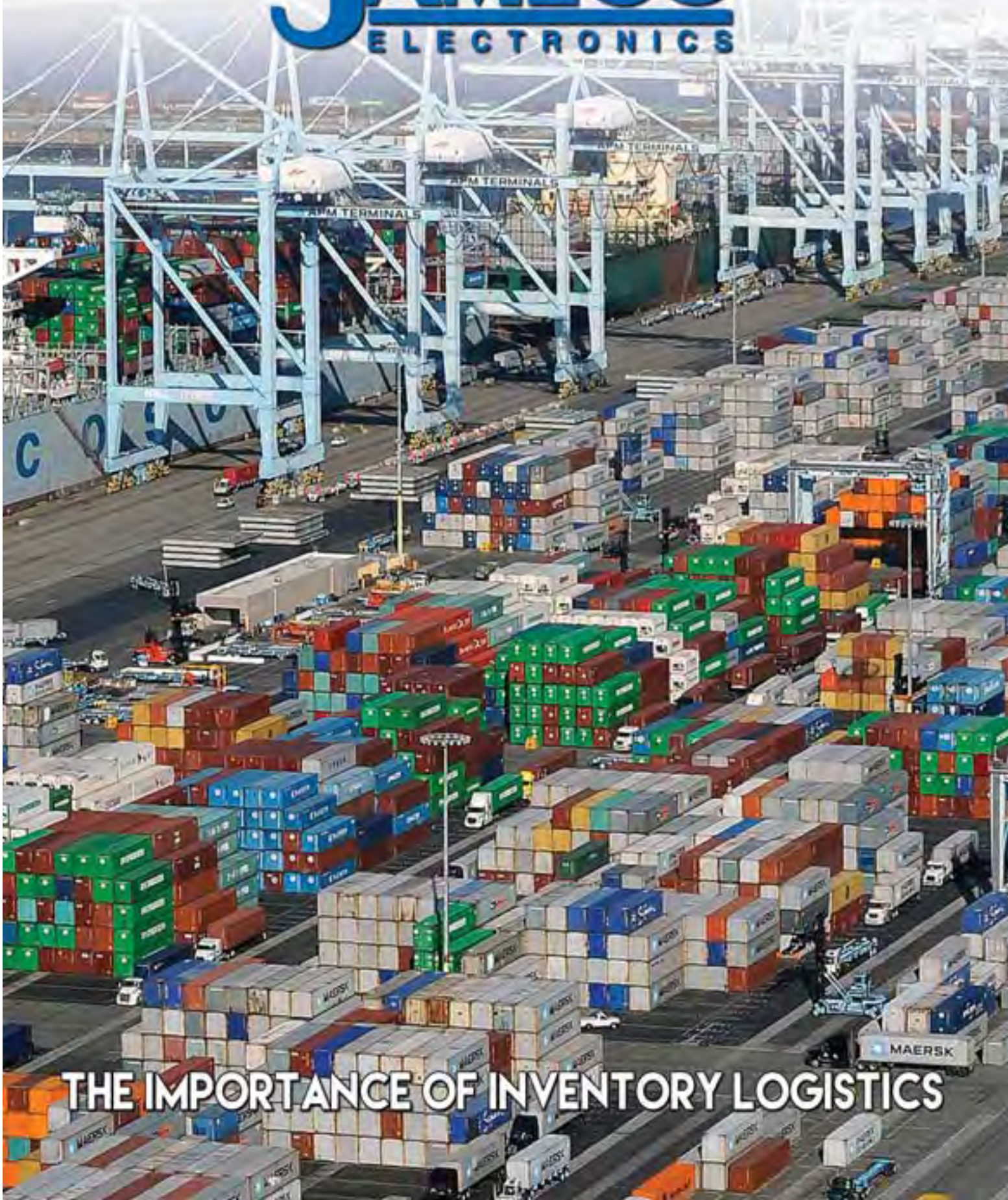


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# JAMECO<sup>®</sup>

## ELECTRONICS

CATALOG 152  
SEPTEMBER 2015



# THE IMPORTANCE OF INVENTORY LOGISTICS



# FEATURED PRODUCTS



## Digital Multimeters

Digital Multimeters on pages 112-113

Our best selling multimeters from Fluke and Dawson have all the features a professional will need from transistor and diode tests to the latest safety standards. Check out the complete specifications available online.

\*Web Code: HBK

Part No.	Mfr. Part No.	No. of Functions	Display Count	Size (H" x W" x D")	1	5
2206061	DDM640	8	2000	7.7 x 3.7 x 2.2	\$34.95	\$31.95
2206053	DDM230B	9	4000	5.8 x 3.0 x 1.6	69.99	63.95
1537328	FLUKE-115	9	6000	6.3 x 3.3 x 1.9	189.95	179.95
1537336	FLUKE-117	9	6000	6.3 x 3.3 x 1.1	209.95	199.95
185535	FLUKE-179	13	6000	7.3 x 3.5 x 1.7	319.95	304.95



2206053



1537336



185535



## Battery Holders with Barrel Plugs

Battery Holders on page 110

These battery holders with 2.1mm barrel plugs can be used to power many different applications like Arduino boards using 9V or AA batteries. Great for portability and to prevent battery mounting problems.

Part No.	Mfr. Part No.	No. of Cells	Connector	Features	*Web Code: UAB	1	10	100	500
2207013	4XAA-2.1	4-AA	2.1mm plug	5.0" wires, 22 AWG		\$2.95	\$2.65	\$2.39	\$2.15
2207021	6XAA-2.1	6-AA	2.1mm plug	3.5" wires, 22 AWG		3.49	3.19	2.95	2.65
2207030	1X9V-2.1	1-9V	2.1mm plug	5.0" wires, 22 AWG		2.95	2.65	2.39	2.15
2207048	1X9V-2.1 CS	1-9V	2.1mm plug	5.5" wires, 22 AWG, w/ cover & switch		3.95	3.55	3.19	2.95
2207056	1X9V-2.1 SNAP	1-9V	2.1mm plug	5.5" wires, 24 AWG		1.95	1.75	1.59	1.45



2207013

2207021

2207030



2207048

2207056



## Peltier Thermoelectric Coolers

\*Web Code: TEC

Quite possibly the coolest thing since cubed ice! These are active cooling (or heating) modules that create a temperature difference when power is applied. One side will get cold while the other side gets hot. A fan or heat sink is still recommended for the hot side, but the cold side will be much lower than ambient or with a fan alone. Power supply required.

Part No.	Description	Max. Cooling Power	Temperature differential (Tmax @ Qc = 0)	Size (mm) (L x W x H)	Price
2219591	11.4" wires, use a 5V @ 2A power supply*	7.5W @ 5V	65°C	30 x 30 x 3.0	\$19.95
2222088	13.3" wires, use a 12V @ 5A power supply*	97W @ 15.3V	66°C	40 x 40 x 3.3	16.95
2219604	11" wires, use a 12V @ 5A power supply	60W @ 12V	66°C	40 x 40 x 79	44.95

\*Heat sink and fan not included



2222088

NEW  
MARKED IN PINK

2219604

## 22 AWG 100-Foot Wire Spools

These popular hook up wire spools are just what you need to work on any of your electrical projects.

- 600V rated
- Passes UL VW-1 flame test
- Temp. range: -55°C to +105°C



\*Web Code: PAF

Part No.	Color	1	5	10
36856	Red	\$7.95	\$6.95	\$5.95
36920	Yellow	7.95	6.95	5.95
36822	Green	7.95	6.95	5.95
36768	Blue	7.95	6.95	5.95
36792	Black	7.95	6.95	5.95
36881	White	7.95	6.95	5.95
2159189	All color set	36.95	33.95	29.95



## Raspberry Pi 2 Model B and Starter Bundle

With its upgraded ARMv7 multicore processor and one Gigabyte of RAM, this pocket computer has stepped up its game.

Just add a microSD card with the OS of your choice and you'll be up and running in no time. Includes Raspberry Pi 2 Model B, a 5V/2A power adapter with USB port, a 3' USB type-A to micro-B cable, an 18" 40-pin GPIO cable a 6.5' HDMI cable, 7' Ethernet cable and a slick enclosure with a smoked base and clear top.

\*Web Code: RPI



NEW  
MARKED IN PINK

Part No.	Description	Price
2223777	Raspberry Pi 2 starter bundle	\$74.95
2223523	Raspberry Pi 2 model B, BCM2836	49.95



## Microcontroller ICs

These best selling 8-bit microcontrollers from Microchip are the brains behind the devices we use every day from computers to medical devices. Multiple I/Os and built in memory offer a wide spectrum of endless applications. For the complete specs, check out online.



223781

Part No.	Mfr. Part No.	Description	1	10
223781	PIC12F675-I/P	DIP-8, Flash, ..... 20MHz, 6 I/Os	\$ .99	\$ .95
145111	PIC16F84A-04/P	DIP-18, Flash, ..... 4MHz, 13 I/Os	3.55	3.45
193367	PIC16F876-20/SP	DIP-28, Flash, ..... 20MHz, 22 I/Os	5.95	5.75
247038	PIC16F877A-I/P	DIP-40, Flash, ..... 20MHz, 33 I/Os	4.85	4.69
176882	PIC16F877-20/P	PDIP-40, Flash, ..... 20MHz, 22 I/Os	5.65	5.45



## Battery Accessories

Battery Accessories on page 110

Battery clips and contacts enable the connection between the source and the load. Battery contacts made of brass or steel help to mount different types of batteries to the application. Coin battery holders with tin and nickel plating can use any cell size around 20mm diameter and are also PC mountable.

\*Web Code: UAB

Part No.	Mfr. Part No.	No. of Cells	Description	1	10	100	500
2222125	628	1-2/3A, AA	THM spring mounting battery clip	\$.85	\$.75	\$.69	\$.65
2222117	52	1-A, AA, CR2, CR123A	THM mounting battery clip	.29	.25	.19	.15
2222109	228	1-A, AA, CR2, CR123A	Mounting case battery contact	.25	.19	.15	.12
2222230	590	1-A, AA, CR2, CR123A, 9V	THM leaf spring battery contact	.25	.19	.15	.12
2222176	5212	2-AA	Dual cell battery contact	.49	.45	.39	.35
2222184	2462	2-AA	Dual cell battery holder	1.25	1.09	.99	.89
2222192	2468	2-AAA	Dual cell battery holder	1.25	1.09	.99	.89
2222168	1065	1-20mm	THM mounting battery holder	1.89	1.69	1.49	1.35
2222205	3003	1-20mm	THM coin cell battery holder	.55	.49	.45	.39



2222125

2222117

2222109



2222230

2222176

2222184



2222192

2222168

2222205

# The Importance of Inventory Logistics

The electronic component industry is dependent upon the steady flow of imports through the U.S. West Coast ports. Earlier this year a long-standing labor dispute congested 29 West Coast ports grounding shipments to a virtual halt. While the dispute was resolved, it didn't happen before causing supply chain disruptions across the country. This catalog cover highlights the importance of inventory logistics within our industry.

All companies strive to maintain low inventory levels and keep the working capital actually working instead of gathering dust. Yet with a supply chain that can stretch 14 weeks, who hasn't found themselves hunting for component inventory? Frankly, there is nothing easy about managing inventory.

Jameco works hard to smooth out inventory bumps for its customers. That starts with a philosophy that if the product is in this catalog, then it's designed to be available for immediate shipment. We simply won't

carry long lead time products and with 40 years of data, we're pretty sure we have a handle on what customers want us to stock. Unlike many of our competitors who might try to turn their inventory as much as eight times a year, our approach is to carry five months of inventory at any one time.

We offer our customers a range of options from protected inventory to scheduled shipments. We've also become quite adept at using our network of over 500 suppliers to find that hard-to-find component you just might need to special order.

Sourcing components and managing inventory logistics is very much a Jameco specialty. Let us know if our expertise can help your company. Call us at 800-831-4242 and we'll do our best to help.



*Look for the newest Forrest M. Mims III puzzler on page 148.*

## The Jameco Difference

### Customer Service

We work hard to provide the best customer service in the industry. Our management team's first priority is listening and responding to customer feedback. You can email the management team directly at [Management@Jameco.com](mailto:Management@Jameco.com) with your feedback and expect a prompt and personal response.



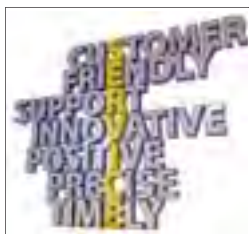
### Expanded Shipping Options

Whether you are looking for low pricing on air shipping or just want it as inexpensive as possible, Jameco's expanded options start at less than \$4.



### Low Price Options

We've designed low prices into our process. Jameco carries three low-priced options from Brand Names, to Jameco's House Brands to Jameco Special Buys. We are franchised distributors for over 200 Brand Name products and we actively price these products below our competitors. We also are famous for our Jameco House Brands (ValuePro, ReliaPro, BenchPro and KitPro) where we provide the same core functionality at a fraction of the price. But we take low pricing a step further with our Special Buys. Look for green pricing coding throughout the catalog for our best priced products.



3 LEVELS OF SAVINGS		
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Enter the web code in the product search box

**\*Network ICs — Enter Web Code JEQ**



## CATALOG QUICK INDEX

**Featured Products..... 153**

**ICs & Semiconductors ..... 2-16**  
Analog, Discretes, Linear, Logic, Memory, MCUs, etc.

**Optos & Illumination ..... 17-28**  
Optoelectronic Components, LEDs, Lamps, LCDs, Displays, etc.

**Passives..... 29-41**  
Capacitors, Resistors, Knobs, Potentiometers, Inductors, etc.

**Wire & Cable ..... 42-47**  
Bulk Wire & Cable, Assemblies, Wire & Cable Management, etc.

**Interconnects ..... 48-63**  
Adapters, Connectors, Terminal Blocks, Sockets, etc.

**Electromechanical ..... 64-83**  
Motors, Switches, Relays, Sensors, etc.

**Fans & Cooling ..... 84-87**  
DC Brushless and AC Tubeaxial Fans, Guards, Filters, etc.

**Power Supplies & Wall Adapters ..... 88-107**  
Switching Power Supplies, Wall Adapters, etc.

**Batteries ..... 108-111**  
Batteries, Battery Packs, Clips, Holders, Chargers, etc.

**Test, Tools & Supplies..... 112-130**  
Test & Measurement, Tools, Soldering Equipment, etc.

**Electronic Design ..... 131-136**  
Programmers, Prototyping Systems, Breadboards, etc.

**Computer Products ..... 137-138**  
Cards, Storage, Networking, etc.

**Educational & Hobbyist ..... 139-148**  
Robotics, Solar, Educational Kits, Books, etc.

**Ordering Information ..... 149**  
**Product Indices ..... 150-152**

*Prices and discounts are subject to change without notice.*

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# 7400, 74C, 74F & 74HC Series

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## 7400 Series

\*Web Code: XAG

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10	100
48979	+	7400N**	DIP-14	Quad 2-input pos. NAND gate .....	\$1.29	\$1.05	\$.85
910901	TI	SN7400N	DIP-14	Quad 2-input pos. NAND gate .....	1.39	1.15	.89
49015	+	7402N*	DIP-14	Quad 2-input pos. NOR gate .....	1.75	1.49	1.29
49040	+	7404N**	DIP-14	Hex inverter .....	1.59	1.35	1.19
49074	+	7405N*	DIP-14	Hex inverter (O.C.) .....	1.39	1.19	.89
49091	+	7406N**	DIP-14	Hex inverter buffer/driver .....	.79	.69	.55
49120	+	7407N**	DIP-14	Hex buffer/driver .....	.75	.65	.55
49146	+	7408N*	DIP-14	Quad 2-input pos. AND gate .....	2.49	2.25	1.95
49189	+	7410N*	DIP-14	Triple 3-input pos. NAND gate .....	1.49	1.35	1.19
49402	+	7413N	DIP-14	Dual 4-input pos. NAND gate .....	.99	.89	.79
49437	+	7414N*	DIP-14	Hex schmitt-trigger inverter .....	1.29	1.15	.95
49630	+	7416N*	DIP-14	Hex inverter buffer/driver (O.C.) .....	1.39	1.19	.85
49728	+	7417N*	DIP-14	Hex buffer/driver (O.C. hi-volt.) .....	1.39	1.19	.95
50008	+	7420N*	DIP-14	Dual 4-input NAND gate .....	.99	.89	.75
50139	+	7427N*	DIP-14	Triple 3-input NOR gate .....	.99	.89	.75
50198	+	7428N	DIP-14	Quad 2-input pos. NAND gate .....	.69	.59	.39
50227	+	7430N*	DIP-14	8-input NAND gate .....	.69	.59	.49
50235	+	7432N*	DIP-14	Quad 2-input pos. OR gate .....	1.95	1.75	1.45
50315	+	7438N*	DIP-14	Quad 2-input NAND buffer .....	.99	.89	.75
50374	+	7442N	DIP-16	4 line BCD to 10 line decimal decoder .....	1.95	1.75	1.49
50403	+	7445N	DIP-16	BCD-to-decimal decoder/driver .....	1.95	1.49	1.25
50420	+	7447N*	DIP-16	BCD-to-7 seg. decoder/driver .....	2.75	2.49	2.25
50534	+	7473N	DIP-14	Dual J-K neg-edge-triggered flip-flop ...	1.95	1.75	1.59
50551	+	7474N**	DIP-14	Dual D type flip-flop .....	1.95	1.75	1.49
50577	+	7475N	DIP-16	4-bit bistable latch .....	2.75	2.49	2.25
50593	+	7476N	DIP-16	Dual J-K pos-edge-triggered flip-flop ..	2.95	2.65	2.39
50631	+	7483N	DIP-16	4-bit binary full adder .....	2.95	2.75	2.49
50657	+	7485N*	DIP-16	4-bit magnitude comparator .....	2.49	2.25	1.95
50665	+	7486N	DIP-14	Quad 2-input exclusive OR gate .....	2.25	2.09	1.95
50681	+	7489N	DIP-16	64-bit read/write memory .....	3.95	3.75	3.49
50690	+	7490N	DIP-14	Asynchronous decade counter .....	2.95	2.65	2.39
50745	+	7493N	DIP-14	4-bit binary counter .....	2.25	1.95	1.75
50770	+	7495N	DIP-14	4-bit parallel-access shift register ...	1.95	1.75	1.49
49234	+	74107N*	DIP-14	Dual J-K flip-flop with clear .....	1.19	1.09	.95
49322	+	74121N*	DIP-14	Monostable multivibrator .....	3.25	2.95	2.75
49357	+	74123N*	DIP-16	Dual monostable multivibrator .....	3.95	3.49	2.95
49509	+	74150N	DIP-24	1-of-16 data selector/multiplexer ...	3.75	3.25	2.75
49525	+	74151N*	DIP-16	1-of-8 data selector/multiplexer .....	.79	.69	.45
49550	+	74153N*	DIP-16	Dual 4-to-1 data selector/multiplexer ...	.89	.69	.59
49568	+	74154N	DIP-24	4-to-16 line decoder/demultiplexer ...	3.25	2.95	2.75
49605	+	74157N*	DIP-16	Quad 2-to-1 line data selector .....	.99	.89	.79
49648	+	74160N*	DIP-16	Synchronous decade counter .....	.89	.79	.69
49664	+	74161N	DIP-16	4-bit synchronous binary counter .....	.89	.79	.69
49681	+	74164N	DIP-14	8-bit serial shift register .....	.79	.69	.49
49699	+	74165N	DIP-16	8-bit serial shift register .....	.39	.29	.25
49779	+	74174N*	DIP-16	Hex D-type flip-flop with clear .....	1.09	.95	.79
49795	+	74175N*	DIP-16	Quad D-type flip-flop with clear .....	1.19	1.09	.89
49883	+	74189N	DIP-16	Tri-state 64-bit RAM .....	2.95	2.75	2.49
49904	+	74191N	DIP-16	Synch. 4-bit up/down binary counter ...	1.95	1.75	1.49
49912	+	74192N	DIP-16	Synch. 4-bit up/down decade counter ...	3.95	3.75	3.49
49939	+	74193N	DIP-16	Synch. 4-bit up/down binary counter ...	2.75	2.49	2.25
49955	+	74194N	DIP-16	4-bit bi-directional shift register .....	1.95	1.75	1.49

\*10 pcs./ \*\*20 pcs. in 7400 series IC cabinet kit, below

## 7400 Series IC Kit

\*Web Code: CKS

**Includes:** 20-drawer component cabinet (319600), 20 clear plastic drawers (319601), 20 clear dividers (319611) and 30 adhesive labels for drawers to identify parts in kit

**10 each:** 7402, 7405, 7408, 7410, 7414, 7416, 7417, 7420, 7427, 7430, 7432, 7438, 7447, 7485, 74107, 74121, 74123, 74132, 74151, 74153, 74157, 74160, 74174, 74175, 74279

**20 each:** 7400, 7404, 7406, 7407, 7474

Part No.	Description	Wt. (lbs.)	1	5
84953	350 pcs. 7400 IC kit	6.2	\$219.95	\$199.95



## 74C Series

Please Note: Manufacturer may vary

\*Web Code: RAG

Part No.	Product No.	Pkg.	Description	1	10	100
44222	74C00N	DIP-14	Quad 2-input pos. NAND gate .....	\$2.25	\$1.95	\$1.75
44257	74C14N	DIP-14	Hex schmitt-trig. inverter (CD40106) ....	2.49	2.25	1.95
44361	74C221N	DIP-16	Dual monostable multivibrator .....	3.95	3.49	3.25
44409	74C374N	DIP-20	Octal D-type flip-flop .....	1.75	1.35	1.19
44564	74C922N	DIP-18	16-key keyboard encoder .....	8.95	7.95	7.25
44572	74C923N	DIP-20	20-key keyboard encoder .....	7.95	6.95	6.25

## 74F Series

Please Note: Manufacturer may vary

\*Web Code: CEN

Part No.	Product No.	Pkg.	Description	1	10	100
287048	74F32N	DIP-14	Quad 2-input pos. OR gate .....	\$2.29	\$2.25	\$2.22
287056	74F74N	DIP-14	Dual D-type flip-flop .....	.39	.29	.25

## 74HC Series

\*Web Code: SDJ

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10	100
45161	+	74HC00N	DIP-14	Quad 2-input pos. NAND gate ..	\$.35	\$.25	\$.19
906339	NXP	74HC00N	DIP-14	Quad 2-input pos. NAND gate ....	.79	.69	.59
45188	+	74HC02N	DIP-14	Quad 2-input pos. NOR gate .....	.35	.25	.19
45209	+	74HC04N	DIP-14	Hex inverter .....	.39	.25	.19
250982	TI	SN74HC04N	DIP-14	Hex inverter .....	.45	.29	.22
906574	NXP	74HC04N	DIP-14	Hex inverter .....	.79	.69	.59
88081	+	74HC05N	DIP-14	Hex inverter (O.C.) .....	.39	.35	.29
45225	+	74HC08N	DIP-14	Quad 2-input pos. AND gate .....	.35	.25	.17
251002	TI	SN74HC08N	DIP-14	Quad 2-input pos. AND gate .....	.39	.29	.19
45364	+	74HC14N	DIP-14	Hex schmitt-trigger inverter .....	.39	.29	.22
251045	TI	SN74HC14N	DIP-14	Hex schmitt-trigger inverter .....	.45	.35	.25
45794	+	74HC32N	DIP-14	Quad 2-input pos. OR gate .....	.39	.25	.17
251088	TI	SN74HC32N	DIP-14	Quad 2-input pos. OR gate .....	.45	.29	.19
46130	+	74HC74N	DIP-14	Dual D-type flip-flop .....	.35	.25	.19
46181	+	74HC86N	DIP-14	Quad 2-input exclusive OR gate ..	.35	.25	.19
45305	+	74HC125N	DIP-14	Tri-state quad bus buffer .....	.29	.25	.19
45321	+	74HC132N	DIP-14	Quad 2-input NAND schmitt trigger ..	.29	.25	.19
45330	+	74HC138N	DIP-16	3-to-8 line decoder/demultiplexer ...	.35	.25	.19
897049	TI	CD74HC147E	DIP-16	Encoder 9-to-4 priority CMOS ....	.65	.49	.39
45399	+	74HC153N	DIP-16	Dual 4-to-1 data selector/multiplexer ..	.69	.59	.49
45401	+	74HC154N	DIP-24	4-to-16 line decoder (0.3" wide) ..	2.25	1.79	1.45
45452	+	74HC161N	DIP-16	4-bit synchronous binary counter ...	.69	.59	.49
45487	+	74HC164N	DIP-14	8-bit serial shift register .....	.35	.25	.17
251328	TI	SN74HC164N	DIP-14	8-bit serial shift register .....	.39	.29	.19
45495	+	74HC165N	DIP-16	8-bit parallel load shift register ...	.35	.29	.19
251336	TI	SN74HC165N	DIP-16	8-bit parallel load shift register ...	.39	.35	.25
45541	+	74HC192N	DIP-16	Synch. 4-bit up/down decade counter ..	.69	.55	.39
45655	+	74HC244N	DIP-20	Tri-state octal buffer/line driver ...	.49	.35	.22
45671	+	74HC245N	DIP-20	Tri-state octal buffer/line driver ...	.45	.29	.22
45743	+	74HC273N	DIP-20	Octal D-type flip-flop .....	.35	.25	.19
45831	+	74HC373N	DIP-20	Octal D-type transparent latch ....	.45	.35	.25
45858	+	74HC374N	DIP-20	Octal D-type flip-flop .....	.49	.35	.22
46050	+	74HC541N	DIP-20	Tri-state octal buffer/line driver ....	.49	.35	.25
46076	+	74HC573N	DIP-20	3-st. octal D-type transparent latch ...	.39	.29	.25
46084	+	74HC574N	DIP-20	Tri-state octal D-type flip-flop .....	.39	.35	.25
46105	+	74HC595N	DIP-16	8-bit shift register w/ output latch ...	.39	.35	.25
251643	TI	SN74HC595N	DIP-16	8-bit shift register w/ output latch ...	.45	.39	.29
911189	NXP	74HC595N	DIP-16	8-bit shift register w/ output latch ...	.89	.79	.69
45891	+	74HC4017N	DIP-16	Hi speed decade counter/divider ...	.45	.39	.35
45920	+	74HC4040N	DIP-16	12-bit asynch. binary counter .....	.49	.39	.25
45971	+	74HC4066N	DIP-14	Quad bilateral analog switch .....	.39	.29	.19

\*74AC/ACT/AHC/ALS Series Online — Enter Web Code CBA

\*ALVC Series Online — Enter Web Code SVC

\* NXP = NXP/Philips Semiconductor | TI = Texas Instruments | + Major Brands



# 74HCT & 74LS Series

## 74HCT Series

Please Note: Manufacturer may vary

\*Web Code: SAG

Part No.	Product No.	Pkg.	Description	1	10	100
44871	74HCT00N	DIP-14	Quad 2-input pos. NAND gate .....	\$ .29	\$ .22	\$ .15
44898	74HCT04N	DIP-14	Hex inverter .....	.39	.25	.17
44901	74HCT08N	DIP-14	Quad 2-input pos. AND gate .....	.29	.19	.15
44935	74HCT14N	DIP-14	Hex schmitt-trigger inverter .....	.29	.25	.22
913299	74HCT32N	DIP-14	Quad 2-input OR gate, l-temp. ....	.49	.45	.39
45137	74HCT74N	DIP-14	Dual D-type flip-flop .....	.39	.29	.17
45145	74HCT86N	DIP-14	Quad 2-input exclusive OR gate .....	.49	.39	.35
44927	74HCT138N	DIP-16	3-to-8 decoder/demultiplexer .....	.49	.39	.25
44960	74HCT161N	DIP-16	4-bit synchronous binary counter .....	.59	.49	.45
912675	74HCT165N	DIP-16	8-bit parallel load shift register .....	.99	.89	.79
88065	74HCT193N	DIP-16	Synch. 4-bit up/down binary counter ...	.89	.79	.69
45014	74HCT240N	DIP-20	Octal buffer/line driver .....	.39	.35	.29
45031	74HCT245N	DIP-20	Tri-state octal bus transceiver .....	.49	.35	.25
45065	74HCT373N	DIP-20	Octal D-type transparent latch .....	.49	.35	.25
109778	74HCT540N	DIP-20	Tri-state octal buffer/line driver .....	.69	.59	.49
45090	74HCT573N	DIP-20	3-st. octal D-type transparent latch ....	.45	.39	.29
45102	74HCT574N	DIP-20	Tri-state octal D-type flip-flop .....	.45	.39	.29
45129	74HCT688N	DIP-20	8-bit magnitude comparator .....	.69	.59	.49

## 74LS Series

\*Web Code: NBS

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10	100
46252	+	74LS00N**	DIP-14	Quad 2-input pos. NAND gate ....	\$ .45	\$ .39	\$ .35
283725	TI	SN74LS00N	DIP-14	Quad 2-input pos. NAND gate .....	.95	.85	.69
46287	+	74LS02N**	DIP-14	Quad 2-input pos. NOR gate .....	.39	.35	.29
283741	TI	SN74LS02N	DIP-14	Quad 2-input pos. NOR gate .....	.45	.39	.35
46308	+	74LS03N	DIP-14	Quad 2-input pos. NAND gate (O.C.) ..	.69	.59	.49
46316	+	74LS04N**	DIP-14	Hex inverter .....	.49	.39	.35
283792	TI	SN74LS04N	DIP-14	Hex inverter .....	.55	.45	.39
46341	+	74LS05N*	DIP-14	Hex inverter (O.C.) .....	.69	.59	.49
46359	+	74LS06N	DIP-14	Hex inverter buffer/driver .....	.75	.65	.55
46367	+	74LS07N	DIP-14	Hex buffer/driver .....	.75	.65	.55
46375	+	74LS08N**	DIP-14	Quad 2-input pos. AND gate .....	.45	.39	.35
295401	TI	SN74LS08N	DIP-14	Quad 2-input pos. AND gate .....	.49	.45	.39
46404	+	74LS10N*	DIP-14	Triple 3-input pos. NAND gate .....	.59	.49	.39
46439	+	74LS11N*	DIP-14	Triple 3-input pos. AND gate .....	.65	.55	.45
46640	+	74LS14N*	DIP-14	Hex schmitt-trigger inverter .....	.45	.35	.29
295460	TI	SN74LS14N	DIP-14	Hex schmitt-trigger inverter .....	.49	.39	.35
47095	+	74LS20N*	DIP-14	Dual 4-input NAND gate .....	.79	.69	.59
47108	+	74LS21N	DIP-14	Dual 4-input AND gate .....	.59	.49	.39
47378	+	74LS27N	DIP-14	Triple 3-input NOR gate .....	.89	.69	.59
47458	+	74LS30N*	DIP-14	8-input NAND gate .....	.69	.59	.49
47466	+	74LS32N**	DIP-14	Quad 2-input pos. OR gate .....	.45	.35	.29
295515	TI	SN74LS32N	DIP-14	Quad 2-input pos. OR gate .....	.49	.39	.35
47693	+	74LS38N	DIP-14	Quad 2-input NAND buffer .....	.79	.69	.59
47773	+	74LS42N	DIP-14	4 line BCD to 10 line decimal decoder	1.75	1.39	1.09
47790	+	74LS47N*	DIP-16	BCD-to-7 seg. decoder/driver ....	1.49	1.29	1.09
295582	TI	SN74LS47N	DIP-16	BCD-to-7 seg. decoder/driver .....	1.55	1.35	1.15
47811	+	74LS48N	DIP-16	BCD-to-7 seg. decoder/driver .....	3.95	3.49	2.95
47992	+	74LS73N*	DIP-14	Dual J-K neg-edge-triggered flip-flop	1.79	1.59	1.29
48004	+	74LS74N**	DIP-14	Dual D-type flip-flop .....	.45	.39	.29
295726	TI	SN74LS74AN	DIP-14	Dual D-type flip-flop .....	.49	.45	.35
48021	+	74LS75N*	DIP-16	4-bit bi-stable latch .....	1.59	1.39	1.19
48039	+	74LS76N	DIP-16	Dual J-K pos-edge-triggered flip-flop ..	3.95	3.75	3.49
48063	+	74LS83N	DIP-16	4-bit binary full adder .....	2.19	1.99	1.79
48071	+	74LS85N*	DIP-16	4-bit magnitude comparator .....	.99	.89	.75
48098	+	74LS86N*	DIP-14	Quad 2-input exclusive OR gate .....	.45	.39	.29
295751	TI	SN74LS86AN	DIP-14	Quad 2-input exclusive OR gate ....	.49	.45	.35
48119	+	74LS90N*	DIP-14	Asynchronous decade counter ...	1.95	1.59	1.45
295769	TI	SN74LS90N	DIP-14	Asynchronous decade counter ...	2.09	1.85	1.59
48143	+	74LS92N	DIP-14	Divide-by-12 decade counter .....	1.59	1.45	1.35
48151	+	74LS93N*	DIP-14	4-bit binary counter .....	1.29	1.09	.95
295822	TI	SN74LS93N	DIP-14	4-bit binary counter .....	1.39	1.19	1.05
46412	+	74LS107N	DIP-14	Dual J-K flip-flop with clear .....	1.09	.99	.89

\*10 pcs./ \*\*20 pcs. in 74LS series IC cabinet kit, pg 4

## 74LS Series (Continued)

\*Web Code: NBS

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10	100
46421	+	74LS109N	DIP-16	Dual J-K bar flip-flop .....	\$ .79	\$ .69	\$ .49
46447	+	74LS112N	DIP-16	Dual J-K neg-edge-triggered flip-flop ..	.65	.55	.45
46471	+	74LS122N	DIP-14	Retriggerable monostable multivib. ....	.89	.79	.69
46480	+	74LS123N*	DIP-16	Dual monostable multivibrator .....	.69	.59	.49
300880	TI	SN74LS123N	DIP-16	Dual monostable multivibrator .....	.75	.59	.45
46501	+	74LS125N*	DIP-14	Tri-state quad bus buffer .....	.65	.55	.45
46527	+	74LS126N	DIP-14	Tri-state quad bus buffer .....	.69	.59	.39
46551	+	74LS132N	DIP-14	Quad 2-input NAND schmitt trigger .....	.39	.29	.19
46607	+	74LS138N**	DIP-16	3-to-8 decoder/demultiplexer .....	.65	.55	.45
301233	TI	SN74LS138N	DIP-16	3-to-8 decoder/demultiplexer .....	.69	.59	.49
46623	+	74LS139N*	DIP-16	Dual 2-to-4 decoder/demultiplexer .....	.65	.55	.45
301268	TI	SN74LS139AN	DIP-16	Dual 2-to-4 decoder/demultiplexer .....	.69	.59	.49
46666	+	74LS145N	DIP-16	BCD-to-decimal decoder/driver ....	.89	.75	.59
46682	+	74LS148N	DIP-16	8-to-3 line priority encoder .....	1.19	1.09	.95
46703	+	74LS151N*	DIP-16	1-to-8 data selector/multiplexer .....	.75	.65	.55
46720	+	74LS153N	DIP-16	Dual 4-to-1 data selector/multiplexer ..	.75	.65	.55
46738	+	74LS154N	DIP-24	4-to-16 line decoder/demultiplexer .....	4.95	4.49	4.25
46754	+	74LS155N*	DIP-16	Dual 2-to-4 line decoder/demultiplexer	1.19	1.09	.95
46771	+	74LS157N*	DIP-16	Quad 2-to-1 line data selector .....	.65	.55	.45
46800	+	74LS160N	DIP-16	Synchronous decade counter .....	2.49	2.25	2.05
46818	+	74LS161N	DIP-16	4-bit synchronous binary counter .....	.69	.59	.39
46842	+	74LS163N	DIP-16	Synchronous 4-bit binary counter .....	.69	.49	.39
46851	+	74LS164N	DIP-14	8-bit serial shift register .....	.69	.49	.39
46877	+	74LS165N	DIP-16	8-bit parallel load shift register .....	.65	.55	.45
46906	+	74LS169N	DIP-16	Synch. 4-bit binary up/down counter ..	.89	.79	.69
46922	+	74LS173N	DIP-16	4-bit D-type register w/ 3-state output	1.19	.99	.75
46931	+	74LS174N*	DIP-16	Hex D-type flip-flop with clear .....	.75	.65	.55
46957	+	74LS175N*	DIP-16	Quad D-type flip-flop with clear ....	.69	.59	.49
46973	+	74LS181N	DIP-24	Arithmetic logic unit/function generator	3.95	3.49	3.25
46990	+	74LS190N	DIP-16	Synchronous up/down decade counter	2.95	2.75	2.49
47001	+	74LS191N	DIP-16	Synch. 4-bit up/down binary counter ..	.89	.79	.59
47010	+	74LS192N	DIP-16	Synch. 4-bit up/down decade counter	3.49	3.25	2.95
47036	+	74LS193N*	DIP-16	Synch. 4-bit up/down binary counter ..	.79	.69	.59
301831	TI	SN74LS193N	DIP-16	Synch. 4-bit up/down binary counter ..	.89	.79	.69
47052	+	74LS194N	DIP-16	4-bit bi-directional shift register .....	1.09	.99	.79
47061	+	74LS195N	DIP-16	4-bit parallel-access shift register .....	1.49	1.29	1.15
47124	+	74LS221N	DIP-16	Dual monostable multivibrator .....	.79	.69	.49
47141	+	74LS240N*	DIP-20	Octal buffer/line driver .....	.69	.55	.45
47167	+	74LS241N	DIP-20	Tri-state octal buffer/line driver .....	.59	.49	.45
47183	+	74LS244N*	DIP-20	Tri-state octal buffer/line driver .....	.65	.55	.45
308312	TI	SN74LS244N	DIP-20	Tri-state octal buffer/line driver .....	.69	.59	.49
47212	+	74LS245N*	DIP-20	Tri-state octal bus transceiver .....	.65	.55	.45
308321	TI	SN74LS245N	DIP-20	Tri-state octal bus transceiver .....	.75	.65	.55
47247	+	74LS247N	DIP-16	BCD to 7-seg. decoder/driver .....	1.39	1.25	1.09
47298	+	74LS257BN	DIP-16	Tri-state quad 2-data selector/m .....	.49	.39	.35
47327	+	74LS259N	DIP-16	8-bit addressable latch .....	.69	.59	.49
47360	+	74LS266N	DIP-14	Quad 2-input exclusive NOR gate (O.C.)	.89	.79	.69
47386	+	74LS273N*	DIP-20	Octal D-type flip-flop .....	.69	.55	.45
47407	+	74LS279N	DIP-16	Quad S-R latch .....	.99	.79	.59
47423	+	74LS283N	DIP-16	4-bit binary full add w/ fast carry .....	1.09	.99	.89
47562	+	74LS367N	DIP-16	Tri-state hex buffer .....	.89	.79	.69
47600	+	74LS373N*	DIP-20	Octal D-type transparent latch .....	.69	.55	.45
308460	TI	SN74LS373N	DIP-20	Octal D-type transparent latch .....	.79	.65	.55
47634	+	74LS374N*	DIP-20	Octal D-type flip-flop .....	.69	.55	.45
308478	TI	SN74LS374N	DIP-20	Octal D-type flip-flop .....	.75	.59	.49
47669	+	74LS377N	DIP-20	Octal D-type flip-flop .....	.99	.89	.79
47722	+	74LS390N	DIP-16	Dual 4-bit decade counter .....	1.39	1.15	.89
47731	+	74LS393N	DIP-14	Dual 4-bit binary counter .....	.85	.75	.65
47861	+	74LS540N	DIP-20	Tri-state octal buffer/line driver ..	1.29	1.09	.75
47870	+	74LS541N	DIP-20	Tri-state octal buffer/line driver .....	.95	.85	.75
64418	+	74LS573N	DIP-20	Tri-state octal D-type flip flop .....	2.95	2.49	1.95
47976	+	74LS670N	DIP-16	4 x 4 register file .....	1.49	1.25	.95
309260	+	74LS682N	DIP-20	8-bit magnitude/identity comp. ...	1.95	1.59	1.19

\*10 pcs./ \*\*20 pcs. in 74LS series IC cabinet kit, pg 4

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\*TI = Texas Instruments | + Major Brands

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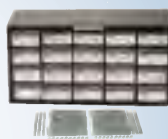
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# 74LS, 74S, 4000, 5000 & 6500 Series

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## 74LS Series IC Kit

★ Web Code: CKS



**Includes:** 20-drawer component cabinet (319600), 20 clear plastic drawers (319601), 20 clear dividers (319611) and 30 adhesive labels for drawers to identify parts in kit

**10 each:** 74LS05, 74LS10, 74LS11, 74LS14, 74LS20, 74LS30, 74LS47, 74LS73, 74LS75, 74LS85, 74LS86, 74LS90, 74LS93, 74LS123, 74LS125, 74LS139, 74LS151, 74LS155, 74LS157, 74LS174, 74LS175, 74LS193, 74LS240, 74LS244, 74LS245, 74LS273, 74LS373, 74LS374, 74LS00, 74LS02, 74LS04, 74LS08, 74LS32, 74LS74, 74LS138

Part No.	Description	Wt. (lbs.)	1	5
84961	420 pcs. 74LS IC kit	6.7	\$169.95	\$153.95
130391	Refill for 84961 (420 pcs.)	2.0	154.95	139.95

## 74S Series

Please Note: Manufacturer may vary

★ Web Code: NCK

Part No.	Product No.	Pkg.	Description	1	10	100
676959	74S00N	DIP-14	Quad 2-input NAND gate	\$ .69	\$ .59	\$ .49
48266	74S02N	DIP-14	Quad 2-input NOR gate	.49	.45	.39
48573	74S20N	DIP-14	Dual 4-input NAND gate	.29	.25	.19
48750	74S32N	DIP-14	Quad 2-input positive OR gate	.49	.39	.29
52513	74S428N	DIP-28	System controller/bus driver (8228)	4.95	4.49	3.95

## 4000 Series

★ Web Code: WAA

Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
12562	+	CD4001**	DIP-14	Quad 2-input NOR gate	\$ .39	\$ .35	\$ .29
675964	+	CD4002	DIP-14	Dual 4-input NOR gate	.39	.29	.22
12597	+	CD4007	DIP-14	Dual complimentary pair plus inv.	.39	.35	.29
12634	+	CD4011**	DIP-14	Quad 2-input NAND gate	.39	.35	.29
893283	TI	CD4011BE	DIP-14	Quad 2-input NAND gate	.45	.39	.35
12677	+	CD4013**	DIP-14	Dual D-type flip-flop	.35	.29	.25
893443	TI	CD4013BE	DIP-14	Dual D-type flip-flop	.39	.35	.29
12706	+	CD4015*	DIP-16	Dual 4-stage static shift register	.39	.35	.29
12722	+	CD4016*	DIP-14	Quad bilateral switch	.35	.29	.25
12749	+	CD4017*	DIP-16	Decade counter/divider	.45	.35	.29
893611	TI	CD4017BE	DIP-16	Decade counter/divider	.49	.39	.35
12773	+	CD4018	DIP-16	Presetable divide-by-N counter	.49	.39	.25
12802	+	CD4020*	DIP-16	14-st. ripple carry binary counter	.39	.35	.29
12829	+	CD4021	DIP-16	8-stage static shift register	.49	.39	.25
12845	+	CD4023*	DIP-14	Triple 3-input NAND gates	.35	.29	.25
12853	+	CD4024*	DIP-14	7-stage ripple carry binary counter	.39	.29	.22
353560	+	CD4026	DIP-16	Decade counter/divider	.45	.35	.29
12888	+	CD4027*	DIP-16	Dual J-K master/slave flip-flop	.39	.35	.29
12909	+	CD4028	DIP-16	BCD-to-decimal decoder	.45	.35	.22
12925	+	CD4029	DIP-16	Preset up/down binary counter	.45	.39	.35
12950	+	CD4040*	DIP-16	12-stage binary/ripple counter	.45	.35	.25
12992	+	CD4043	DIP-16	Tri-state quad NOR R/S latch	.45	.35	.22
13012	+	CD4046*	DIP-16	Micropower phase lock loop	.49	.39	.35
13039	+	CD4047	DIP-14	Monostable/astable multivibrator	.39	.35	.29
13055	+	CD4049**	DIP-16	Hex inverting buffer/converter	.39	.35	.29
13071	+	CD4050*	DIP-16	Hex non-inverting buffer/converter	.39	.35	.29
13098	+	CD4051*	DIP-16	Single 8-ch analog multiplexer	.39	.35	.29
894391	TI	CD4051BE	DIP-16	Single 8-ch analog multiplexer	.45	.39	.35
13119	+	CD4052	DIP-16	Dual 4-ch analog multiplexer	.39	.29	.22
13127	+	CD4053	DIP-16	Triple 2-ch analog multiplexer	.29	.22	.19
13151	+	CD4060	DIP-16	14-st. ripple carry binary counter	.45	.35	.29
13186	+	CD4066**	DIP-14	Quad bilateral switch	.35	.29	.25
13215	+	CD4067	DIP-24	Single 16-ch analog multiplexer	2.19	1.95	1.49
13231	+	CD4069*	DIP-14	Hex inverters (74C04)	.39	.35	.25
894761	TI	CD4069UBE	DIP-14	Hex inverters	.39	.35	.29
13258	+	CD4070*	DIP-14	Quad 2-input exclusive OR gate	.35	.29	.25
13274	+	CD4071*	DIP-14	Quad 2-input OR gate	.39	.35	.29
676086	+	CD4073	DIP-14	Triple 3-input AND gate	.39	.35	.29
676094	+	CD4075	DIP-14	Triple 3-input OR gate	.39	.29	.22
676107	+	CD4077	DIP-14	Quad exclusive NOR gate	.29	.22	.19
13354	+	CD4081*	DIP-14	Quad 2-input AND gate	.39	.35	.29
676123	+	CD4082	DIP-14	Dual 4-input AND gate	.39	.35	.29
13400	+	CD4093*	DIP-14	Quad 2-input NAND schmitt trig.	.39	.35	.29

\*10 pcs./\*\*20 pcs. in 4000 series IC cabinet kit, above right

## 4000 Series (Continued)

★ Web Code: WAA

Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
818873	TI	CD4093BE	DIP-14	CMOS 2-input NAND gate	\$ .45	\$ .39	\$ .35
870807	NSC	CD4093BCN	DIP-14	Quad 2-input NAND schmitt trig.	.59	.49	.45
13426	+	CD4094	DIP-16	8-bit shift register with latch	.45	.35	.25
13485	+	CD4510	DIP-16	BCD presetable up/down counter	.45	.39	.35
13493	+	CD4511*	DIP-16	BCD to 7-segment latch/decoder/driver	.45	.29	.22
895377	TI	CD4511BE	DIP-16	BCD to 7-segment latch/decoder/driver	.49	.35	.25
13522	+	CD4514	DIP-24	4-bit latch/line decoder	2.25	1.75	1.59
13549	+	CD4516	DIP-16	Binary up/down counter	.45	.35	.25
13565	+	CD4518	DIP-16	Dual BCD up counter	.49	.35	.25
2179008	+	CD4519B	DIP-16	Logic MUX	.99	.89	.75
13581	+	CD4520	DIP-16	Dual binary up counter	.49	.39	.25
13611	+	CD4528	DIP-16	Dual monostable multivibrator	.79	.59	.49
13653	+	CD4538*	DIP-16	Dual monostable multivibrator	.59	.49	.39
13696	+	CD4543*	DIP-16	BCD to 7-segment decoder driver	.45	.35	.29
54771	+	CD4557B	DIP-16	64-bit shift register	.69	.59	.49
54623	+	CD40098B	DIP-16	Hex inverting 3-state buffer	.49	.45	.39
676473	+	CD40102	DIP-16	2-decade BCD 8-st. sync down counter	.79	.69	.59
893179	TI	CD40106BE	DIP-14	Hex schmitt trigger	.39	.29	.25
676502	+	CD40110	DIP-16	Decade up/down counter	1.29	1.09	.89
2178988	+	CD40163B	DIP-16	Synch. programmable 4-bit counter	.49	.45	.39

\*10 pcs. in 4000 series IC cabinet kit, below

## 4000 Series CMOS IC Kit

★ Web Code: CKS

**Includes:** 20-drawer component cabinet (319600), 20 clear plastic drawers (319601), 20 clear dividers (319611) and 30 adhesive labels for drawers to identify parts in kit

**10 each:** CD4015, CD4016, CD4017, CD4020, CD4023, CD4024, CD4027, CD4040, CD4046, CD4050, CD4051, CD4069, CD4070, CD4071, CD4081, CD4093, CD4511, CD4538, CD4543, CD4584

**20 each:** CD4001, CD4011, CD4013, CD4049, CD4066

Part No.	Description	Wt. (lbs.)	1	5
84970	300 pcs. 4000 series CMOS IC kit	6.1	\$89.95	\$79.95
130403	Refill for 84970 (300 pcs.)	1.4	74.95	67.95

## 5000 Series & Clock Chips

★ Web Code: RAE

Part No.	Mfr.	Product No.	Pkg.	Description	1	10
32803	+	TCM5089N	DIP-16	Touch tone generator	\$4.95	\$4.49
27422	+	LM555CN**	DIP-8	Timer	.25	.22
126797	+	LMC555CN*	DIP-8	CMOS timer	.69	.59
24328	+	LM556N*	DIP-14	Dual timer	.29	.25
95531	+	RTC72421B	DIP-18	Real time clock	5.95	5.49
25101	+	MC146818*	DIP-24	Real time clock with RAM	7.95	6.95
10567	AMD	AM9513APC*	DIP-40	Real time clock	29.95	24.95
2146433	CSS	CSS555-ID	DIP-8	Programmable timer	1.95	1.75
2146450	CSS	CSS555C-ID	DIP-8	Programmable timer w/ internal cap	2.35	2.09
2146425	CSS	CSS555-IS	SOIC-8	Programmable timer	1.55	1.39
2146468	CSS	CSS555-DMK	—	Demo kit	79.95	74.95
2158733	CSS	EZ PROGRAMMER	—	CSS555 & CSS555C Basic EZ programmer	39.95	35.95
1392878	ST	MAT28-BR12SH1	SOIC-28	Battery/crystal snapshot	4.95	4.49

\*10 pcs./\*\*20 pcs. in Linear series IC cabinet kit, pg 10 ★ Pull = Extra Savings

★ Clock Management — Enter Web Code CMS

★ Digital Signal Processing — Enter Web Code CEQ

## 6500 Series

★ Web Code: NAG

Part No.	Mfr.	Product No.	Pkg.	Description	1	10
43191	+	6502*	DIP-40	CPU, 8-bit, 1MHz	\$5.95	\$5.49
43166	+	65C02*	DIP-40	CPU, 8-bit, 1MHz (CMOS)	5.95	5.25
43254	+	6522*	DIP-40	Versatile interface adapter, 1MHz	4.95	4.49
43297	+	6532*	DIP-40	RAM I/O timer, 1MHz	6.95	5.95
43318	+	6551*	DIP-28	Asynch. comm. interface adapter, 1MHz	3.95	3.49

★ Pull = Extra Savings

\* AMD = Advanced Micro | CSS = Custom Silicon Solutions | NSC = National Semi | TI = Texas Instruments | + Major Brands



# 6800/68000, 8000 Series, UARTs, Z80 MPUs & EPROMs



## 6800/68000 CMOS

\*Web Code: SBP

Part No.	Mfr. Part No.	Pkg.	Description	1	10
248604	MC68HC11E1CFN3	PLCC-52	MCU, 8-bit, 38 I/O, 3MHz	\$10.95	\$9.95
248583	MC68HC11F1CFN3	PLCC-68	MCU, 8-bit, 30 I/O, 3MHz	11.95	10.95
132530	MC68HC705J1ACP	DIP-20	MCU, 8-bit, 14 I/O, 4MHz	5.95	5.49
248575	MC68HC71E9CFN2	PLCC-52	MCU, 8-bit, 38 I/O, 2MHz	23.95	21.95

## 6800/68000 N-MOS

\*Web Code: PAG

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10
43481	◆	6800★	DIP-40	CPU, 8-bit, 5V, 2MHz	\$4.95	\$4.49
43502	◆	6802★	DIP-40	CPU, 8-bit, 5V, 1MHz	9.95	8.95
43537	◆	6808★	DIP-40	CPU, 8-bit, 7V, 1MHz	6.95	5.95
43545	◆	6809E★	DIP-40	CPU, 8-bit, 7V, 1MHz	4.95	4.49
320590	◆	68B09E★	DIP-40	CPU, 8-bit, 7V, 2MHz	4.95	4.49
43561	◆	6810★	DIP-24	SRAM, 1K-bit, 5V, 1MHz	3.95	3.49
43596	◆	6821★	DIP-40	Peripheral inter. adapter, 8-bit, 7V, 1MHz	3.95	3.49
43414	◆	68B21	DIP-40	Peripheral inter. adapter, 8-bit, 7V, 1MHz	4.95	4.49
43633	◆	6850★	DIP-24	Asynch. comm. int. adapter, 8-bit, 7V, 1MHz	4.49	3.95

★ Pull = Extra Savings

## 8000 Series

Please Note: Manufacturer may vary

\*Web Code: CAH

Part No.	Product No.	Pkg.	Description	1	10	100
51844	8031★	DIP-40	MCU, 8-bit, 32 I/O, 8MHz	\$2.95	\$2.75	\$2.49
51676	80C31★	DIP-40	MCU, 8-bit, 32 I/O, 24MHz, CMOS	3.25	2.95	2.75
876096	P80C31BH-1	DIP-40	MCU, 8-bit, 32 I/O, 16MHz, CMOS	3.95	3.49	3.25
102197	8032★	DIP-40	CPU, 8-bit, 32 I/O, 12MHz	3.49	2.95	2.49
51861	8035★	DIP-40	CPU, 8-bit, 27 I/O, 11MHz	1.95	1.75	1.49
51959	8039★	DIP-40	CPU, 8-bit, 27 I/O, 6MHz	1.95	1.49	1.25
51692	80C39	DIP-40	MCU, 8-bit, 27 I/O, 11MHz, CMOS	2.95	2.75	2.49
51991	8051AP★	DIP-40	MCU, 8-bit, 27 I/O, 11MHz	1.25	.95	.75
125647	80C52BASIC	DIP-40	MCU, 8-bit, 32 I/O, 12MHz, CMOS	29.95	27.95	25.95
52046	8080A★	DIP-40	CPU, 8-bit, 16 I/O, 1MHz	4.95	4.49	4.25
52062	8085AH★	DIP-40	CPU, 8-bit, 16 I/O, 3MHz	4.95	4.49	3.25
52071	8085AH-2★	DIP-40	CPU, 8-bit, 16 I/O, 5MHz	5.25	4.75	4.49
52100	8086-2★	DIP-40	CPU, 8-bit, 32 I/O, 8MHz	3.95	3.49	2.95
52142	8088★	DIP-40	CPU, 8-bit, 16 I/O, 5MHz	3.95	3.49	2.95
52290	8155★	DIP-40	I/O port timer, 2K-bit, 3MHz	3.95	3.49	2.95
52302	8155-2★	DIP-40	Static MOS RAM, 2K-bit, 3 I/O, 5MHz	4.49	3.95	3.49
52193	81C55★	DIP-40	I/O port timer, 2K-bit, 3MHz, CMOS	4.95	4.49	3.95
52492	8224★	DIP-16	Clock generator/driver	4.95	4.49	3.95
52513	8228	DIP-28	System controller/bus driver	4.95	4.49	3.95
52581	8243★	DIP-24	I/O expander, 5V, MIL. temp	4.95	4.25	3.25
52644	8251★	DIP-28	USART	2.49	2.25	1.95
52652	8251A★	DIP-28	Prog. communications interface	3.49	3.25	2.95
52687	8253-5★	DIP-24	Prog. interval timer, 5MHz	3.49	3.25	2.75
52708	8254★	DIP-24	Prog. interval timer, 8MHz	1.49	1.25	.95
52716	8254-2★	DIP-24	Prog. interval timer, 10MHz	3.95	3.49	3.25
52409	82C54-2★	DIP-24	Prog. interval timer, 10MHz, CMOS	3.95	3.49	2.95
52724	8255★	DIP-40	CPU peripheral, 2MHz	4.49	3.95	3.49
52732	8255A-5★	DIP-40	CPU peripheral, 5MHz	4.75	4.25	3.75
291805	8255AC-5	DIP-40	CPU peripheral, 4MHz	4.75	4.25	3.75
52417	82C55A★	DIP-40	CPU peripheral, 8MHz, CMOS	4.49	3.95	3.49
52759	8256★	DIP-40	Multi func. uproc. support controller	15.95	13.95	11.95
52839	8279★	DIP-40	CPU peripheral, 5MHz	10.95	9.95	7.95
52847	8279-5★	DIP-40	CPU peripheral, 5MHz	11.95	10.95	8.95
52871	8284A★	DIP-18	Clock generator/driver, 8MHz	4.95	4.49	3.95
52901	8287★	DIP-20	Octal bus transceiver	6.95	5.95	4.95
53031	8748H◆	DIP-40	CPU, 8-bit, 27 I/O, 11MHz	12.95	11.95	9.95
53057	8749H◆	DIP-40	CPU, 8-bit, 27 I/O, 11MHz	12.95	10.95	9.95

\* Tie pin 31 low to bypass the internal ROM

★ Pull = Extra Savings ◆ Refurbished = Backed by Jameco

## UARTs

Please Note: Manufacturer may vary

\*Web Code: MAG

Part No.	Product No.	Pkg.	Description	1	10
43158	6402★	DIP-40	5V CMOS	\$5.95	\$4.95
27570	NS16C450N★	DIP-40	Asynch. comm. element, 5V	1.95	1.75
288809	TL16C550CN	DIP-40	1-channel w/ 16-byte FIFO, 5V	3.95	3.49

★ Pull = Extra Savings

## Z80 MPUs

Please Note: Manufacturer may vary

\*Web Code: JAF

Part No.	Product No.	Pkg.	Description	1	10
35561	Z80★	DIP-40	2.5MHz CPU (MK3880N/780C)	\$2.49	\$2.25
35596	Z80A★	DIP-40	4MHz CPU (MK3880N-4/780C-1)	2.95	2.75
35609	Z80A-CTC★	DIP-28	4MHz counter timer circuit (MK3882-4)	2.25	1.95
35641	Z80A-PIO★	DIP-40	4MHz parallel I/O interf. contr. (MK3881-4)	2.25	1.95
35705	Z80B★	DIP-40	6MHz CPU (MK3880N-6)	3.25	2.95
61786	Z85C3008PS	DIP-40	Serial communications controller	2.95	2.59

★ Pull = Extra Savings

## EPROMs

\*Web Code: XAF

Part No.	*Mfr.	Product No.	Pkg.†	Config.	Description	1	10	100
33611	◆	TMS2716◆	DIP-24	2k x 8	450ns, 5V	\$1.25	\$ .95	\$ .75
40002	◆	2716◆	DIP-24	2k x 8	450ns, 5V	3.95	3.75	3.49
40011	◆	2716-1◆	DIP-24	2k x 8	350ns, 5V	3.49	2.95	2.49
308662	◆	2716A-2	DIP-24	2k x 8	200ns, 5V	3.95	3.75	3.49
40096	◆	2732◆	DIP-24	4k x 8	450ns, 5V	5.95	5.49	3.95
40133	◆	2732A-45◆	DIP-24	4k x 8	450ns, 5V	3.95	3.75	3.49
40125	◆	2732A-25◆	DIP-24	4k x 8	250ns, 5V	4.95	4.49	3.95
114876	◆	2732B◆	DIP-24	4k x 8	450ns, 5V	4.49	4.25	3.95
40109	◆	2732A-20◆	DIP-24	4k x 8	200ns, 5V	5.49	4.95	4.49
266001	◆	27C32-150◆	DIP-24	4k x 8	150ns, 5V	4.95	4.49	4.25
40192	◆	2764-20◆	DIP-28	8k x 8	200ns, 5V	4.25	3.95	3.75
40230	◆	2764A-20◆	DIP-28	8k x 8	200ns, 5V	4.25	3.95	3.75
39845	◆	27C64-25◆	DIP-28	8k x 8	250ns, 5V	3.49	3.25	2.95
74608	◆	27C64-20◆	DIP-28	8k x 8	200ns, 5V	3.75	3.49	3.25
39829	◆	27C64-15◆	DIP-28	8k x 8	150ns, 5V	4.25	3.95	3.75
698322	ST	M27C64A-15F1	FDIP-28	8k x 8	150ns, 5V (±10%)	5.95	5.49	5.25
105304	◆	27C64-12◆	DIP-28	8k x 8	120ns, 5V	4.49	4.25	3.85
266036	◆	27C64-100	DIP-28	8k x 8	100ns, 5V	4.95	4.55	4.05
39984	◆	27128A-25◆	DIP-28	16k x 8	250ns, 5V	3.95	3.75	3.49
39950	◆	27128A-15◆	DIP-28	16k x 8	150ns, 5V	4.25	3.95	3.55
39685	◆	27C128-25◆	DIP-28	16k x 8	250ns, 5V	3.75	3.49	3.25
101101	◆	27C128-20◆	DIP-28	16k x 8	200ns, 5V	3.75	3.49	3.25
87935	◆	27C128-12◆	DIP-28	16k x 8	120ns, 5V	4.49	4.25	3.95
39731	◆	27C256-25◆	DIP-28	32k x 8	250ns, 5V	2.35	2.15	1.85
39722	◆	27C256-20◆	DIP-28	32k x 8	200ns, 5V	2.55	2.25	1.95
39714	◆	27C256-15◆	DIP-28	32k x 8	150ns, 5V	2.75	2.49	2.25
698111	ST	M27C256B-15F1	FDIP-28	32k x 8	150ns, 5V	3.95	3.49	3.25
65904	◆	27C256-12◆	DIP-28	32k x 8	120ns, 5V	3.65	3.49	3.25
698091	ST	M27C256B-12F1	FDIP-28	32k x 8	120ns, 5V	4.25	3.75	3.49
112740	◆	27C256-10◆	DIP-28	32k x 8	100ns, 5V	3.75	3.25	2.95
698082	ST	M27C256B-10F1	FDIP-28	32k x 8	100ns, 5V	4.49	3.95	3.59
140476	◆	27C256-70◆	DIP-28	32k x 8	70ns, 5V	4.75	4.49	3.95
266079	◆	27C256-55	DIP-28	32k x 8	55ns, 5V	4.75	4.49	3.95
39802	◆	27C512-25◆	DIP-28	64k x 8	250ns, 5V	2.25	1.95	1.75
39790	◆	27C512-20◆	DIP-28	64k x 8	200ns, 5V	2.25	1.95	1.75
39781	◆	27C512-15◆	DIP-28	64k x 8	150ns, 5V	2.75	2.49	2.25
698234	ST	M27C512-15F1	FDIP-28	64k x 8	150ns, 5V	4.19	3.95	3.75
39773	◆	27C512-12◆	DIP-28	64k x 8	120ns, 5V	2.95	2.75	2.49
698226	ST	M27C512-12F1	FDIP-28	64k x 8	120ns, 5V	4.19	3.95	3.75
131959	◆	27C512-10◆	DIP-28	64k x 8	100ns, 5V	2.95	2.75	2.49
203625	◆	27C512-70	DIP-28	64k x 8	70ns, 5V	3.95	3.75	3.49

◆ Refurbished = Backed by Jameco †FDIP = Ceramic frit seal

Continued on next page

\* ST = ST Micro ◆ Major Brands

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# EPROMs, OTP/PROMs, EEPROMs, Memory & Anti-Static Accessories



## EPROMs (Continued)

★ Web Code: XAF

Part No.	Mfr.	Product No.	Pkg.	Config.	Description	1	10	100
203641	◆	27C1024-12	DIP-40	64k x 16	120ns, 5V	\$3.95	\$3.25	\$2.75
39651	◆	27C010-15◆	DIP-32	128k x 8	150ns, 5V	3.25	2.95	2.75
697987	ST	M27C1001-15F1	FDIP-32	128k x 8	150ns, 5V	4.95	4.75	4.49
74624	◆	27C010-12◆	DIP-32	128k x 8	120ns, 5V	3.25	2.95	2.75
697961	ST	M27C1001-12F1	FDIP-32	128k x 8	120ns, 5V	5.95	5.49	5.25
697944	ST	M27C1001-10F1	FDIP-32	128k x 8	100ns, 5V	4.75	4.49	4.25
146149	◆	27C010-70◆	DIP-32	128k x 8	70ns, 5V	4.25	3.95	3.75
698007	ST	M27C1001-70F1	FDIP-32	128k x 8	70ns, 5V	4.75	4.49	4.25
65699	◆	27C020-15◆	DIP-32	256k x 8	150ns, 5V	3.49	3.25	2.95
698031	ST	M27C2001-12F1	FDIP-32	256k x 8	120ns, 5V	5.95	5.49	4.95
156267	◆	27C020-10	DIP-32	256k x 8	100ns, 5V	4.25	3.95	3.75
127933	◆	27C4096-12	DIP-40	256k x 16	120ns, 5V	5.49	4.95	4.49
85462	◆	27C040-15◆	DIP-32	512k x 8	150ns, 5V	4.49	4.25	3.95
102293	◆	27C040-12◆	DIP-32	512k x 8	120ns, 5V	4.95	4.75	4.49
266124	◆	27C040-70	DIP-32	512k x 8	70ns, 5V	4.95	4.75	4.49
156275	◆	27C080-10	DIP-32	1M x 8	100ns, 5V	8.95	7.95	7.25
203684	◆	27C080-90	DIP-32	1M x 8	90ns, 5V	8.95	7.95	7.25

◆ Refurbished = Backed by Jameco    † FDIP = Ceramic frit seal

## Static RAM

★ Web Code: WAF

Part No.	Mfr.	Product No.	Pkg.	Config.	Description	1	10
42198	◆	5101★	DIP-22	256 x 4	1-Kbit, 5V, 450ns	\$7.95	\$6.95
38957	◆	2114N	DIP-18	1k x 4	4-Kbit, 5V, 450ns	2.25	1.95
43238	◆	6514	DIP-18	1k x 4	4-Kbit, 5V, 300ns	3.49	2.95
38973	◆	2114N-2	DIP-18	1k x 4	4-Kbit, 5V, 200ns	2.25	1.95
38981	◆	2114N-2L	DIP-18	1k x 4	4-Kbit, 5V, 450ns, LP	2.49	2.25
114260	DAL	DS1220Y-150	DIP-24	2k x 8	16-Kbit, 5V, 150ns, NV	12.95	10.95
25911	◆	MK48202B-15	DIP-24	2k x 8	16-Kbit, 5V, 150ns, NV	8.95	7.95
42809	◆	6116P-3N★	DIP-24	2k x 8	16-Kbit, 5V, 150ns	1.75	1.55
42788	◆	6116P-1★	DIP-24	2k x 8	16-Kbit, 5V, 100ns	1.79	1.59
42737	◆	6116LP-1★	DIP-24	2k x 8	16-Kbit, 5V, 100ns, LP	1.95	1.75
242675	◆	6116-70	DIP-24	2k x 8	16-Kbit, 5V, 70ns	2.25	1.95
2179032	CPS	6116A-55PC	DIP-24	2k x 8	16-Kbit, 5V, 55ns	1.49	1.25
242683	CPS	CY7C128A-45	DIP-24	2k x 8	16-Kbit, 5V, 45ns, Asynch.	1.95	1.75
85121	◆	6264LP-70	DIP-28	8k x 8	64-Kbit, 5V, 70ns, LP	3.75	3.49
42884	◆	6264LP-10★	DIP-28	8k x 8	64-Kbit, 5V, 100ns, LP	2.95	2.75
42892	◆	6264LP-12★	DIP-28	8k x 8	64-Kbit, 5V, 120ns, LP	2.25	1.95
42930	◆	6264P-12★	DIP-28	8k x 8	64-Kbit, 5V, 120ns	2.49	2.25
114278	DAL	DS1225AB-15	DIP-28	8k x 8	64-Kbit, 5V, 150ns, NV	13.95	11.95
242376	◆	CY7C199P-35	DIP-28	32k x 8	256-Kbit, 5V, 35ns, LP Asynch.	1.95	1.75
177113	DAL	DS1230Y-100	DIP-28	32k x 8	256-Kbit, 5V, 100ns, NV	13.95	12.95
114323	DAL	DS1230Y-150	DIP-28	32k x 8	256-Kbit, 5V, 150ns, NV	12.95	11.95
41970	◆	43256-10L★	DIP-28	32k x 8	256-Kbit, 5V, 100ns, LP	3.25	2.95
82472	◆	62256LP-70	DIP-28	32k x 8	256-Kbit, 5V, 70ns, LP	2.49	2.25
391793	CPS	CY62256L-70PC	DIP-28	32k x 8	256-Kbit, 5V, 70ns	3.49	3.25
391822	CPS	CY62256LL-70PC	DIP-28	32k x 8	256-Kbit, 5V, 70ns, LP	3.49	3.25
42876	◆	62256LP-85	DIP-28	32k x 8	256-Kbit, 5V, 85ns, LP	2.65	2.45
42833	◆	62256LP-10★	DIP-28	32k x 8	256-Kbit, 5V, 100ns, LP	1.95	1.75
42850	◆	62256LP-12★	DIP-28	32k x 8	256-Kbit, 5V, 120ns, LP	1.85	1.65
391831	CPS	CY62128LL-70SC	SOIC-32	128k x 8	1-Mbit, 5V, 70ns, LP	1.75	1.49
131810	◆	628128LP-70	DIP-32	128k x 8	1-Mbit, 5V, 70ns, LP	5.95	5.49
103982	◆	628128LP-85★	DIP-32	128k x 8	1-Mbit, 5V, 85ns, LP	4.49	3.95
242448	◆	BS62LV4006PIP-55	PDIP-32	512k x 8	4M LP, 55ns, 2.4-5.5V, I-temp	18.95	16.95
157358	◆	628512LP-70	DIP-32	512k x 8	4-Mbit, 5V, 70ns, LP	14.95	13.95

★ Pull = Extra Savings

## OTP/PROMs

★ Web Code: WAG

Part No.	Mfr.	Product No.	Pkg.	Config.	Description	1	10	100
27764	◆	N82S123	DIP-16	32 x 8	256-bit, 7V, 50ns, PROM	\$6.95	\$5.95	\$4.95
27781	◆	N82S129	DIP-16	256 x 4	1-kbit, 7V, 50ns, PROM	11.95	10.95	9.95
27810	◆	N82S181	DIP-24	1k x 8	8-kbit, 7V, 70ns, PROM	3.95	2.95	1.95
27836	◆	N82S191	DIP-24	2k x 8	16-kbit, 7V, 35ns, PROM	3.95	3.59	3.29
394986	ATM	AT27C256R-45PU	DIP-28	32k x 8	256-kbit, 45ns OTP, LP, I-temp.	1.95	1.75	1.49
395081	ATM	AT27C512R-70PU	DIP-28	64k x 8	512-kbit, 5V, 70ns, I-temp., OTP	2.25	1.95	1.75
394708	ATM	AT27C010-70PU	DIP-32	128k x 8	1-Mbit, 5V, 70ns, I-temp., OTP	2.95	2.75	2.49

★ Network ICs — Enter Web Code JEQ

## EEPROMs

Please Note: Manufacturer may vary

★ Web Code: GAM

Part No.	Product No.	Pkg.	Config.	Description	1	10	100
108855	93C56	DIP-8	128 x 16	3-wire serial, 2-5V	\$3.99	\$3.35	\$2.99
108847	24C04P	DIP-8	512 x 8	2-wire serial, 2-5V	.49	.39	.35
200555	24C16-10	DIP-8	2k x 8	2-wire serial, 5V	.45	.39	.35
74691	28C16A-25	DIP-24	2k x 8	Page parallel, 5V	3.95	3.75	3.49
74827	28C64A-25	DIP-28	8k x 8	Page parallel, 5V	3.75	3.49	3.25
200580	24C256-10	DIP-8	32k x 8	2-wire serial, 2-5V	.59	.49	.39
74878	28C256-25	DIP-28	32k x 8	Page parallel, 5V	4.95	4.49	3.95
74843	28C256-15	DIP-28	32k x 8	Page parallel, 5V	5.49	5.25	4.49
276832	24C512	DIP-8	64k x 8	2-wire serial, 2.5V	1.59	1.35	1.19

★ Flash Memory — Enter Web Code KAJ



## Anti-Static Work Mats



These mats are made of attractive semi-conductive vinyl that provide adequate discharging yet will not short leads or pins.

Part No.	Dimensions	Wt. (lbs.)	1	10	25
10576	11.3" x 22"	0.7	\$9.95	\$8.95	\$7.95
10584	19.5" x 23.5"	1.1	13.95	12.49	10.95
2130853	19.7" x 23.6"	1.1	14.95	13.95	12.95
236541	23.5" x 27.5"	1.4	22.95	20.95	17.95
2152075	24" x 48"	3.9	69.95	64.95	59.95



★ Anti-Static — Enter Web Code XAA

## DRAM

Please Note: Manufacturer may vary

★ Web Code: DRM

Part No.	Product No.	Pkg.	Config.	Description	1	10	100
41339	4116-15	DIP-16	16k x 1	150ns (MM5290J-1R)	\$9.99	\$8.99	\$7.99
41662	4164-150★	DIP-16	64k x 1	150ns (MCM6665-15)	.99	.89	.79
41574	41464-10★	DIP-18	64k x 4	100ns (HY53C464S-10)	1.69	1.59	1.45
41398	41256-120★	DIP-16	256k x 1	120ns (MB81256-12)	.79	.69	.59

★ Pull = Extra Savings

★ Zilog Flash MCUs — Enter Web Code JAF

★ MPUs — Enter Web Code MPT

★ Universal Programmers and Adapters — Enter Web Code SUP

## IC Anti-Static Accessories

★ Web Code: XAA

Part No.	Product No.	Description	1	10	100
13864	CF2	Conductive foam (12" x 24" x .25") hard black	\$12.95	\$11.95	\$10.95
29516	RIC20#	.300" anti-static rail for 8, 14, 16, 18, 20 & 22-pin ICs	.29	.25	.22
29524	RIC220#	.600" anti-static rail for 24, 28, 36 & 40-pin ICs	.29	.25	.22
29583	RRS	Storage tube rubber stopper	*	.09	.07

# Previously used

Additional Anti-Static Products, IC Accessories & Tools see page 123

\* ATM = Atmel Semiconductor    CPS = Cypress Semiconductor    DAL = Dallas Semiconductor    ST = ST Micro    ◆ Major Brands



# PAL/GALs, Microcontrollers, BASIC Stamps & Interface



## Dallas Semiconductors

\*Web Code: QDH

Part No.	Mfr. Part No.	Pkg.	Description	1	10	100
114198	DS1210	DIP-8	NV controller chip .....	\$3.95	\$3.25	\$2.49
114219	DS1213C	DIP-28	Smart socket .....	21.95	19.95	18.95
133410	DS1216C	DIP-28	Smart watch/RAM .....	25.95	22.95	17.95
114331	DS1232LP	DIP-8	Micromonitor chip .....	1.75	1.49	1.29
697231	DS1243Y-120+	DIP-28	64k NV SRAM w/ phantom clock .....	17.95	15.95	14.25
176778	DS1302	DIP-8	Trickle charge time keeping .....	3.25	2.39	1.69
1194679	DS1307+	DIP-8	5V, 64 x 8 serial I2C real time clock, C-temp .....	3.59	2.75	1.95
1194695	DS1307N+	DIP-8	5V, 64 x 8 serial I2C real time clock, I-temp .....	2.95	2.25	2.05
780811	DS1511Y	DIP-28	Y2K compliant watchdog clock .....	14.95	12.95	10.95
114382	DS1620	DIP-8	Digital thermometer and thermostat ..	5.95	5.49	4.95
865936	DS18B20+	TO-92	Prog. resolution 1-wire digital thermometer ..	3.95	2.49	2.19
133452	DS12887	DIP-24	Real time clock chip .....	6.95	5.95	4.95

\*CPLDs and FPGAs — Enter Web Code SAZ

## Voice Chip

### Single-Chip Voice Record/Playback Device

- Manual switch or microprocessor controllable
- Directly cascadable for longer durations
- Single voltage operation: +5V (4.5V to 5.5V operating range)
- Playback can be edge or level-activated • 28-pin DIP
- Typical 100k record cycles, 1µA standby current and 100 year message retention



Part No.	Mfr. Part No.	Description	1	10	50
141671	ISD1110P	Voice record/playback (10 sec.) .....	\$5.95	\$5.49	\$5.25

## PALs & GALs

\*Web Code: YAD

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10
28020	♦	PAL16L8	DIP-20	Octal 16-input AND-OR-INVERT gate array .....	\$1.25	\$ .95
88399	♦	GAL16V8-10*	DIP-20	10ns 64 x 32 AND array .....	2.49	2.25
37452	♦	GAL16V8-15*	DIP-20	15ns 64 x 32 AND array .....	2.25	1.95
37461	♦	GAL16V8-25*	DIP-20	25ns 64 x 32 AND array .....	2.09	1.89
876539	LAT	GAL16V8D-25LP	DIP-20	25ns 64 x 32 AND array .....	2.49	2.25
38658	♦	GAL20V8-15**	DIP-24	15ns 64 x 40 AND array .....	2.49	2.25
39159	♦	GAL22V10-15	DIP-24	15ns 132 x 44 AND array .....	3.75	3.49
39167	♦	GAL22V10-25	DIP-24	25ns 132 x 44 AND array .....	2.95	2.75

GALs are electrically erasable, CMOS PLDs that can be reprogrammed and can be used in place of numerous PALs

\* Replaces PALs: 10H8, 10L8, 10P8, 12H6, 12L6, 12P6, 14H4, 14L4, 14P4, 16H2, 16H8, 16L2, 16L8, 16P2, 16P8, 16R4, 16R6, 16R8, 16RP4, 16RP6, 16RP8, 14H8, 14L8, 14P8, 16H6, 16L6, 16P6

\*\* Replaces PALs: 18H4, 18L4, 18P4, 20H2, 20H8, 20L2, 20L8, 20P2, 20P8, 20R4, 20R6, 20R8, 20RP4, 20RP6, 20RP8

## Buffer

\*Web Code: WBR

Part No.	Product No.	Pkg.	Description	1	10	100
23051	LH0002CN	DIP-10	General purpose buffer .....	\$9.95	\$8.95	\$7.95



## 80C52-BASIC Microcontroller

\*Web Code: CAH

A custom-masked microcontroller with a full-featured 8KB ROM-resident BASIC-52 interpreter. 256 x 8-bit RAM.

- Full BASIC interpreter in ROM on a single chip
- Operates DC to 12MHz • "Stand-alone" software development
- On-chip oscillator and clock circuit
- Interrupts can be handled by BASIC or Assembly Language



Part No.	Mfr. Part No.	Description	1	10	100
125647	80C52BASIC	40-pin CPU 8-bit CMOS w/ BASIC interpreter .....	\$29.95	\$27.95	\$25.95

## Parallax Propeller Microprocessor Chip

Designed for high-speed embedded processing while maintaining low-power and low-current consumption.



Part No.	Mfr. Part No.	Package	1	10
2007134	P8X32A-D40	DIP-40 .....	\$12.95	\$11.95

\* ATM = Atmel Semiconductor | LAT = Lattice Semiconductor | MAX = Maxim Semiconductor | MCH = Microchip | ♦ Major Brands

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

## Microcontrollers

\*Web Code: PAV

Part No.	*Mfr.	Mfr. Part No.	Pkg.	Description	1	10	100
145040	MCH	PIC12C508A-04/P	DIP-8	512 OTP, 4MHz, 5 I/O .....	\$1.05	\$ .95	\$ .85
144258	MCH	PIC12C509A-04/P	DIP-8	1k OTP, 4MHz, 5 I/O .....	1.05	.95	.85
223790	MCH	PIC12F629-I/P	DIP-8	1k flash, 20MHz, 6 I/O .....	.95	.89	.85
223781	MCH	PIC12F675-I/P	DIP-8	1k flash, 20MHz, 6 I/O .....	.99	.95	.89
312514	MCH	PIC12F683-I/P	DIP-8	2k flash, 20MHz, 6 I/O .....	1.39	1.29	1.25
145111	MCH	PIC16F84A-04/P	DIP-18	1k flash, 4MHz, 13 I/O .....	3.55	3.45	3.35
193332	MCH	PIC16F84A-20/P	DIP-18	1k flash, 20MHz, 13 I/O .....	3.95	3.69	3.39
312733	MCH	PIC16F88-I/P	DIP-18	4k flash, 20MHz, 16 I/O .....	3.25	2.95	2.75
246756	MCH	PIC16F628-20/P	DIP-18	2k flash, 20MHz, 16 I/O .....	3.59	3.45	3.25
223749	MCH	PIC16F630-I/P	DIP-14	1k flash, 20MHz, 12 I/O .....	1.35	1.19	1.09
247142	MCH	PIC16F648A-I/P	DIP-18	4k flash, 20MHz, 16 I/O .....	2.19	1.95	1.89
312590	MCH	PIC16F684-I/P	DIP-14	2k flash, 20MHz, 12 I/O .....	1.55	1.35	1.25
312611	MCH	PIC16F688-I/P	DIP-14	4k flash, 20MHz, 12 I/O .....	1.75	1.65	1.55
2127523	MCH	PIC16F690-I/P	DIP-20	7k flash, 20MHz, 18 I/O .....	1.89	1.75	1.59
246975	MCH	PIC16F873A-I/SP	DIP-28	4k flash, 20MHz, 22 I/O .....	3.95	3.75	3.49
193367	MCH	PIC16F876-20/SP	DIP-28	8k flash, 20MHz, 22 I/O .....	5.95	5.75	5.49
247011	MCH	PIC16F876A-I/SP	DIP-28	8k flash, 20MHz, 22 I/O .....	4.49	4.35	4.15
176882	MCH	PIC16F877-20/P	DIP-40	8k flash, 20MHz, 22 I/O .....	5.65	5.45	5.25
247038	MCH	PIC16F877A-I/P	DIP-40	8k flash, 20MHz, 33 I/O .....	4.85	4.69	4.55
2127531	MCH	PIC16F886-I/P	DIP-28	14k flash, 20MHz, 25 I/O .....	2.15	1.99	1.85
2127540	MCH	PIC16F887-I/P	DIP-40	14k flash, 20MHz, 35 I/O .....	2.59	2.25	2.15
248031	MCH	PIC18F452-I/P	DIP-40	32k flash, 20MHz, 34 I/O .....	5.95	5.75	5.59
2177651	MCH	PIC18F2550-I/SP	DIP-28	32k flash, 48MHz, 24 I/O .....	5.19	4.49	4.35
2177678	MCH	PIC18F4550-I/P	DIP-40	32k flash, 48MHz, 35 I/O .....	5.75	5.49	4.75
248330	ATM	ATMEGA8-16PI	DIP-28	8k flash, 16MHz, 23 I/O .....	2.95	2.75	2.49
323133	ATM	ATMEGA16-16PU	DIP-40	6k flash, 16MHz, 32 I/O .....	4.49	4.25	3.95
765302	ATM	ATTINY13-20PU	DIP-8	1k flash, 20MHz, 6 I/O .....	1.95	1.75	1.55
2151267	ATM	ATTINY45-20PU	DIP-8	4k flash, 20MHz, 6 I/O .....	1.25	1.09	.99
2151312	ATM	ATTINY85-20PU	DIP-8	8k flash, 20MHz, 6 I/O .....	1.95	1.75	1.59
168874	ATM	AT89C2051-24PU	DIP-20	2k flash, 24MHz, 15 I/O .....	.99	.79	.69
204089	ATM	AT89C4051-24PU	DIP-20	4k flash, 24MHz, 15 I/O .....	2.45	2.15	1.75
1537061	ATM	ATTINY2313-20PU	DIP-20	2k flash, 20MHz, 18 I/O .....	2.75	2.49	2.25
168903	ATM	AT89C51-24PC	DIP-40	4k flash, 40MHz, 32 I/O .....	2.49	2.25	1.95
168920	ATM	AT89C52-24PC	DIP-40	8k flash, 24MHz, 32 I/O .....	2.95	2.49	1.95
662637	ATM	AT89S52-24PC	DIP-40	8k flash, 24MHz, 32 I/O .....	1.59	1.39	1.09
168946	ATM	AT89C55WD-24PC	DIP-40	20k flash, 24MHz, 32 I/O .....	2.49	2.25	1.95
2139111	ATM	ATMEGA328P-PU	DIP-28	32k flash, 8-bit, 20MHz .....	4.95	4.49	4.09
2129334	ATM	A000048	DIP-28	32k flash, 8-bit, ATmega328 .....	4.95	4.65	4.49

## USB-to-Serial Prop Plug for Propeller & BASIC Stamp

Provides a USB-to-serial port connection for microcontroller programming and communication. USB cable included.



Part No.	Mfr. Part No.	Description	1	5
2109421	32201	Up to 3Mbps, 3.3V & 5V compatible, 4-pin header .....	\$18.95	\$17.95

## Parallax BASIC Stamp Modules

\*Web Code: BSM

Part No.	Mfr. Part No.	Package	Speed	No. of I/O Pins	1	5
130892	BS2-IC	24-pin	20MHz	16 + 2 .....	\$48.95	\$43.95
159775	BS2SX-IC	24-pin	50MHz (turbo)	16 + 2 .....	58.95	52.95

See page 143 for Parallax Boards & Kits

## Interface Series

\*Web Code: RBU

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10
1291647	MCH	TC4420CPA	DIP-8	6A high speed MOSFET driver .....	\$1.49	\$1.29
312160	MAX	MAX7219CNG	DIP-24	5V, 8 digit LCD driver .....	7.95	6.95
313322	♦	ICM7228AIP	DIP-28	5V, 8 digit LCD driver .....	3.95	3.49
241875	♦	FAN8082	DIP-8	18V, bi-directional DC motor driver ..	.99	.89
51131	♦	SN75492P	DIP-14	5V, HEX digit driver .....	1.95	1.75



Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Servo Controllers, Drivers/Receivers & Converters

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

<b>ANALOG DEVICES</b>	<b>PARMCHILE</b>	<b>National Semiconductor</b>	<b>ON</b>	<b>ST</b>	<b>MOTOROLA</b>	<b>Allegro</b>	<b>TEXAS INSTRUMENTS</b>	<b>HOLTEK</b>
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Semiconductors

Digital Interface					* Web Code: WBB		
Part No.	Mfr.	Part No.	Pkg.	Description	1	10	50
171969	PDN	1144	DIP-18	Keypad encoder .....	\$5.19	\$4.95	\$4.75
141532	PDN	1200	DIP-18	Unipolar stepper motor controller .....	6.39	6.09	5.75

Stepper Motor Drivers/Controllers					* Web Code: GDP		
Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
288067	ST	L297/1	DIP-20	Stepper motor controller, 5V .....	\$7.95	\$7.25	\$6.49
245403	ST	L298N	MW-15	Dual full-bridge driver, 46V .....	2.75	2.49	2.35
2179016	ALL	A3958SB	DIP-24	DMOS full-bridge PWM driver, 50V .....	.79	.59	.39
288104	ST	L6203	MW-11	DMOS full-bridge driver, 48V .....	7.49	6.95	6.25

Motor/Display Drivers					* Web Code: DAD		
Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
1762681	ALL	UDN2981A-T	DIP-18	8-channel source driver .....	\$2.95	\$2.75	\$2.49
24230	NSC	LM3914N	DIP-18	25V, dot/bar display driver .....	2.75	2.49	2.25
300003	NSC	LM3914N-1	DIP-18	25V, dot/bar display driver .....	2.25	1.85	1.59
24256	NSC	LM3915N	DIP-18	25V, dot/bar display driver .....	2.75	2.49	2.25
901061	NSC	LM3915N-1	DIP-18	3dB/step, 30dB range dot/bar disp. dvr .....	2.59	2.19	1.95
24272	NSC	LM3916N	DIP-18	3-25V, dot/bar display driver .....	2.49	2.15	1.89
241824	MOT	MC14489BP	DIP-20	5V, 7-segment LED display driver .....	3.95	3.75	3.49

## KAE Servo Controllers

\* Web Code: YBC

Controllers operate from standard 8-bit serial interface (RS232 or RS485). Using RS485, any mix of up to 32 controllers may be operated from a single serial port.

### 146472: PIC-SERVO Motion Control Chipset for DC Motors

- For DC motors with digital encoders
- 32-bit position, velocity and acceleration resolution
- PWM and direction outputs connect to servo amplifier
- Two chipset (PIC-SERVO V.4, 28-pin and PIC-ENC V.1, 18-pin)

### 323934/2134432: PIC-SERVO SC Servo Motion Control I.C.

- For DC motors (brush or brushless with incremental encoder feedback)
- Serial interface connects to RS232/485/422 communication port
- Position control, velocity control, trapezoidal profiling, plus step and direction inputs



323934



2134432

Part No.	Mfr.	Part No.	Package	1	5	25
146472	KAE	TOV4-DPS	DIP-28/18, 0.3" .....	\$35.95	\$34.49	\$32.95
323934	KAE	TOV10-DP	DIP-28, 0.3" .....	29.95	28.49	26.95
2134432	KAE	TOV10-SO	SOIC-28, 0.3" .....	29.95	28.49	26.95

## KAE Industrial Motion Controllers

### 323942: • For brush-type DC motors with 2 or 3 channel incremental encoders

- P.I.D. Servo control, trapezoidal position profiling, velocity mode, 32-bit resolution
- Integrated 12 to 48VDC supply power amplifier @ 3A continuous, 6A peak
- Limit switch inputs, general purpose analog input, PWM, DIR output for use with external amps

### 323951: • For 3-phase brushless motors with Hall effect sensors or conventional DC brush-type motors

- Amplifier capable of driving 6A continuously @ up to 48VDC
- High current amplifier: 7A continuous, 10A peak, 12 to 48VDC supply
- Support for linear & circular interpolation using the PIC-SERVO CMC chipset
- 184997: • Trapezoidal position profiling, velocity mode, up to 50,000 steps/sec.
- Full/half step bipolar chopper drive, 2A per phase, 7.5 to 46VDC supply
- Encoded indexer and driver for 2 or 4 phase stepper motors



323942

Part No.	Description	Size (L" x W" x H")	1	5
323942	PIC-SERVO motor control board	3.1 x 2.1 x 0.9 .....	\$169.95	\$159.95
323951	PIC-SERVO 3-phase motor control board	3.1 x 3.1 x 0.9 .....	239.95	227.95
184997	PIC-STEP motor control board	3.1 x 2.1 x 0.9 .....	159.95	151.95

## KAE Smart Serial Adapter

### Serial Converter/Stand Alone Host Controller

- Supports USB or RS232 serial interface
- Up to 32 NMC PIC-SERVO, PIC-STEP, PIC-I/O modules can be controlled from a single smart serial adapter
- RS232 operation supports baud rates from 19,200 to 115,200
- Supports Windows®, LINUX, Mac® OS, and other operating systems
- May be used as a stand alone host with either the simple sequencer chip or a PIC18F2620 MCU
- On board connector for MICROCHIP MPLAB ICD2



Part No.	Mfr.	Part No.	Description	1	5
1586120	KAE	SSA485-BDV2	Smart serial adapter .....	\$99.95	\$94.95

## Encoders/Decoders

\* Web Code: VAR

Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
296702	MOT	MC145026P	DIP-16	Encoder, 4.5-18V .....	\$2.95	\$2.75	\$2.49
296711	MOT	MC145027P	DIP-16	Decoder, 4.5-18V .....	2.95	2.75	2.49
123730	HOL	HT12E	DIP-18	Encoder, 2.4-12V .....	1.75	1.55	1.35
123748	HOL	HT12D	DIP-18	Decoder, 2.4-12V .....	1.65	1.45	1.25

## RS-232 Drivers/Receivers

\* Web Code: EAV

Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
142535	+	MAX202CPE	DIP-16	5V, 120kbps, w/ 0.1µF ext. caps .....	\$2.95	\$2.25	\$1.59
24811	+	MAX232CPE*	DIP-16	5V, 200kbps, multichannel .....	1.85	1.65	1.25
24812	+	MAX232CPE-R	DIP-16	5V, 200kbps, multichannel .....	1.85	1.65	1.25
318959	MAX	MAX232CPE	DIP-16	5V, 200kbps, multichannel .....	2.49	2.09	1.59
698576	TI	MAX232N	DIP-16	Dual EIA-232 driver/receiver, C-temp .....	.79	.69	.59
903277	TI	MAX232IN	DIP-16	Dual EIA-232 driver/receiver, I-temp .....	.75	.65	.55
106163	+	MAX233CPP	DIP-20	5V, 120kbps, multichannel .....	5.95	5.49	4.75
23157	+	DS1488N*	DIP-14	15V, quad line driver .....	.49	.39	.29
23181	+	SN75189N*	DIP-14	5V, quad line receiver .....	.39	.29	.19
25099	+	MC145406P	DIP-16	5-12V, EIA-232-D/V.28 driver/rcvr .....	2.25	1.95	1.75

\* 10 pcs. in Linear series IC cabinet kit, pg 10

## RS-422/423/485 Drivers/Receivers

\* Web Code: NBT

Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
299807	+	LTC485CN8	DIP-8	RS-485 LP transceiver, 5V .....	\$2.39	\$1.65	\$1.35
244195	+	MAX1487CPA	DIP-8	RS-485/422 LP transceiver, 12V .....	1.75	1.49	1.25
50948	+	SN75174N	DIP-16	RS-422 quad diff. line driver w/ 3 st. ..	1.29	1.19	1.09
50956	+	SN75175N	DIP-16	RS-422/423 quad diff. line receiver, 5V ..	1.49	1.25	1.09
758364	TI	SN75176AP	DIP-8	RS-422 differential bus transceiver ..	.69	.59	.45
50964	+	SN75176BN	DIP-8	RS-422 diff. line bus transceiver, 5V ..	.59	.49	.35

## A/D & D/A Converters

\* Web Code: QAG

Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
277131	MAX	MAX110BCPE	DIP-16	A/D, 14-bit, 5V, 50sps, 2-ch .....	\$10.95	\$9.95	\$8.95
10145	NSC	ADC0803LCN	DIP-20	A/D, 8-bit, 5V, 9.1Ksps, 1-ch .....	3.75	3.25	2.95
10153	NSC	ADC0804LCN	DIP-20	A/D, 8-bit, 5V, 9.1Ksps, 1-ch .....	3.19	2.59	2.19
10170	NSC	ADC0808CCN	DIP-28	A/D, 8-bit, 5V, 9.1Ksps, 8-ch .....	4.49	4.19	3.75
10225	NSC	ADC0820CCN	DIP-20	A/D, 8-bit, 5V, 1.5µs .....	3.49	3.25	2.95
116100	NSC	ADC0831CCN	DIP-8	A/D, 8-bit, 5V, 32µs .....	2.49	2.09	1.75
43756	+	7107CPL	DIP-40	A/D, 3 1/2-digit LCD/LED, ±5V .....	2.75	2.49	2.25
115158	ADI	AD558JN	DIP-16	D/A, 8-bit, 5-15V, 1-5-3µs, 1-ch .....	11.95	10.95	9.95
14904	NSC	DAC0800LCN	DIP-16	D/A, 8-bit, 4.5-18V, 150ns .....	1.25	.95	.85
14947	NSC	DAC0808LCN	DIP-16	D/A, 8-bit, 4.5-18V, 150ns .....	1.75	1.49	1.19
14963	NSC	DAC0830LCN	DIP-20	D/A, 8-bit, 5-15V, 1µs .....	3.95	3.49	2.95
290052	TI	TLC7524CN	DIP-16	D/A, 8-bit, 5-15V, 100ns .....	3.49	3.09	2.75

\* Ethernet Controllers — Enter Web Code LAE

\* Interface Controllers — Enter Web Code HAS

\* Motion Control — Enter Web Code DEU

\* ADI = Analog Devices | ALL = Allegro | HOL = Holtek | MAX = Maxim | MOT = Motorola | NSC = National | ST = ST Micro | TI = Texas Instruments | + Major Brands



# Comparators, Amplifiers & Digital Potentiometers

## Comparators

\*Web Code: EBS

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10	100
23528	♦	LM311N*	DIP-8	Voltage comparator .....	\$ .29	\$ .25	\$ .19
23851	♦	LM339N**	DIP-14	Quad comparator .....	.25	.22	.17
826742	TI	LM339N	DIP-14	Quad differential comparator .....	.29	.25	.19
120900	♦	LM392N	DIP-8	Low power op amp./volt comp. ....	1.19	1.09	.95
212177	♦	LM393AN	DIP-8	Low power low offset volt quad comp. ....	.29	.25	.19
24281	♦	LM393N*	DIP-8	Dual comparator .....	.29	.22	.17
973531	FSC	LM393N	DIP-8	Dual differential comparator ±18V ....	.35	.25	.19

\*10 pcs./\*\*20 pcs. included in Linear kit, pg 10

\*Power Management — Enter Web Code PMT

\*DC-to-DC Converters — Enter Web Code DCS

## ANALOG DEVICES

## Amplifiers

Part No.	Mfr. Part No.	Pkg.	Description	1	10	100
1780862	AD620ANZ	DIP-8	Low cost, LP instrumentation amp .....	\$6.95	\$5.95	\$5.25



## Amplifiers

Part No.	Mfr. Part No.	Pkg.	Description	1	10	100
825934	INA126PA	DIP-8	µPower instrumentation amp. ....	\$2.75	\$2.49	\$2.25
1780985	AD623ANZ	DIP-8	Single supply, rail-to-rail .....	4.49	3.95	3.59

## Audio Amps

\*Web Code: MBP

Part No.	*Mfr.	Product No.	Pkg./Pins	Description	1	10	100
243678	ADI	OP275GP	DIP-8	Dual JFET audio op amplifier ...	\$2.59	\$2.25	\$1.85
24037	NSC	LM380N	DIP-14	2-watt, power amplifier .....	1.39	1.15	.89
24088	NSC	LM383T	TO-220/5	7-watt, high power .....	5.95	5.49	4.95
24096	NSC	LM384N	DIP-14	5-watt audio amplifier .....	1.49	1.29	1.15
24125	NSC	LM386N-1*	DIP-8	Low voltage, 250mW/6V .....	.89	.75	.59
24133	NSC	LM386N-3*	DIP-8	Low voltage, 500mW/9V .....	.79	.65	.55
24942	ON	MC1350P	DIP-8	Video IF amp. (12V operation) .....	3.95	3.59	3.25
23270	NSC	LM1875T	TO-220/5	20-watt audio power amp. ....	3.15	2.95	2.75
835753	NSC	LM1875T/LB03	TO-220/5	20W audio pwr amp. (staggered leads) .....	3.25	2.95	2.75
107140	NSC	LM1881N	DIP-8	Video synchronous separator .....	2.15	1.85	1.65
32897	ST	TDA2002V	TO-220/5	8-watt audio high power amp. ...	4.95	4.49	3.95
1416796	ST	TDA2030AV	PWAT-5	18-watt audio amplifier .....	2.95	2.59	2.29
315344	ST	TDA2040V	PWAT-5	20-watt hi-fi power .....	2.95	2.75	2.49
275830	TI	OPA2134PA	DIP-8	High performance audio op amp. ....	2.95	2.49	2.25
320670	NSC	LM3886TF	TO-220/11	68-watt high-perf., isol. pkg. ....	5.49	4.95	4.49
192516	NSC	LM3886T	TO-220/11	68-watt high-performance .....	6.25	5.25	4.75
302201	NSC	LM4752T*	TO-220/7	Stereo 11-watt audio power amp. ....	4.95	4.49	3.95
316873	MOT	MC34119D	SOIC-8	LP audio amp. (500mW, 16VDC) .....	.69	.59	.39
316865	MOT	MC34119P	DIP-8	LP audio amp. (500mW, 16VDC) .....	2.15	1.85	1.65

\*10 pieces included in Linear kit, pg 10 ★ Pull = Extra Savings

## Op Amps

\*Web Code: WAD

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10	100
27852	♦	OP07CP	DIP-8	Ultra-low offset voltage .....	\$ .89	\$ .79	\$ .69
115318	♦	OP27GP	DIP-8	Low noise precision (-40° to 80°C) .....	2.49	1.95	1.59
33161	♦	TL062CP	DIP-8	Low power JFET op amp. ....	.49	.39	.35
33187	♦	TL071CP	DIP-8	Low noise JFET op amp. ....	.29	.25	.22
213073	♦	TL072ACP	DIP-8	Low noise JFET input op amp. ....	.79	.69	.59
33195	♦	TL072CP*	DIP-8	Low noise JFET dual op amp. ....	.25	.22	.19
33216	♦	TL074CN*	DIP-14	Low noise JFET quad op amp. ....	.45	.39	.35
33232	♦	TL081CP	DIP-8	JFET input, offset control .....	.39	.35	.29
33241	♦	TL082CP*	DIP-8	JFET input dual op amplifier .....	.39	.35	.29
33267	♦	TL084CN*	DIP-14	JFET input quad op amplifier .....	.39	.35	.29
143917	TI	TLC272CP	DIP-8	LinCMOS precision dual op amp. ....	.69	.59	.49
212151	♦	LM301AN*	DIP-8	Operational amplifier .....	.75	.59	.49
245673	♦	LM308AH	TO-5/8	Precision op amplifier .....	4.95	4.49	3.95

\*10 pcs. 20 pcs. included in Linear cabinet kit, pg 10

## Op Amps (Continued)

\*Web Code: WAD

Part No.	*Mfr.	Product No.	Pkg./Pins	Description	1	10	100
23464	♦	LM308N*	DIP-8	Precision op amplifier .....	\$6.95	\$6.25	\$5.49
23608	NSC	LM318N	DIP-8	Precision high speed .....	.89	.79	.69
212169	♦	LM324AN	DIP-14	Low power quad op amplifier .....	.35	.29	.25
23683	♦	LM324N**	DIP-14	Low power quad op amplifier .....	.29	.25	.22
826671	TI	LM324N	DIP-14	Quad op amplifier .....	.35	.29	.25
973110	FSC	LM324N	DIP-14	Quad op amp., supply volt. ±16V ....	.39	.35	.25
22904	♦	LF347N	DIP-14	Quad JFET input (wide band) .....	.65	.55	.39
23915	♦	LM348N	DIP-14	Quad 741 op amp (UPC4741C) .....	.35	.29	.25
22912	♦	LF351N	DIP-8	BIFET op amplifier .....	.99	.89	.79
22939	♦	LF353N*	DIP-8	Dual BIFET (comp w/ TL082CP) .....	.39	.35	.29
22971	NSC	LF356N*	DIP-8	JFET input (wide band) .....	.99	.85	.65
22998	♦	LF357N	DIP-8	JFET input (wide band) .....	2.49	2.25	1.95
120862	♦	LM358AN	DIP-8	Low power dual (improved 358N) ....	.25	.22	.19
23966	♦	LM358N*	DIP-8	Low power dual op amplifier .....	.29	.25	.22
826793	TI	LM358P	DIP-8	Low power dual op amplifier .....	.39	.35	.25
23018	♦	LF411CN*	DIP-8	Low offset drift JFET input .....	1.25	1.09	.89
23026	♦	LF412CN*	DIP-8	Low offset drift JFET input dual .....	1.19	.95	.75
106681	♦	LF442CN	DIP-8	Dual low power JFET input .....	1.19	1.05	.79
119992	♦	LF444CN	DIP-14	Quad low power JFET input .....	1.49	1.25	1.05
143976	♦	LMC660CN	DIP-14	CMOS quad operational amplifier ...	1.75	1.45	1.09
24521	♦	LM741CH	TO-5/8	Op amplifier .....	3.95	3.49	3.25
24539	♦	LM741CN**	DIP-8	Op amplifier .....	.29	.25	.22
24540	♦	LM741CN-R	DIP-8	Op amplifier .....	.29	.25	.22
830522	TI	UA741CP	DIP-8	General purpose op amplifier .....	.39	.35	.29
840763	NSC	LM741CN/NOPB	DIP-8	General purpose op amplifier .....	.79	.59	.45
24563	♦	LM747CN	DIP-14	Dual 741 op amplifier .....	.99	.89	.69
239222	♦	LTC1001CN8	DIP-8	Precision op amplifier .....	1.49	1.25	.95
239177	♦	LT1014DN	DIP-14	Quad precision op amplifier .....	3.95	3.49	3.25
1745688	LTC	LTC1050CN8	DIP-8	Precision zero-drift op amp w/ internal cap .....	4.29	3.89	3.65
23131	♦	LM1458N*	DIP-8	Dual op amplifier .....	.35	.29	.25
903509	TI	MC1458P	DIP-8	Dual general purpose op amplifier ...	.35	.25	.22
1085819	TI	TLC2722CP	DIP-8	Advanced LinCMOS® rail-to-rail .....	1.79	1.49	1.29
1944839	♦	TLV2772CP	DIP-8	Hi slew rate r-r output, w/ shutdown ...	.99	.89	.79
12116	♦	CA3080E	DIP-8	Op transconductance amplifier ....	3.95	3.75	3.49
12183	♦	CA3130E	DIP-8	CMOS op amplifier .....	1.59	1.35	1.05
12204	♦	CA3140E	DIP-8	Bi-MOS op amplifier .....	1.29	1.19	1.09
24168	♦	LM3900N	DIP-14	Quad amplifier .....	.49	.45	.35
251125	♦	MC4558CN	DIP-8	Wide bandwidth dual bipolar .....	.45	.35	.25
908289	TI	RC4558P	DIP-8	Dual general purpose op amp, ±15V .....	.39	.35	.25
27385	♦	NE5532*	DIP-8	Dual low noise op amplifier .....	.49	.45	.39
903963	TI	NE5532P	DIP-8	Dual low noise op amplifier .....	.55	.45	.39
252970	♦	NE5532AP	DIP-8	Dual lower noise op amplifier .....	.89	.69	.59
27406	♦	NE5534	DIP-8	Low noise op amplifier .....	.79	.69	.59
302076	NSC	LM6134BIN	DIP-14	Quad LP r-r in/out, 10MHz .....	3.49	3.25	2.75
302068	NSC	LM6142AIM	SOIC-8	Dual r-r in/out, 17MHz .....	1.95	1.75	1.49
301356	NSC	LMC6484AIN	DIP-14	CMOS quad r-r I/O, lower VOS .....	3.49	2.95	2.59
192532	NSC	LM13700N	DIP-16	Dual op transcon. w/ diodes/buffer .....	1.69	1.45	1.19
871586	ON	MC33204P	DIP-14	Low voltage, rail-to-rail .....	1.59	1.39	1.19
251061	ON	MC34072P	DIP-8	Single supply 3V-44V op amplifier ...	.99	.79	.59

\*10 pcs./\*\*20 pcs. included in Linear cabinet kit, pg 10

## Digital Potentiometers

\*Web Code: JBP

Part No.	*Mfr.	Product No.	Pkg.	Description	1	10	100
1778367	ADI	AD5282BRU200	TSSOP-16	Dual, 256 position .....	\$2.95	\$2.59	\$2.39
241744	MCH	MCP41010-I/P	DIP-8	10kΩ, 256 steps, SPI .....	1.49	1.25	.99
241752	MCH	MCP42010-I/P	DIP-14	10kΩ, 256 steps, 2-ch SPI .....	1.95	1.75	1.49

\*Real Time Clocks — Enter Web Code RTC

\*Supervisory Chips — Enter Web Code SCT

\*Analog Switches — Enter Web Code VBN

\*ADI = Analog Devices | FSC = Fairchild | LTC = Linear Technology | MCH = Microchip | MOT = Motorola | NSC = National | ON = ON Semi | ST = ST Micro | TI = Texas Ins. | ♦ Major Brands

\*For additional products, availability and specifications visit [Jameco.com](http://www.Jameco.com) and enter the Web Code in the product search box



Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Linear Series, Sensors & Voltage Regulators



## Linear Series

\*Web Code: FAD

Part No.	Mfr.	Product No.	Pkg./Pins	Description	* Order in multiples of 10		
					1	10	100
16301	+	DS0026CN	DIP-8	Dual MOS clk. driver (5MHz)	\$2.95	\$2.75	\$2.49
239281	+	DG201BDJ	DIP-16	Quad analog switch	1.75	1.49	1.35
1341966	TI	L293DNE	DIP-16	Quad half-H drivers, I-temp	2.95	2.49	1.95
1342011	TI	L293NE	DIP-16	Quad half-H drivers, C-temp	2.95	2.75	2.49
23721	+	LM331N	DIP-8	Prec volt to freq convtr (150ppm/°C)	2.39	1.95	1.75
23739	NSC	LM334Z	TO-92/3	Adjust current source	.79	.65	.49
23771	NSC	LM336Z-2.5	TO-92/3	Voltage reference (2.5V)	.39	.35	.29
24117	+	LM385Z-1.2	TO-92/3	Microprw volt. ref. diode (1.2V)	.49	.45	.35
23000	+	LF398N	DIP-8	Sample and hold circuit	1.29	1.05	.85
309833	+	DG403DJ	DIP-16	Dual SPDT & SPDT analog switch	2.49	2.25	1.95
33347	+	TL431CLP	TO-92/3	Program precision reference	.29	.22	.15
33355	+	TL494CN	DIP-16	Contrl circuit pulse-width-modulated	.59	.49	.39
86799	+	LM555CM	SOIC-8	Timer	.35	.29	.25
27422	+	LM555CN**	DIP-8	Timer (MC1455P/NE555V)	.25	.22	.17
27423	+	LM555CN-R	DIP-8	Timer (MC1455P/NE555V)	.29	.25	.19
973646	FSC	LM555CN	DIP-8	Timer	.29	.25	.19
126797	+	LMC555CN*	DIP-8	CMOS timer	.69	.59	.45
841571	NSC	LMC555CN/NOPB	DIP-8	CMOS timer	1.49	1.25	.95
890091	ST	NE555N	DIP-8	Gen. purp. single bipolar timer	.29	.25	.22
904085	TI	NE555P	DIP-8	Precision timer	.39	.35	.25
761272	TI	TLCS55CP	DIP-8	LinCMOS™ timer, C-temp	.65	.55	.49
24328	+	LM556N*	DIP-14	Dual 555 timer	.29	.25	.22
904114	TI	NE556N	DIP-14	Dual precision timer	.35	.29	.25
27473	ST	NE564N	DIP-16	High freq. phase locked loop	2.49	2.25	1.95
24352	+	LM565N	DIP-14	Phased locked loop	2.95	2.75	2.49
24395	+	LM567CN	DIP-8	Tone decoder	1.39	1.09	.95
27490	ST	NE571N	DIP-16	Companion, subscriber	4.49	4.25	3.95
1367795	NXP	SA602AN/01,112	DIP-8	Double-balanced mixer/oscillator	3.05	2.75	2.45
115174	ADI	AD620AN	DIP-8	Low-cost instrument amp.	6.49	5.25	4.49
1780985	ADI	AD623ANZ	DIP-8	Sngl supply r-to-r instrument amp.	4.49	3.95	3.59
115182	ADI	AD633JN	DIP-8	Low-cost analog multiplier	6.95	6.25	5.75
23211	+	MC1496P	DIP-14	Balanced mod/demodulator	1.75	1.49	1.25
1944821	+	P1803AC	TO-220	Balanced three-chip sidactor	.19	.15	.15
34278	+	ULN2003A*	DIP-16	Hi-volt/curr. darl. transistor array	.35	.29	.25
1147178	TI	ULN2003AN	DIP-16	Hi-volt/curr. darl. transistor array	.49	.45	.35
193826	+	ULN2003AD	SOIC-16	Hi-volt/curr. darl. transistor array	.39	.29	.22
2179024	+	ULQ2003A	DIP-16	Hi-volt/curr. darl. transistor array	.39	.35	.29
34294	+	ULN2004AN	DIP-16	Hi-volt/curr. darl. transistor array	.39	.35	.29
34972	EXR	XR2206CP	DIP-16	Monolithic function generator	7.95	7.25	6.75
34999	+	XR2211	DIP-14	FSK demodulator/tone decoder	2.19	1.95	1.75
34315	+	ULN2803A*	DIP-18	Hi-volt/curr. darl. transistor array	.59	.55	.49
34316	+	ULN2803A-R	DIP-18	Hi-volt/curr. darl. transistor array	.65	.59	.55
700664	TI	ULN2803AN	DIP-18	Darlington transistor array, I-temp	1.75	1.49	1.25
123625	NSC	LM2907N-8	DIP-8	Frequency to volt converter	1.75	1.49	1.19
23317	NSC	LM2907N	DIP-14	Frequency to volt converter	1.69	1.49	1.25
23350	NSC	LM2917N-8	DIP-8	Freq. to volt conv. w/ zener	1.49	1.35	1.19
23341	NSC	LM2917N-14	DIP-14	Freq. to volt conv. w/ zener	1.49	1.35	1.15
12079	+	CA3046N	DIP-14	NPN transistor array	1.49	1.39	1.25
12159	+	CA3086N	DIP-14	NPN transistor array	1.95	1.75	1.49
31974	+	SG3524N	DIP-16	Regulating pulse width modulator	.89	.79	.59
51140	+	75551PA	DIP-8	CMOS timer	.45	.39	.35
51174	+	7660CPA	DIP-8	CMOS volt converter (+5 to ±5V)	.75	.65	.55
53786	FSC	9602PC	DIP-16	Dual retrig. resett. monostable multivib.	.39	.29	.19
118586	ON	MC145151P	DIP-28	Parallel input PLL freq synthesizer	3.95	3.25	2.49
1054684	TI	SN75441ONE	DIP-16	Quad half-H drivers	1.95	1.75	1.55

\*10 pcs./\*\*20 pcs. included in Linear cabinet kit, above right

\*MUX/DEMUXs — Enter Web Code RAB

## Linear IC Kit

\*Web Code: CKS

Includes: 20 drawer component cabinet (319600), 20 clear plastic drawers (319601), 20 clear dividers (319611), pg 132 and 30 adhesive labels for drawers to identify parts in kit.

10 each: TL072CP, TL074CN, TL082CP, TL084CN, MAX232CPE, LM301N, LM308N, LM311N, LM337T, LF353N, LF356N, LM358N, LM386N-1, LM386N-3, LM393N, LF411CN, LF412CN, LMC555CN, LM556N, LM723CN, LM1458N, DS1488N, DS1489N, ULN2003A, ULN2803A, NE5532N, 7808T, 78L12, 7815T, 7905T, 7912CT, 7915CT

20 each: LM317T, LM324N, LM339N, LM741CN, LM555CN, 7805T, 78L05, 7812T

Part No.	Description	Wt. (lbs.)	1	5
84988	480 pcs. (40 types) analog IC kit	6.0	\$199.95	\$179.95
130411	Refill for 84988 (480 pcs.)	1.3	184.95	169.95

\*Voltage References — Enter Web Code TBD

## Temperature Sensors

\*Web Code: WAN

Part No.	Mfr.	Product No.	Pkg/Pins	Description	1	10	100
107094	NSC	LM34CZ	TO-92/3	Prec temp sensor (-40° to +230°F)	\$5.95	\$5.25	\$4.75
155192	NSC	LM34DZ	TO-92/3	Prec temp sensor (+32° to +212°F)	2.05	1.75	1.55
1467905	NSC	LM34DZ/NOPB	TO-92/3	Prec temp sensor (+32° to +212°F)	2.09	1.79	1.59
107107	NSC	LM35CZ	TO-92/3	Prec temp sensor (-40° to 110°C)	3.95	3.49	3.25
2162610	MCH	TC77-3.3MCTTR	SOT23/5	High accuracy (-55° to 125°C)	.49	.39	.29
192217	NSC	LM35DT	TO-220/3	Prec temp sensor (-55° to 150°C)	2.49	1.95	1.55
155740	NSC	LM35DZ	TO-92/3	Prec temp sensor (0° to +100°C)	1.59	1.25	.95
278387	ADI	TMP36GT9	TO-92	Low voltage temp. sensor	1.29	1.09	.95
120820	+	LM335AZ	TO-92/3	Precision temperature sensor	.99	.89	.79
23755	+	LM335Z	TO-92/3	Volt mode temperature sensor	.75	.65	.55
1268893	NSC	LM335Z/NOPB	TO-92/3	Precision temperature sensor	.89	.79	.59
241939	ADI	AD590JH	TO-52/3	Two terminal IC temp transducer	9.95	8.95	7.95
313293	ADI	AD595AQ	DIP-14	Thermocouple amp for chromel-alumel	14.95	13.95	12.95
302551	DAL	DS18S20	TO-92/3	High-prec. 1-wire digital thermo	3.95	3.25	2.25

## Hall Effect Sensors

\*Web Code: REB

Part No.	Mfr.	Part No.	Pkg.	Description	1	10	100
1718743	ADI	A1302EUA-T	SIP-3	4.5V to 6V, 11mA, 1.3mV/G sensitivity	\$1.95	\$1.75	\$1.49
2135881	ADI	A1302KUA-T	SIP-3	4.5V to 6V, 11mA, 1.3mV/G sensitivity	1.95	1.75	1.49
1718701	ADI	A1104LUA-T	SIP-3	3.8V to 24V, 7.5mA, Brp=25G. Bop=450G	1.49	1.25	1.09
1871879	OH180U		SIP-3	Mono IC w/ hall linear amp & sensor	2.95	2.59	2.29

More Hall Effect Sensors on page 73

## Voltage Regulators

\*Web Code: TAC

Part No.	Mfr.	Product No.	Pkg./Pins	Description	1	10	100
23499	+	LM309K	TO-3/2	5V, 1A (0°C to +125°C)	\$4.95	\$4.49	\$4.25
192268	NSC	LM317AT	TO-220/3	3-terminal adj. (1.2V-37V)	1.25	.99	.79
837898	NSC	LM317AT/NOPB	TO-220/3	3-term. 1.5A output adj pos, I-temp	1.59	1.29	.95
192276	NSC	LM317HVT	TO-220/3	3-terminal adj. (1.2V-57V)	2.09	1.75	1.45
23552	+	LM317LZ	TO-92/3	100mA adj. positive (1.2V-37V)	.29	.25	.22
23579	+	LM317T**	TO-220/3	1.5A adj. positive (1.2V-37V)	.35	.29	.25
23580	+	LM317T-R	TO-220/3	1.5A adj. positive (1.2V-37V)	.39	.35	.29
23667	+	LM323K	TO-3/2	5V, 3A positive	4.75	4.25	3.59
296841	+	LM337LZ	TO-92/3	3-terminal adjustable negative	.69	.59	.49
23819	+	LM337T*	TO-220/3	1.5A/adj. neg. (-1.2V-37V)	.49	.45	.39
23835	+	LM338K	TO-3/2	5A adj. positive (1.2V-32V)	6.95	6.25	5.75
192284	NSC	LM338T	TO-220/3	5A adjustable	1.89	1.45	1.19
838621	NSC	LM338T/NOPB	TO-220/3	5A adjustable positive	1.75	1.49	1.25
900017	NSC	LM340T-5.0	TO-220/3	5V, 1A positive, I-temp	1.39	1.19	.95
23931	+	LM350K	TO-3/2	3A/3 term. adj. pos. (1.2V-33V)	6.25	5.75	5.25
23940	+	LM350T	TO-220/3	3A adjustable power	.59	.49	.45
24467	+	LM723CN*	DIP-14	Voltage regulator (2V-37V)	.39	.35	.29

\*10 pcs./\*\*20 pcs. included in Linear kit, above

\*ADI = Analog Devices | DAL = Dallas | EXR = EXAR | FSC = Fairchild | MCH = Microchip | NSC = National | NXP = NXP Semi | ON = ON Semi | ST = ST Micro | TI = Texas Ins. | + Major Brands



# Voltage Regulators & IC Sockets

## Voltage Regulators (Continued)

\*Web Code: TAC

Part No.	*Mfr.	Product No.	Pkg./Pins	Description	1	10	100
107166	NSC	LM2936Z-5.0	TO-92/3	Ultra-low quiescent curr. 5V ..	\$1.69	\$1.49	\$1.29
51246	+	7805K	TO-3/2	5V, 1A positive (LM340K-5) ....	2.49	2.25	1.95
51262	+	7805T**	TO-220/3	5V, 1A positive (LM340T-5) .....	.29	.25	.22
51263	+	7805T-R	TO-220/3	5V, 1A positive (LM340T-5) .....	.35	.29	.25
924570	ST	L7805ACV	TO-220/3	5V, 1.5A positive .....	.39	.35	.29
924633	ST	L7805CV	TO-220/3	5V, 1.5A positive .....	.45	.35	.29
786138	FSC	LM7805CT	TO-220/3	5V, 1A positive, I-temp .....	.45	.39	.35
902071	NSC	LM7805CT	TO-220/3	5V, 1A positive .....	1.39	1.19	.95
876221	ON	MC7805CT	TO-220/3	5V, 1A positive, C-temp .....	.29	.25	.22
876248	ON	MC7805CTG	TO-220/3	5V, 1A positive, C-temp .....	.49	.39	.29
51182	+	78L05**	TO-92/3	5V, 100mA positive .....	.25	.22	.17
51183	+	78L05-R	TO-92/3	5V, 100mA positive .....	.29	.25	.19
192233	+	78M05	TO-220/3	5V, 500mA positive .....	.29	.25	.22
51297	+	7806T	TO-220/3	6V, 1A positive (LM340T-6) .....	.35	.29	.25
51300	+	7808T*	TO-220/3	8V, 1A positive (LM340T-8) .....	.35	.29	.25
876352	ON	MC7809CT	TO-220/3	9V, 2.2A positive, C-temp .....	.39	.35	.29
1958641	FSC	LM7809CT	TO-220/3	9V, 2.2A positive .....	.59	.49	.39
192225	+	78L09ACZ	TO-92/3	9V, 100mA positive .....	.29	.25	.19
51318	+	7812K	TO-3/2	12V, 1A pos. (LM340K-12) .....	2.95	2.75	2.49
51334	+	7812T**	TO-220/3	12V, 1A pos. (LM340T-12) .....	.29	.25	.22
51335	+	7812T-R	TO-220/3	12V, 1A pos. (LM340T-12) .....	.45	.39	.35
889305	ST	L7812CV	TO-220/3	12V, 1.5A positive .....	.39	.35	.29
902127	NSC	LM7812CT	TO-220/3	12V, 1A positive .....	1.39	1.19	.95
51203	+	78L12*	TO-92/3	12V, 100mA positive .....	.29	.22	.15
51377	+	7815T*	TO-220/3	15V, 1A positive (LM340T-15) .....	.35	.29	.25
51414	+	7824T	TO-220/3	24V, 1A positive (LM340T-24) .....	.35	.29	.25
51457	+	7905T*	TO-220/3	-5V, 1A neg. (LM320T-5) .....	.35	.29	.25
51422	+	79L05	TO-92/3	-5V, 100mA negative .....	.35	.29	.25
2132269	+	7906A	TO-220/3	-6V, 500mA negative .....	.35	.29	.25
51481	+	7912T*	TO-220/3	-12V, 1A neg. (LM320T-12) .....	.35	.29	.25
51502	+	7915T*	TO-220/3	-15V, 1A neg. (LM320T-15) .....	.39	.35	.29
2205237	+	GL-7924	TO-220/3	-24V, 2.2A .....	.39	.29	.25
316945	MOT	MC34063AP1	DIP-8	1.5 step-up/down invert sw reg ...	.49	.39	.35

\*10 pcs./ \*\*20 pcs. included in Linear kit, pg 10

## Low Drop-Out Voltage Regulators

\*Web Code: MBT

Part No.	*Mfr.	Product No.	Pkg./Pins	Description	1	10	100
299743	NSC	LM1084IT-ADJ	TO-220/3	5A low dropout adj. pos. ....	\$2.49	\$2.25	\$2.05
299735	NSC	LM1084IT-3.3	TO-220/3	5A low dropout 3.3V pos. ....	1.95	1.75	1.49
835593	NSC	LM1084IT-5.0/NOPB	TO-220/3	5A, 5V LDO pos., I-temp .....	2.75	2.49	2.05
192305	+	LM1086CT-3.3	TO-220/3	1.5A low dropout pos. (3.3V) .....	.99	.89	.79
242114	+	LM1117T-3.3	TO-220/3	800mA, 3.3V, LDO .....	.89	.79	.69
242115	NSC	LM1117T-3.3/NOPB	TO-220/3	800mA, 3.3V, LDO .....	1.29	1.09	.79
2126230	TI	UC2833DW	SOIC-16	2V, 1A prec. LDO reg./controller	2.95	2.49	1.95
897188	NSC	LM2937ET-3.3	TO-220/3	500mA, 3.3V LDO, I-temp .....	1.59	1.29	1.05
297810	NSC	LM2937ET-5.0	TO-220/3	500mA, 5V LDO .....	1.59	1.25	1.05
107182	+	LM2940CT-5	TO-220/3	5V LDO reg. (max. 45Vin) .....	1.39	1.19	.95
192495	NSC	LM2940CT-12	TO-220/3	12V LDO reg. (max. 45Vin) .....	1.49	1.25	.95
837505	NSC	LM2940T-5.0/NOPB	TO-220/3	1A, 5V LDO, I-temp .....	1.39	1.19	1.05
121064	+	LM2941CT	TO-220/5	1A LDO adjustable (45Vin) .....	1.59	1.35	.95
1944880	+	LP2950ACN	TO-92/3	100mA 5V LDO reg. ....	.65	.55	.45
1323397	NSC	LP2950ACZ-3.3/NOPB	TO-92	3.3V $\mu$ pwrr volt. reg., I-temp .....	.89	.79	.69
266757	+	LP2950CZ-5.0	TO-92/3	100mA low power LDO .....	.59	.49	.45
2135671	+	AS2954-5.0	TO-92/3	5.0V, 250mA LDO .....	.29	.25	.19
192524	+	LM3940IT-3.3	TO-220/3	1A LDO for 5V to 3.3V .....	1.65	1.45	1.25

\*Power Drivers and Modules — Enter Web Code REK

\*Switching Regulators — Enter Web Code DEN

## Simple Switcher Voltage Regulators

\*Web Code: VAX

Part No.	*Mfr.	Product No.	Pkg./Pins	Description	1	10
156566	+	LM2574N-5	DIP-8	5V step-down regulator .....	\$1.59	\$1.29
192381	NSC	LM2576HVT-5.0	TO-220/5	3A step down V-reg, high Vin range ...	4.95	4.49
192372	NSC	LM2576HVT-ADJ	TO-220/5	3A step-down V-reg, high Vin range ...	4.49	3.95
245569	+	LM2576T-5.0	TO-220/5	3A step-down voltage regulator .....	2.49	2.25
120977	+	LM2576T-ADJ	TO-220/5	3A step-down voltage regulator .....	1.95	1.75

## PLCC Thru-Hole Sockets

\*Web Code: YAH

- Solder tail allows thru-hole board patterns in .100" grid
- Thru-hole lead length: .125"
- Accepts JEDEC type "A" plastic leaded chip (0.05" centers)

71969



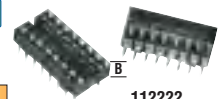
Part No.	*Mfr.	Product No.	Pins	Body Height (in.)	1	10	100
71811	JVP	G1P32	32	.375 .....	.75	.65	.59
71618	+	G1P444	44	.375 .....	.75	.65	.59
72442	JVP	G1P452	52	.375 .....	.85	.75	.69
71969	JVP	G1P468	68	.375 .....	.89	.79	.75
71977	JVP	G1P484	84	.375 .....	1.09	.95	.79

## Single/Dual Wipe Solder Tail Low-Profile IC Sockets

- Contact current: 1A
- Contact resistance: less than 5m $\Omega$
- Dielectric withstanding voltage: 300V
- Insulation resistance: greater than 1000M $\Omega$
- Thru-hole lead length: .140" (A)
- Body height: .188" (B)

JAMECO ValuePro

\*Web Code: WAP



112222

Order in multiples of 10

Part No.	*Mfr.	Product No.	Pins	Width (in.)	10	100	1000
112193	JVP	6LPD	6	0.3 .....	.14	.11	.10
51571	+	8LPD	8	0.3 .....	.13	.10	.08
112206	JVP	8LPD	8	0.3 .....	.14	.11	.09
37162	JVP	14LP (single wipe)	14	0.3 .....	.13	.10	.09
112214	JVP	14LPD	14	0.3 .....	.14	.11	.10
37372	JVP	16LP (single wipe)	16	0.3 .....	.12	.10	.08
37373	+	16LPD	16	0.3 .....	.18	.12	.10
112222	JVP	16LPD	16	0.3 .....	.20	.13	.11
38113	JVP	18LP (single wipe)	18	0.3 .....	.14	.12	.09
112231	JVP	18LPD	18	0.3 .....	.17	.16	.12
38607	JVP	20LP (single wipe)	20	0.3 .....	.14	.12	.10
112248	+	20LPD	20	0.3 .....	.17	.16	.14
38608	JVP	20LPD	20	0.3 .....	.18	.17	.15
112256	JVP	22SLPD	22	0.3 .....	.18	.16	.14
39132	JVP	22LPD	22	0.4 .....	.17	.16	.14
39378	+	24SLPD	24	0.3 .....	.25	.23	.20
112282	JVP	24SLPD	24	0.3 .....	.27	.25	.22
112264	+	24LPD	24	0.6 .....	.24	.22	.18
112266	JVP	24LPD	24	0.6 .....	.26	.22	.20
112299	+	28SLPD	28	0.3 .....	.25	.23	.21
112300	JVP	28SLPD	28	0.3 .....	.26	.24	.22
112272	+	28LPD	28	0.6 .....	.25	.23	.20
40301	JVP	28LPD	28	0.6 .....	.26	.24	.21
137621	JVP	32SLPD	32	0.3 .....	.19	.15	.12
689979	+	ED32DT	32	0.6 .....	.15	.12	.09
112301	JVP	32LPD	32	0.6 .....	.29	.25	.22
41110	JVP	40LP (single wipe)	40	0.6 .....	.29	.25	.22
41111	+	40LPD	40	0.6 .....	.33	.30	.26
112311	JVP	40LPD	40	0.6 .....	.40	.36	.30

\* FSC = Fairchild | JVP = Jameco ValuePro | MOT = Motorola | NSC = National | ON = ON Semi | ST = ST Micro | TI = Texas Instruments | + Major Brands

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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## AMP DIP Low-Profile IC Sockets

\*Web Code: QAF

### Economy Ladder Style

- Dual wipe
- Housing: glass filled thermoplastic, black
- Contacts: phosphor bronze tin plating

Part No.	Mfr. Part No.	Pos.	Plating	Width (in.)	10	100	500
526299	390261-2	8	60µ" tin	0.3	.12	.10	.08
526192	390261-3	14	60µ" tin	0.3	.16	.13	.11
526213	390261-5	18	60µ" tin	0.3	.16	.13	.11
683139	1-390261-5	18	60µ" tin	0.3	.17	.14	.12
683198	1-390262-1	24	60µ" tin	0.6	.25	.21	.20
683171	1-390261-9	28	60µ" tin	0.3	.31	.25	.21
526256	390262-2	28	60µ" tin	0.6	.27	.25	.21
526272	390262-5	40	60µ" tin	0.6	.37	.31	.27

## Machine Tooled Solder Tail Low-Profile IC Sockets

- Contact plating: gold
- Contact resistance: less than 5mΩ
- Dielectric withstanding voltage: 300V<sub>RMS</sub>
- Insulation resistance: greater than 1000MΩ
- Material: beryllium copper or phosphor bronze
- Tin-plated leads
- Thru-hole lead length: .177" (A)
- Body height: .117" (B)

Part No.	Cross Ref. No.	Pins	Width (in.)	1	10	100
167004	6MLP	6	0.3	\$.39	\$.29	\$.19
51626	8MLP	8	0.3	.49	.45	.29
37197	14MLP	14	0.3	.65	.55	.39
37402	16MLP	16	0.3	.75	.59	.45
65585	18MLP	18	0.3	.89	.75	.55
38623	20MLP	20	0.3	.85	.69	.49
39386	24SMLP	24	0.3	.95	.79	.59
39351	24MLP	24	0.6	1.09	.89	.65
114412	28SMLP	28	0.3	1.09	.89	.65
40328	28MLP	28	0.6	1.19	.95	.69
40329	28MLP-R	28	0.6	1.25	.99	.75
105381	32MLP	32	0.6	1.35	1.09	.89
41136	40MLP	40	0.6	1.69	1.39	.95
42059	48MLP	48	0.6	1.25	.99	.75

## .100" Single-In-Line Machine Tooled Strip Sockets

- Solder tail or wire wrap

Part No.	Description	Pins	Lead Length (in.)	1	10	100
164822	Straight single row	4	.160	\$.75	\$.65	\$.59
138684	Straight single row	5	.160	.59	.49	.39
2100339	Straight single row	7	.160	.59	.49	.35
102201	Straight single row	10	.160	1.19	.95	.75
2125675	Straight single row	14	.160	.89	.69	.49
78642	Straight single row	30	.160	1.49	1.29	.95
175920	Straight single row	36	.160	1.75	1.59	1.29
101283	WW2 single row	20	.435 (2)	2.49	2.25	1.95
104054	WW3 single row	30	.575 (3)	2.95	2.75	2.49

## ICS AND IC SOCKETS GRAB BAGS

Part No.	Product No.	Description	1	10
17996	GB108	100 assorted TTL series DIP & SMD (SOIC) (74, 74ALS, 74HC, 74HCT, 74F, 74LS, 74S)	\$12.95	\$11.49
18024	GB109	100 assorted linear series (NSC, Motorola, TI) TO-3, 8 & 14-pin DIP, SOIC packages	12.95	11.49
105620	GB120	100 assorted sockets (DIP, PGA, SIMM, SIP)	6.95	5.95
135386	GB120LB	300 assorted sockets (DIP, PGA, SIMM, SIP)	14.95	12.95

## 3 Level Machine Tooled Wire Wrap IC Sockets

\*Web Code: FAL

- Contact plating: gold
- Sleeve material: brass
- Contact resist.: less than 5mΩ
- Material: beryllium copper or phosphor bronze
- Dielectric withstanding voltage: 300V<sub>RMS</sub>
- Insulation resistance: greater than 1000MΩ
- Body height: .115" (A)
- Thru-hole lead length: .586" (L)
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide

Part No.	Cross Ref. No.	Pins	Width (in.)	1	10	100
94474	8MSWW3	8	0.3	\$1.49	\$1.35	\$1.19
62051	14MSWW3	14	0.3	1.75	1.55	1.39
37411	16MSWW3	16	0.3	2.25	1.95	1.75
94482	18MSWW3	18	0.3	2.49	2.25	1.95
38632	20MSWW3	20	0.3	2.49	2.25	1.95
105372	24MSWW3	24	0.3	2.75	2.49	2.25
94491	24MSWW3	24	0.6	2.95	2.75	2.49
200716	28MSWW3	28	0.3	3.25	2.95	2.75
40337	28MSWW3	28	0.6	3.95	3.49	3.25
94503	40MSWW3	40	0.6	4.95	4.49	3.95

## 2 & 3 Level Wire Wrap IC Sockets

\*Web Code: SAF

- Contact plating/leads: tin (TWW); dual wipe
- Contact current: 1A
- Contact resistance: <5mΩ
- Sleeve material: brass
- Dielectric withstanding volt.: 300V
- Material: beryllium copper or phosphor bronze
- Insulation resistance: greater than 1000MΩ
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide
- Thru-hole lead length: .438" (L2); .638" (L3)
- Body height: .300" (A)

Part No.	Mfr.	Product No.	Pins	Width (in.)	1	10	100
196841	JVP	14TWW3	14	0.3	\$1.49	\$1.25	\$.95
37437	CA	16TWW2	16	0.3	2.95	2.75	2.49
75416	CA	24TWW2	24	0.6	1.49	1.25	.95

## Wire Wrap IC Socket I.D. Marker

- Material: plastic
- Can easily write location, part number or function
- Quick identification of pin numbers
- Slips onto socket before wrapping

Part No.	Product No.	Pins	Width (in.)	1	10	100
37145	ID-14-100	14	0.3	\$.69	\$.59	\$.45

## Machine Contact Dual-In-Line Female Sockets

- 0.100" centers
- Pin sleeve: tin
- Solder tail contact: .114" L
- Contact clip: gold

Part No.	Cross Ref. No.	Pins	1	10	100
212856	SA101000	10	\$.95	\$.85	\$.75
212936	SA481000	48	1.09	.99	.89

## SIMM Vertical Socket

\*Web Code: WAL

- Locking tabs
- Memory module sockets
- Tinned contacts
- Keyed mounting posts

Part No.	Cross Ref. No.	Description	1	10	100
100302	2000-1X30S	Single x 30-pin, vertical	\$1.49	\$1.35	\$1.19

\*Transistors — Enter Web Code FEN

\* CA = Circuit Assembly | JVP = Jameco ValuePro





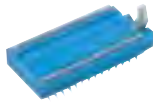
## Low Profile ZIF Sockets

\*Web Code: UBX

### Series 526

- Body: UL 94V-0 glass-filled polyester thermoplastic
- Beryllium copper alloy spring tempered contacts w/ 200µ" (5.08µm) tin plating
- Contact res.: 10mΩ max. • Contact current: 2A
- Breakdown voltage: 1000VAC min.
- Center pins: .600" (15.24mm) • Zinc alloy cam
- Operating temp.: -67°F to 221°F (-55°C to 105°C)
- Suggested PCB hole size: .035"Dia. (0.89mm)

102745



Part No.	Mfr. Part No.	Pins	Size (L" x W")	1	5	25
296789	24-526-10	24	1.45 x .75	\$8.25	\$7.75	\$7.25
102745	28-526-10	28	1.64 x .75	8.95	7.95	6.95
102753	40-526-10	40	2.24 x .75	9.95	8.95	7.95



## High Temp. Universal ZIF Test Sockets

### Series 6554

- Accepts devices on .300" to .600" (7.62mm to 15.24mm) centers
- -10: 100µ" tin over 50µ" nickel; -11: 10µ" gold over 50µ" nickel
- Operating temperature:
  - 10: 221°F (105°C) – tin plating
  - 11: 302°F (150°C) – gold plating
- Socket body: UL 94V-0 glass-filled PPS • Beryllium copper contact plating
- Stainless steel handle • Center pins: 0.600" • Insulation resistance: 1000MΩ
- Contact current: 1A • Dielectric withstanding voltage: 1000VAC

\*Web Code: AAN

104012



Part No.	Mfr. Part No.	Pins	Size (L" x W")	1	5	25
103992	24-6554-10	24	1.8 x 0.9	\$8.95	\$8.25	\$7.49
104003	28-6554-10	28	2.0 x 0.9	9.95	8.95	7.95
104012	32-6554-10	32	2.1 x 0.9	9.95	8.95	7.95
104030	40-6554-10	40	2.5 x 0.9	11.95	10.95	9.95



## SOIC/SOJ to DIP Adapters

\*Web Code: YBS

- Board material: 0.062" thick FR-4 w/ 1 oz. copper traces on both sides
- Brass alloy pins with 200µ" (5.08µm) min. tin plating
- Operating temperature: 221°F (105°C) max.
- Suggested PCB hole size: 0.028"Dia. (0.71mm)
- Center pins: 0.300" (7.62mm)

291515



Part No.	Mfr. Part No.	Pins	Size (L" x W")	1	10	100
291208	08-350000-11RC	8	.400 x .46	\$6.95	\$6.29	\$5.69
291515	16-350000-11RC	16	.800 x .45	7.49	6.75	5.59

## Transistors

\*Web Code: FEN

\* Order in multiples of 10

Part No.	*Mfr.	Product No.	Pkg.	Desc.	V <sub>ceo</sub>	Min. (h <sub>FE</sub> @ Ic)	1	10	100
26462	♦	MPSA06	TO-92	NPN	80	100k @ .01A	*.12	\$.10	\$.10
26489	♦	MPSA13*	TO-92	NPN	30	5k @ .01A	*.12	.10	.10
210593	♦	MPSA14	TO-92	NPN	30	20k @ .10A	*.19	.15	.15
210681	♦	MPSA18*	TO-92	NPN	45	500 @ .001A	*.15	.12	.12
33021	♦	TIP29A	TO-220	NPN	60	15 @ 1A	.39	.35	.25
33048	♦	TIP31A*	TO-220	NPN	60	10 @ 3A	.39	.35	.25
179354	FSC	TIP31C	TO-220	NPN	100	10 @ 3A	.39	.35	.25
890568	ST	TIP35C	TO-247	NPN	100	25 @ 1.5A	1.59	1.35	1.15
33081	♦	TIP41A	TO-220	NPN	60	15 @ 3A	.49	.39	.29
179371	♦	TIP41C	TO-220	NPN	100	15 @ 3A	.49	.39	.29
178546	♦	MPSA42	TO-92	NPN	30	40 @ .03A	*.15	.12	.12
32977	♦	TIP102*	TO-220	NPN	100	1k @ 3A	.49	.45	.39
32993	♦	TIP120*	TO-220	NPN	60	1k @ 3A	.39	.35	.29
32994	♦	TIP120-R	TO-220	NPN	60	1k @ 3A	.49	.45	.39
179291	FSC	TIP120	TO-220	NPN	60	1k @ 3A	.59	.49	.39
120416	♦	TIP122	TO-220	NPN	100	1k @ 3A	.59	.49	.39
179303	FSC	TIP122	TO-220	NPN	100	1k @ 3A	.65	.55	.45
260558	NTE	NTE123AP	TO-92	NPN	40	40 @ .001A	1.49	1.25	1.09
890445	ST	TIP142	TO-218	NPN	100	1k @ 0.5A	1.59	1.35	1.09
2132293	♦	BD158	TO-126	NPN	300	30 @ .05A	*.19	.15	.15

\*10 pcs. in Transistor cabinet kit, pg 14

## Transistors (Continued)

\*Web Code: FEN

\* Order in multiples of 10

Part No.	*Mfr.	Product No.	Pkg.	Desc.	V <sub>ceo</sub>	Min. (h <sub>FE</sub> @ Ic)	1	10	100
254810	♦	BC337	TO-92	NPN	45	100 @ .10A	*.15	\$.12	\$.12
254801	♦	BC547B	TO-92	NPN	45	330 @ .002A	*.12	.09	.09
254799	♦	BC547C	TO-92	NPN	45	600 @ .002A	*.10	.08	.08
254781	♦	BC548B	TO-92	NPN	30	110 @ .002A	*.10	.08	.08
800568	MOT	MPS918	TO-92	NPN	15	20 @ .003A	*.15	.12	.12
38228	♦	2N2219A	TO-39	NPN	40	100 @ .15A	.79	.69	.59
26446	♦	MPQ2222	DIP-14	NPN	40	100 @ .15A	2.95	2.75	2.49
28628	♦	PN2222*	TO-92	NPN	30	100 @ .15A	*.10	.07	.07
38236	♦	2N2222A*	TO-18	NPN	40	100 @ .15A	.79	.69	.59
38237	♦	2N2222A-R	TO-18	NPN	40	100 @ .15A	.89	.79	.69
213938	♦	MMBT2222A	SOT-23	NPN	40	100 @ .15A	*.10	.07	.07
210673	♦	MPS2222A	TO-92	NPN	40	40 @ .50A	*.15	.12	.12
178511	♦	PN2222A	TO-92	NPN	40	100 @ .15A	*.08	.04	.04
178512	♦	PN2222A-R	TO-92	NPN	40	100 @ .15A	*.09	.05	.05
787536	FSC	PN2222ABU	TO-92	NPN	40	300 @ .15A	*.10	.06	.06
38295	♦	2N3053*	TO-39	NPN	40	25 @ .15A	.89	.79	.69
38308	♦	2N3055*	TO-3	NPN	60	15 @ 10A	1.19	1.09	.99
211406	♦	2N3055A	TO-3	NPN	60	20 @ 4A	2.49	2.25	1.95
211385	♦	TIP3055	TO-218	NPN	60	5 @ .001A	1.29	1.15	.95
25857	♦	MJE3055T	TO-220	NPN	60	20 @ 4A	.65	.55	.45
209242	♦	2N3771	TO-3	NPN	40	15 @ 15A	2.25	1.95	1.75
38359	♦	2N3904*	TO-92	NPN	40	100 @ .01A	*.08	.06	.06
38360	♦	2N3904-R	TO-92	NPN	40	100 @ .01A	*.09	.07	.07
178597	FSC	2N3904	TO-92	NPN	40	100 @ .01A	*.12	.10	.10
783421	FSC	2N3904BU	TO-92	NPN	40	100 @ .01A	*.10	.08	.08
38421	♦	2N4401*	TO-92	NPN	40	100 @ .15A	*.10	.07	.07
783498	FSC	2N4401TA	TO-92	NPN	40	20 @ .1mA	*.10	.07	.07
62316	♦	2N5088	TO-92	NPN	30	300 @ .05A	.35	.29	.19
140373	♦	2N5179	TO-72	NPN	12	25 @ .003A	2.95	2.59	2.25
1945081	FSC	2N5306	TO-92	NPN	25	7000 @ .002A	*.09	.069	.069
2158979	♦	2N6284	TO-3/2	NPN	100	750 @ 10A	2.95	2.59	2.29
924300	ST	2N6284	TO-3/2	NPN	100	750 @ 10A	3.95	3.49	2.95
194618	♦	2N6547	TO-3	NPN	400	12 @ 5A	3.95	3.49	2.95
33030	♦	TIP30A	TO-220	PNP	60	15 @ 1A	.49	.39	.29
33064	♦	TIP32A*	TO-220	PNP	60	10 @ 3A	.39	.35	.25
181841	♦	TIP32C	TO-220	PNP	100	10 @ 3A	.39	.35	.25
890592	ST	TIP36C	TO-218	PNP	100	25 @ 1.5A	1.49	1.35	1.19
33101	♦	TIP42A	TO-220	PNP	60	15 @ 3A	.49	.45	.35
139580	♦	TIP42C	TO-220	PNP	100	15 @ 3A	.49	.39	.29
179258	♦	TIP107	TO-220	PNP	100	1k @ 3A	.59	.49	.35
33013	♦	TIP125	TO-220	PNP	60	1k @ 3A	.49	.39	.29
179320	♦	TIP127	TO-220	PNP	100	1k @ 3A	.49	.39	.29
890488	ST	TIP147	TO-218	PNP	100	1k @ 5A	1.95	1.59	1.29
260611	NTE	NTE159	TO-92	PNP	80	50 @ .01A	1.49	1.25	1.09
1215986	♦	BC327	TO-92	PNP	45	100 @ .10A	*.12	.10	.10
2169521	ON	BC557CG	TO-92	PNP	-45	800 @ -2A	*.15	.10	.10
2125456	MEC	MH810	TO-220	PNP	30	240 @ .5A	*.19	.15	.15
194378	♦	2N2905A	TO-39/3	PNP	60	100 @ .15A	.89	.79	.65
28644	♦	PN2907*	TO-92	PNP	40	100 @ .15A	*.10	.07	.07
211342	♦	MPS2907A	TO-92	PNP	60	100 @ .15A	*.19	.15	.15
178520	♦	PN2907A	TO-92	PNP	60	100 @ .15A	*.09	.07	.07
38279	♦	2N2907A*	TO-18	PNP	60	100 @ .15A	.69	.59	.49
211502	♦	MJ2955	TO-3	PNP	60	20 @ 4A	1.29	1.19	1.09
38375	♦	2N3906*	TO-92	PNP	40	100 @ .01A	*.099	.069	.069
178618	FSC	2N3906	TO-92	PNP	40	100 @ .01A	*.12	.099	.099
1944951	♦	PN4355	TO-92	PNP	60	5 @ .05A	.25	.19	.16
38447	♦	2N4403*	TO-92	PNP	40	100 @ .15A	*.099	.069	.069
210649	♦	2N5401*	TO-92	PNP	150	60 @ .01A	*.13	.11	.11
261121	NTE	NTE6410	TO-92	PNP	30	—	5.95	5.49	4.95

\*10 pcs./\*\*100 pcs. in Transistor cabinet kit, pg 14

\* FSC = Fairchild Semi | MEC = Micro Electronics | MOT = Motorola | NTE = NTE Electronics | ON = ON Semi | ST = ST Micro | ♦ Major Brands

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)



## Transistor Assortment Cabinet Kit

\*Web Code: CKS

**Includes:** 20 drawer component cabinet (319600), 20 clear plastic drawers (319601), 20 clear dividers (319611, pg 132) and 30 adhesive labels for drawers to identify parts in kit

**10 each:** 2N2222A, 2N2907A, 2N3053, 2N3055, 2N4401, 2N4403, 2N5401, 2N7000, MJE3055T, MPSA18, MPSA06, MPSA13, TIP31A, TIP32A, TIP102, TIP120

**100 each:** 2N3904, 2N3906, PN2222, PN2907

Part No.	Description	Wt. (lbs.)	1	5
82595	560 pcs. (20 types) NPN, PNP transistor kit	5.1	\$69.95	\$59.95
130374	Refill for 82595 (560 pcs.)	0.4	54.95	49.95



## J-FETs

Please Note: Manufacturer may vary

\*Web Code: JAD

Part No.	Product No.	Pkg.	Channel	BV <sub>GS</sub> @ I <sub>g</sub> (μA)	I <sub>SS</sub> (mA) @ V <sub>DS</sub>	* Order in multiples of 10		
						1	10	100
26403	MPF102	TO-92	N	-25 @ -10	2 @ 15	\$1.49	\$1.35	\$1.19
954390	J112	TO-92	N	-35 @ -50	5 @ 15	*	.15	.09
210622	2N3819	TO-92	N	-25 @ -1	20 @ 15	.69	.59	.49
253948	2N5457	TO-92	N	-25 @ -10	1 @ 15	.89	.79	.69
253577	2N5486	TO-92	N	-25 @ -1	8 @ 15	.99	.89	.79
38527	2N5951	TO-92	N	-30 @ -1	7 @ 15	.89	.79	.69
253913	2N5460	TO-92	P	40 @ 10	-1 @ -15	.85	.75	.65
253905	2N5461	TO-92	P	40 @ 10	-2 @ 15	.79	.69	.59

## Hexfet Power MOSFETs

\*Web Code: HDU

Part No.	Mfr. Part No.	Pkg.	Channel	BV <sub>DS</sub>	Min. On-St. Drain Source	* Order in multiples of 10		
						1	10	100
1563147	IRFZ44NPBF	TO-220AB	N	55	49A	\$1.35	\$1.15	\$.95
1560051	IRF540NPBF	TO-220AB	N	100	33A	1.45	1.15	.85
1559965	IRF5305PBF	TO-220AB	P	-55	-31A	1.39	.99	.79

## N-Channel & P-Channel MOSFETs

\*Web Code: GCI

Part No.	*Mfr.	Product No.	Pkg.	Channel	BV <sub>DS</sub>	Min. On-St. Drain Source	* Order in multiples of 10		
							1	10	100
812391	ST	STP80NF03L-04	TO-220	N	30	80A	\$1.95	\$1.75	\$1.49
2001373	ST	STP16NF06L	TO-220	N	60	16A	.75	.65	.59
669871	+	IRFZ24N	TO-220AB	N	55	17A	.89	.79	.59
669935	+	IRFZ34N	TO-220AB	N	55	26A	1.09	.89	.69
669943	+	IRLZ34N	TO-220AB	N	55	30A	1.09	.89	.69
669951	+	IRFZ44N	TO-220AB	N	55	49A	1.25	1.05	.85
669978	+	IRFZ46N	TO-220AB	N	55	53A	1.29	.99	.79
669986	+	IRFZ48N	TO-220AB	N	55	64A	1.39	1.15	.89
256031	+	BS170	TO-92	N	60	0.5A (max.)	*	.15	.12
1217519	FSC	BS170	TO-92	N	60	0.5A (max.)	*	.19	.15
670098	+	IRFP250N	TO-247AC	N	200	30A	1.95	1.49	1.29
670101	+	IRFP260N	TO-247	N	200	50A	3.49	2.55	2.09
670135	+	IRFP450	TO-247	N	500	14A	2.35	2.09	1.85
670143	+	IRFP460	TO-247	N	500	20A	2.95	2.75	2.49
2218089	FSC	FQA19N60	TO-3	N	600	18.5A	1.95	1.75	1.59
209234	+	IRF510	TO-220	N	100	5.6A	.79	.69	.59
1559885	INR	IRF510PBF	TO-220	N	100	5.6A	.89	.79	.69
209226	+	IRF520	TO-220	N	100	10A	.69	.59	.49
1559906	INR	IRF520PBF	TO-220	N	100	10A	.79	.69	.59
209058	+	IRL520	TO-220	N	100	9.2A	.89	.79	.69
210500	+	IRF530	TO-220	N	100	14A	.79	.69	.59
670151	+	IRF530N	TO-220AB	N	100	17A	.95	.85	.65
670160	+	IRL530N	TO-220AB	N	100	17A	.95	.85	.65

## N-Channel & P-Channel MOSFETs (Cont.)

\*Web Code: GCI

Part No.	*Mfr.	Product No.	Pkg.	Channel	BV <sub>DS</sub>	Min. On-St. Drain Source	* Order in multiples of 10		
							1	10	100
210518	+	IRF540	TO-220	N	100	27A	\$.89	\$.79	\$.69
670194	+	IRL540N	TO-220AB	N	100	36A	1.39	1.09	.95
210526	+	IRF620	TO-220	N	200	6.0A	.59	.49	.39
210534	+	IRF630	TO-220	N	200	9.0A	.59	.49	.45
210542	+	IRF640	TO-220	N	200	18A	1.09	.99	.79
670231	+	IRF644	TO-220AB	N	250	14A	1.09	.95	.75
210551	+	IRF730	TO-220	N	400	5.5A	.89	.79	.69
210569	+	IRF740	TO-220	N	400	10A	.99	.89	.79
2203661	MOT	MTP10N40E	TO-220AB	N	400	10A	1.09	.99	.79
210577	+	IRF820	TO-220	N	500	4.0A	.89	.79	.69
210585	+	IRF830	TO-220	N	500	4.5A	.89	.79	.69
184719	+	IRF840	TO-220	N	500	8.0A	.85	.75	.65
2217852	+	BUZ77A	TO-220	N	600	2.7A	.79	.69	.59
2217861	+	BUZ78	TO-220AB	N	800	1.5A	.89	.79	.69
787798	FSC	RFP12N10L	TO-220AB	N	100	12A	.65	.59	.55
670282	+	IRF1405	TO-220AB	N	55	169A	2.75	2.25	1.69
279460	+	VN2222LL	TO-92	N	60	0.15A	.29	.25	.15
618089	+	IRF3205	TO-220	N	55	110A	1.75	1.45	1.25
785590	FSC	FQP50N06	TO-220	N	60	50A	.99	.89	.75
119423	+	2N7000	TO-92	N	60	0.3A	*	.07	.05
178669	FSC	2N7000*	TO-92	N	60	0.2A	*	.08	.06
783594	FSC	2N7000-R	TO-92	N	60	0.2A	*	.15	.12
140169	+	2N7002	SOT-23	N	60	0.5A	*	.15	.11
2210626	INR	IRLB8721PBF	TO-220AB	N	30	62A	1.75	1.65	1.55
256057	+	BS250	TO-92	P	-45	0.25A (max.)	.75	.65	.55
1944901	+	ZVP3306A	TO-92	P	-60	-0.16A†	.85	.45	.35
670442	+	IRF4905	TO-220AB	P	-55	-74A	1.85	1.49	1.35
1559851	INR	IRF4905PBF	TO-220AB	P	-55	-74A	1.95	1.55	1.39
670477	+	IRF5210	TO-220AB	P	-100	-40A	1.39	1.29	1.19
670485	+	IRF5305	TO-220AB	P	-55	-31A	1.09	.95	.75
670581	+	IRF9234N	TO-220AB	P	-55	-19A	1.09	.99	.75
670629	+	IRF9520	TO-220AB	P	-100	-6A	.85	.69	.59
670741	+	IRF9530	TO-220AB	P	-100	-12A	1.09	.95	.75
670637	+	IRF9530N	TO-220AB	P	-100	-14A	1.19	.89	.75
670645	+	IRF9540N	TO-220AB	P	-100	-23A	1.49	1.19	.95
670653	+	IRF9640	TO-220AB	P	-200	-11A	1.39	1.19	.95

\*10 pcs. in Transistor cabinet kit, above left † DMOS FET

## Diodes

\*Web Code: PAK

Part No.	*Mfr.	Product No.	Pkg.	Description	* Order in multiples of 10		
					1	10	100
1559164	INR	HFA08TB60PBF	TO-220AC	600VBR, 8A (Ultrafast)	\$1.95	\$1.75	\$1.49
2220533	+	1N34A	DO-7	65PRV (Germanium)	1.95	1.75	1.49
35941	+	1N270*	DO-7	80PRV (Germanium)	.99	.89	.79
312101	+	MBR1100	DO-41	100PRV, 1.0A (Schottky)	.25	.22	.19
36038	+	1N4148**	DO-35	75PRV, 0.01A (Switching)	*	.05	.02
151247	+	1N4148T	DO-35	75PRV, 0.01A (tape/reel)	*	.05	.02
179215	VSH	1N4148	DO-35	100PRV (Switching)	*	.05	.02
743285	FSC	1N4148	DO-35	75PRV, 0.01A (Switching)	*	.06	.03
656042	+	1N4150	DO-35	75BV, 0.4A (Ultrafast)	*	.08	.06
743710	ST	1N6263	DO-35	60VRRM, 50mA (Schottky)	*	.15	.12
1558946	INR	80SQ045	DO-204	40VRRM, 8A (Schottky)	1.39	1.29	1.09

\*10 pcs./\*\*100 pcs. in Diode/Rectifier cabinet kit, pg 15



## Zener Diodes

★ Web Code: LAF

							* Order in multiples of 10		
Part No.	Mfr.	Product No.	Pkg.	V <sub>Znom</sub>	Pwr Dissipation		1	10	100
36290	♦	1N751A	DO-35	5.1V	0.5W	.....	★	\$ .07	\$ .05
178773	VSH	1N4732A	DO-41	4.7V	1W	.....	★	.10	.08
36097	♦	1N4733A*	DO-41	5.1V	1W	.....	★	.06	.05
36118	♦	1N4734A	DO-41	5.6V	1W	.....	★	.06	.05
36126	♦	1N4735A	DO-41	6.2V	1W	.....	★	.06	.05
178837	♦	1N4739A	DO-41	9.1V	1W	.....	★	.06	.05
36169	♦	1N4742A*	DO-41	12V	1W	.....	★	.05	.04
36185	♦	1N4744A	DO-41	15V	1W	.....	★	.07	.05
782922	FSC	1N4749AT/R	DO-41	24V	1W	.....	★	.19	.15
179004	♦	1N5225B	DO-35	3.0V	0.5W	.....	★	.10	.06
743488	FSC	1N5226B	DO-35	3.3V	0.5W	.....	★	.05	.03
179039	♦	1N5230B	DO-35	4.7V	0.5W	.....	★	.12	.08
179047	♦	1N5231B	DO-35	5.1V	0.5W	.....	★	.09	.07
804818	ON	1N532BG	Surmetic-40	15V	5W	.....	★	.39	.19
804914	ON	1N5359BG	Surmetic-40	24V	5W	.....	★	.29	.17

\* 10 pcs. in Diode/Rectifier cabinet kit, below

## Small Signal Diodes

★ Web Code: JDQ

							Order in multiples of 10		
Part No.	Mfr.	Product No.	Pkg.	Description			10	100	1000
36311	♦	1N914*	DO-35	75PRV, 0.01A	.....		\$ .05	\$ .02	\$ .015
179207	VSH	1N914-TR	DO-35	100PRV	.....		.05	.03	.02
655269	♦	1N914A	DO-35	100VRRM, 0.2A	.....		.05	.03	.02

\* 100 pcs. in Diode/Rectifier cabinet kit, page 15

★ Transient Voltage Suppressors — Enter Web Code QBQ

## Diode/Rectifier Assortment Cabinet Kit

★ Web Code: CKS

420 pcs. (15 types) Diodes, Zener Diodes, Switching and Silicon Rectifiers

Includes: 20 drawer component cabinet (319600), 20 clear plastic drawers (319601), 20 clear dividers (319611), pg 132 and 30 adhesive labels for drawers to identify parts in kit.

10 each: 1N270, 1N751A, 1N4001, 1N4007, 1N4150, 1N4733A, 1N4735A, 1N4742A, 1N5404, 1N5408, C106B1, KBP04M  
100 each: 1N914, 1N4004, 1N4148



Part No.	Description	Wt. (lbs.)	1	5
82587	420 pcs. (15 types) diode kit	5.0	\$44.95	\$39.95
130366	Refill for 82587 (420 pcs.)	0.3	29.95	26.95

## Triacs

★ Web Code: PAE

Part No.	Mfr.	Product No.	Pkg.	Rating		1	10	100
160098	♦	HT-32	DO-35	27.37 V <sub>BO</sub> , 2A	.....	\$ .35	\$ .29	\$ .25
31819	♦	SC146B	TO-220	200 V <sub>DRM</sub> , 10A (2N6342)	.....	1.85	1.65	1.55
31827	♦	SC146M	TO-220	600 V <sub>DRM</sub> , 10A (2N6344)	.....	1.95	1.75	1.49
160207	TEC	Q4008L4	TO-220AB	400 V <sub>DRM</sub> , 8A	.....	1.49	1.35	1.19
139336	TEC	Q4015L5	TO-220AB	400 V <sub>DRM</sub> , 15A	.....	1.75	1.49	1.29
160215	TEC	Q6008L5	TO-220AB	600 V <sub>DRM</sub> , 8A	.....	1.75	1.49	1.35
160231	TEC	Q6015L5	TO-220AB	600 V <sub>DRM</sub> , 15A	.....	2.25	1.95	1.75
220505	TEC	Q6025R6	TO-220AB	600 V <sub>DRM</sub> , 25A	.....	2.75	2.49	2.25
2034010	ST	BT412-600BWRG	TO-220AB	600 V <sub>DRM</sub> , 30A	.....	1.49	1.19	.95
220521	TEC	Q6035P5	TO-3	600 V <sub>DRM</sub> , 35A	.....	4.95	4.49	3.95
140425	♦	2N6071A	TO-225AA	200 V <sub>DRM</sub> , 4A	.....	.59	.55	.45

## SanRex® Fast-On Package Triac

Part No.	Mfr. Part No.	Pkg.	Rating (V <sub>DRM</sub> , I <sub>T(RMS)</sub> )	1	10	100
658275	TG35F60	Fast-On	Isolated 35A, 600V	\$8.95	\$7.95	\$6.95

## Rectifiers

★ Web Code: LBD

							* Order in multiples of 10			
Part No.	Mfr.	Product No.	Pkg.	Rating			1	10	100	1000
177754	TAT	T6A05L	T6L	50 PIV, 6A	.....	\$ .39	\$ .35	\$ .29	\$ .25	
177762	TAT	T6A10L	T6L	100 PIV, 6A	.....	.49	.45	.39	.35	
177818	TAT	T6A100L	T6L	1000 PIV, 6A	.....	.69	.59	.49	.45	
35924	♦	1N1188	DO-5	400 PRV, 35A	.....	4.25	3.75	3.35	3.15	
2197610	KST	1N1190A	DO-5	600 PRV, 40A	.....	5.95	5.35	4.79	4.29	
2197628	KST	1N1190RA†	DO-5	600 PRV, 40A	.....	2.95	2.59	2.29	1.95	
618097	♦	MBR2535CT	TO-220	35 VRPM, 30A	.....	.69	.59	.49	.39	
35975	♦	1N4001*	DO-41	50 PRV, 1A	.....	★	.05	.02	.015	
76961	♦	1N4002	DO-41	100 PRV, 1A	.....	★	.05	.02	.015	
76970	♦	1N4003	DO-41	200 PRV, 1A	.....	★	.05	.02	.015	
35991	♦	1N4004*	DO-41	400 PRV, 1A	.....	★	.05	.02	.015	
76988	♦	1N4005	DO-41	600 PRV, 1A	.....	★	.05	.03	.02	
76996	♦	1N4006	DO-41	800 PRV, 1A	.....	★	.09	.06	.03	
36011	♦	1N4007*	DO-41	1000 PRV, 1A	.....	★	.05	.02	.015	
36012	♦	1N4007-R	DO-41	1000 PRV, 1A	.....	★	.05	.02	.015	
1537951	DDI	1N4007-T	DO-41	1000 V <sub>RRM</sub> , 1A	.....	★	.06	.05	.03	
36249	♦	1N5401	DO-201AD	100 PIV, 3A	.....	★	.12	.10	.08	
77083	♦	1N5402	DO-27A	200 PRV, 3A	.....	★	.14	.12	.10	
36265	♦	1N5404*	DO-27A	400 PRV, 3A	.....	★	.12	.10	.08	
36273	♦	1N5408*	DO-27A	1000 PRV, 3A	.....	★	.12	.10	.08	
36274	♦	1N5408	DO-27A	1000 PRV, 3A	.....	★	.13	.11	.09	
177949	♦	1N5817	DO-204AL	20 PIV, 1A	.....	★	.14	.12	.10	
177957	♦	1N5818	DO-204AL	30 PIV, 1A	.....	★	.14	.12	.10	
177965	♦	1N5819	DO-204AL	40 PIV, 1A	.....	★	.14	.12	.10	
177973	♦	1N5820	DO-201AD	20 PIV, 3A	.....	★	.09	.05	.04	
177990	♦	1N5822	DO-201AD	40 PIV, 3A	.....	★	.16	.14	.12	

\* 10 pcs./ \*\* 100 pcs. in Diode/Rectifier cabinet kit, left † Reverse polarity

## Bridge Rectifiers

★ Web Code: MBD

Part No.	Mfr.	Product No.	Pkg.	Rating		1	10	100
178001	♦	DF005M	DF	50 V <sub>RRM</sub> , 1A	.....	\$ .29	\$ .25	\$ .22
103000	♦	DF01M	DF	100 V <sub>RRM</sub> , 1A	.....	.29	.25	.22
103042	♦	DF02M	DF	200 V <sub>RRM</sub> , 1A	.....	.29	.25	.22
103026	♦	DF10M	DF	1000 V <sub>RRM</sub> , 1A	.....	.35	.29	.25
145429	♦	KBP02M	KBP	200 V <sub>RRM</sub> , 1.5A	.....	.25	.19	.12
119562	♦	KBP04M*	KBP	400 V <sub>RRM</sub> , 1.5A	.....	.49	.45	.39
103018	♦	W02G	WOG	200 V <sub>RRM</sub> , 1.5A	.....	.35	.29	.25
102980	♦	W04G	WOG	400 V <sub>RRM</sub> , 1.5A	.....	.35	.29	.25
178132	♦	W01M	WOM	100 V <sub>RRM</sub> , 1.5A	.....	.25	.22	.19
178183	TAT	BR805D	BR8D	50 PIV, 2A	.....	.49	.45	.39
678137	♦	2KBP04M	KBP	400 V <sub>RRM</sub> , 2A	.....	.35	.29	.25
253260	♦	2KBP06M	KBP	600 V <sub>RRM</sub> , 2A	.....	.45	.35	.29
1541466	DDI	RS405L	RS-4L	600 V <sub>RRM</sub> , 4A	.....	.89	.79	.69
1545416	♦	KBU8B	KBU	100 V <sub>RRM</sub> , 8A	.....	1.39	1.19	.95
2138871	♦	GBU4J	GBU	600 V <sub>RRM</sub> , 4A	.....	.49	.45	.35
2126133	♦	SBU8J	SBU	600 V <sub>RRM</sub> , 8A	.....	1.25	1.09	.95
299874	♦	GBPC1206	GBPC (screw)	600 V <sub>RRM</sub> , 12A	.....	1.95	1.75	1.49
299866	♦	GBPC1206W	GBPC-W (wire)	600 V <sub>RRM</sub> , 12A	.....	1.49	1.25	.99
2132242	♦	GBPC1208W	GBPC-W (wire)	800 V <sub>RRM</sub> , 12A	.....	.99	.89	.69
179477	♦	GBPC25-01	GBPC	100 V <sub>RRM</sub> , 25A	.....	2.25	1.95	1.75
179485	♦	GBPC25-02	GBPC	200 V <sub>RRM</sub> , 25A	.....	2.39	2.09	1.75
178280	♦	MB254	MB35	400 V <sub>RRM</sub> , 25A	.....	2.75	2.49	2.25
178431	♦	MB358	MB35	800 V <sub>RRM</sub> , 35A	.....	2.95	2.75	2.49
25574	♦	MDA990-3	179-01	200 PIV, 30A	.....	3.95	3.75	3.49
25591	♦	MDA990-6	179-01	600 PIV, 30A	.....	3.95	3.75	3.49
178503	TAT	TB3510	TB35	1000 PIV, 35A	.....	3.49	3.25	2.95

\* 10 pcs. in Diode/Rectifier cabinet kit, above left

\* DDI = Diode Inc. | FSC = Fairchild Semi | KST = KEST | ON = ON Semi | ST = ST Micro | TAT = Taitron | TEC = Teccor Elec. | VSH = Vishay | ♦ Major Brands

★ For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



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# Rectifiers, Heat Sinks & Heat Sink Compounds

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Semiconductors

## Silicon Controlled Rectifiers (SCRs)

\* Web Code: BAB

Part No.	Mfr.	Product No.	Pkg.	Rating	* Order in multiples of 10		
					1	10	100
14859	♦	C38M	TO-65	600 PRV, 35A (2N3899) ...	\$6.95	\$6.25	\$5.49
14736	♦	C106B1*	TO-202	200 PRV, 4A (2N6239)†	.69	.59	.49
14752	♦	C122B	TO-220	200 PRV, 8A	1.39	1.25	1.09
14761	♦	C122M	TO-220	600 PRV, 8A	1.35	1.25	1.05
160119	♦	T106D1	TO-202AB	400 PRV, 4A	.75	.65	.55
119802	♦	2N5060	TO-92	25 PRV, 0.8A	.29	.25	.19
211422	♦	2N5061	TO-92	60 PRV, 0.8A	*	.19	.15
160135	TEC	S6025L	TO-220AB	600 V <sub>DRM</sub> , 25A	1.75	1.59	1.45
806063	ON	2N6027G	TO-92	40 V, 0.15A	.29	.19	.17
140417	♦	2N6507	TO-220AB	400 PRV, 25A	1.35	1.09	.89
885654	ON	2N6509	TO-220AB	800 V <sub>DRM</sub> , 25A	1.29	1.15	.95

† Isolated \* 10 pcs. in Diode/Rectifier cabinet kit, pg 15

## GRAB BAG ASSORTMENTS

Part No.	Cross Ref.	Description	Price
17996	GB108	100 assorted TTL series chips	\$12.95
18024	GB109	100 assorted linear series chips	12.95
105620	GB120	100 assorted sockets	6.95
17961	GB107	200 assorted diodes	9.95
18171	GB127	100 assorted transistors	9.95

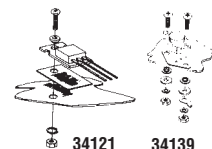
17996

## Heat Sink Mounting Kits

\* Web Code: JAB

- TO-3 and TO-220 heat sink insulator assemblies
- 10 kits per pack

Part No.	Type	Description	1	10	100
34121	TO-220	5 pcs per kit	\$3.95	\$3.59	\$3.25
34139	TO-3	12 pcs per kit	3.95	3.59	3.25



JAMECO ValuePro



## Heat Sinks

\* Web Code: JAB

- Material: black anodized aluminum
- P/N 42622 can be mounted vertically with solderable mounting tabs

Part No.	Mfr.	Product No.	Fig.	Type	Holes	Size (L" x W" x H")	1	10	100
2150942	AVD	9000000958	1	CPU	0	1.78 x 1.19 x 0.65	\$1.39	\$1.29	\$1.15
2077335	AVD	501200B00	2	DIP-14/16	0	0.73 x 0.25 x 0.19	.49	.45	.39
1115900	AVD	580200B00000G	3	DIP-14/16	0	0.84 x 0.60 x 0.41	1.15	1.05	.95
2150934	JVP	205-00036-001	2	DIP-14/16	0	1.18 x 0.64 x 0.65	.69	.59	.39
2202052	JVP	630-160	4	TO-3	4	1.60 x 1.32 x 1.00	.89	.79	.69
151547	JVP	635-125B2	5	TO-3	4	1.88 x 1.40 x 1.25	1.49	1.25	1.09
2202044	JVP	635-180	5	TO-3	4	1.80 x 1.80 x 1.25	.79	.69	.59
189835	AVD	501303B00000G	5	TO-3	4	1.90 x 1.40 x 0.50	1.29	1.19	1.09
2215486	AVD	568203B00000G	6	TO-3	4	1.80 x 1.80 x 1.00	1.49	1.35	1.15
16513	JVP	DUDE4	7	TO-3	4	4.75 x 1.50 x 1.25	3.75	3.25	2.75
2145086	AVD	322605B00000G	8	TO-5	1	0.75 x 0.75 x 0.236	.89	.69	.59
2202028	JVP	529801	9	TO-218	1	1.38 x 0.50 x 1.00	1.25	1.09	.99
326757	JVP	529801B02500	9	TO-218	3	1.64 x 1.00 x 1.50	1.49	1.35	1.15
326693	JVP	531002B05200	9	TO-220	2	1.38 x 0.50 x 1.00	.99	.89	.79
326713	JVP	531102B02500	9	TO-220	3	1.38 x 0.50 x 1.50	.99	.89	.79
2155022	JVP	BK-T220-0082	10	TO-220	1	1.75 x 0.70 x 0.37	.49	.39	.29
2155014	AVD	THM6071	11	TO-220 (open back)	1	1.75 x 0.70 x 0.37	.49	.39	.29
326765	JVP	531302B02500	9	TO-220/202	3	2.50 x 1.38 x 0.50	1.29	1.15	1.05
696626	AVD	530002B02500	9	TO-220	1	2.52 x 1.65 x 1.00	1.95	1.59	1.39
696714	AVD	577002B00000G	12	TO-220	1	0.52 x 0.25 x 0.75	.29	.25	.22
158051	AVD	577102B00000G	12	TO-220	1	0.75 x 0.52 x 0.25	.29	.25	.22
1115643	AVD	577202B00000G	12	TO-220	1	0.52 x 0.50 x 0.75	.35	.29	.25
326596	JVP	507302B00000G	12	TO-220	1	0.75 x 0.75 x 0.38	.29	.25	.17
70658	JVP	THM6073	12	TO-220	1	0.75 x 0.75 x 0.38	.35	.29	.19
2202036	AVD	THM6110B-MT	13	TO-220	1	1.00 x 0.50 x 0.72	1.19	1.05	.89
129242	JVP	THM6106	12	TO-220	1	1.18 x 1.00 x 0.50	.65	.55	.45
70915	JVP	THM6106	12	TO-220	2	1.18 x 1.00 x 0.50	.69	.59	.49
696722	AVD	581002B02500G	14	TO-220	1	0.64 x 0.64 x 1.00	1.29	1.19	1.09
1115133	AVD	574402B03200G	15	TO-220	1	0.75 x 0.87 x 0.40	.49	.39	.29
42622	AVD	563002B00000G	16	TO-220	1	1.18 x 1.00 x 0.50	.59	.49	.45
2155348	AVD	THM6038	17	TO-220	0	1.18 x 1.00 x 0.50	.49	.39	.35
2178689	AVD	THM6237	18	TO-220	Clip	0.38 x 0.89 x 0.70	.59	.49	.35



Fig. 1 (2150942)



Fig. 2 (2077335)



Fig. 3 (1115900)



Fig. 4 (2202052)



Fig. 5 (189835)



Fig. 6 (2215486)



Fig. 7 (16513)



Fig. 8 (2145086)



Fig. 9 (326757)



Fig. 10 (2155022)



Fig. 11 (2155014)



Fig. 12 (70658)



Fig. 13 (2202036)



Fig. 14 (696722)



Fig. 15 (1115133)



Fig. 16 (42622)



Fig. 17 (2155348)



Fig. 18 (2178689)



## Heat Sink Compounds



\* Web Code: YBA

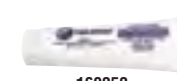
Part No.	Manufacturer	Description	Vol. (oz.)	1	5
615355	GC Electronics	Heat sink compound, 100% synthetic base stocks type 44	16	\$39.95	\$36.95
236823	ValuePro	Heat sink compound, silicon based grease	0.35	4.95	4.49
167249	Aavid Thermalloy	Heat sink compound, silicon based grease	2	8.95	7.95
169252	Techspray	Heat sink compound, silicon free	4	32.95	29.95
259151	NTE	Heat sink compound, white gel, thermal grease (5 pack)	0.35	2.95	2.49
615304	GC Electronics	Heat sink compound, zinc oxide-filled silicon grease	16	29.95	26.95
615312	GC Electronics	Heat sink compound, zinc oxide-filled silicon grease	0.23	3.95	3.59
615321	GC Electronics	Heat sink compound, zinc oxide-filled silicon grease	1	7.95	6.95



236823



167249



169252



615321

\* AVD = Aavid Thermalloy | JVP = Jameco ValuePro | ON = On Semiconductor | TEC = Teccor | ♦ Major Brands



# Optoisolators, Optocouplers & LED Accessories



## Optoisolators

\* Web Code: CAG

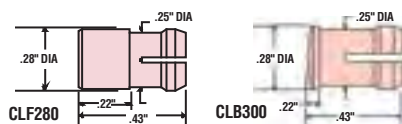
* Order in multiples of 10						
Part No.	Mfr.	Product No.	Pkg.	Description	1	10 100
40985	+	4N25	DIP-6	NPN phototransistor output	\$.25	\$.22 \$.19
41005	+	4N26	DIP-6	NPN phototransistor output	.29	.25 .22
41013	+	4N28	DIP-6	NPN phototransistor output	.29	.25 .22
41021	+	4N32	DIP-6	NPN photodarlington output	.29	.25 .22
41030	+	4N33	DIP-6	NPN photodarlington output	.25	.22 .19
41056	+	4N35	DIP-6	NPN phototransistor output	.29	.25 .22
1872628	OPT	OPB606A	DIP-4	NPN phototransistor	1.59	1.49 1.35
320653	+	PS2501-1	DIP-4	Single NPN phototransistor output	.35	.29 .25
320661	+	PS2501-2	DIP-8	Dual NPN phototransistor output	1.19	1.09 .95
160338	+	PS2501-4	DIP-16	Quad NPN phototransistor output	1.65	1.39 1.19
320688	+	PS2502-1	DIP-4	Darlington photocoupler	.79	.69 .59
320696	+	PS2502-2	DIP-8	Dual NPN photodarlington output	1.95	1.75 1.49
160362	+	PS2502-4	DIP-16	Quad NPN photodarlington output	2.49	2.25 1.95
320717	+	PS2505-2	DIP-8	High isolation volt. photocoupler	2.25	1.95 1.75
320725	+	PS2505-4	DIP-16	Quad NPN phototransistor output	1.95	1.75 1.49
320805	+	PS2532-4	DIP-16	Quad hi collector to emitter voltage	2.75	2.49 2.25
26278	+	MOC3010	DIP-6	Bilateral sw. non-zero crossing triac	.49	.39 .35
95020	+	MOC3011	DIP-6	Random phase, triac driver output	.49	.45 .35
277780	+	MOC3020	DIP-6	Bilateral sw. non-zero crossing triac	.49	.39 .35
95038	+	MOC3021	DIP-6	Random phase, triac driver output	.59	.39 .29
277819	+	MOC3023	DIP-6	Random phase, triac driver output	.39	.35 .29
26294	JVP	MOC3031	DIP-6	Zero-crossing, triac driver output	.79	.69 .59
277835	+	MOC3041	DIP-6	Zero-crossing, triac driver output	.69	.55 .39
133874	+	MOC3063	DIP-6	Zero-crossing, triac driver output	.69	.55 .39
2006414	LTO	LTR-5986D	SIP-3	NPN phototransistor/detector	* .15	.12

\* Distant and Light Kits — Enter Web Code DLK



## T1<sup>3/4</sup> Cliplite® LED Lens Mounts

Standard CLF280 and low profile CLB300 provide 180° viewing angle. Colors: red and clear.



\* Web Code: KAL

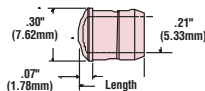
Part No.	Mfr. Part No.	Size	Color	1	10	100
14277	CLF280CTP	T1 3/4	Clear	\$.35	\$.29	\$.25
124927	CLB300CTP	T1 3/4	Clear	.35	.29	.25



## Panel Lens for PCB Mounted T1<sup>3/4</sup> LED

T1-3/4 size low-profile panel lenses provide 180° viewing angle.

\* Web Code: KAL



Part No.	Mfr. Part No.	Size	Color	Length	1	10	100
143132	CMC321CTP	T1 3/4	Clear	.33"	\$.39	\$.35	\$.29



## 2-150mA T1 & T1<sup>3/4</sup> LED Tester

Plug any leaded LED into any 2 rows of sockets. 13.1" spaced positions test T1/T1<sup>3/4</sup> LEDs from 2 to 30mA; 13.2" spaced positions test larger footprint (high flux) LEDs from 20 to 150mA. Uses 9V battery (P/N 198731 – sold separately)



Part No.	Description	Size (L x W x H)	1	5	25
355805	LED tester	3.1" x 2.2" x 0.9"	\$8.95	\$7.95	\$7.49

## Optocouplers

\* Web Code: NAK

Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
42471	+	6N136	DIP-8	Hi-speed phototransistor output	\$.65	\$.55	\$.45
113911	+	6N137	DIP-8	Hi CMR, hi-speed logic gate output	.75	.65	.55
42489	+	6N138	DIP-8	Hi-speed photodarlington output	.69	.59	.49
18825	+	H11AA1	DIP-6	AC input/phototransistor	.59	.49	.45
320493	FSC	H11D1	DIP-6	Hi voltage phototransistor	.49	.45	.35
24918	+	MCT6	DIP-8	High density NPN phototransistor	.59	.49	.45
672325	+	MCT62	DIP-8	Dual channel NPN phototransistor	.69	.59	.49
2202378	LTO	LTH-1550-01	DIP-4	Photointerruptor-NPN phototransistor	.39	.35	.29
2006385	LTO	LTV-814H	DIP-4	Phototransistor output, AC input	.29	.19	.15
2215890	OMR	EE-SA105	DIP-4	Photomicrosensor (actuator)	2.49	2.25	1.95
878286	LTO	LTV-847	DIP-16	Quad ch. phototransistor output	.69	.59	.49
1583156	CLA	PD2401*	DIP-16	AC solid st. sw. w/ dual pwr SCR output	6.95	5.95	5.49

\* 4 pins

## Slotted Optical Switches



\* Web Code: XAP

Part No.	Mfr.	Product No.	Pkg.	Description	1	10	100
114091	+	H21A1	4-pin w/ tab	Single channel, 20mA (Ic)	\$2.75	\$2.49	\$2.25
320901	+	H21A3	4-pin w/ tab	Single channel, 20mA (Ic)	2.75	2.49	2.25
2078282	SIE	IRLA075	4-pin w/ tab	Single channel, 50mA (Ic)	.99	.89	.79



## Optical Tilt Switches



\* Web Code: OTS

Part No.	Mfr.	Part No. *	Pkg.	Description	1	10	100
2126547	RP-RUB-30-000-NB		4-pin	Optical tilt, 30°, 5mA (Ic)	\$.45	\$.35	\$.29
2126539	RP-RUB-45-000-NB		4-pin	Optical tilt, 45°, 5mA (Ic)	.49	.39	.29

\* CUB = horizontal mount PCB; RUB = vertical mount PCB



## Conxrite Pre-Wired Solderless LED Interconnects

Designed to replace labor-intensive hard-wiring of panel-mounted LEDs to PCB.



Part No.	Mfr. Part No.	LED Size	Termination (leads)	Length	1	10	100
143037	CNXCE2108	T1 3/4 (5mm)	2-pin connector	8" ..	\$2.19	\$2.09	\$1.75
2219321	CNXCE4112	T1 3/4 (5mm)	2-pin connector	8" ....	2.49	2.25	1.95



## T1 & T1<sup>3/4</sup> LED Mounting Hardware

• Color: black



Order in multiples of 10

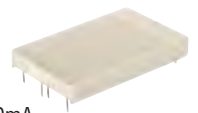
Part No.	Mfr. P/N	Description	Mounting Hole Dia.	Panel Thickness	Pricing		
					10	100	1000
95513	LA27B	T1 snap-in	.185"	Up to .070"	\$.12	\$.10	\$.08
23077	PT18H013*	T1 3/4 ring/clip	.257"	Up to .125"	.15	.14	.12

\* Manufacturer: Jameco ValuePro



## 1" x 1.56" LED Backlight

- IC compatible • D.C. forward current: 30mA
- Peak wavelength: 567nm @ 20mA
- View angle: 52°
- Forward voltage: (typical) 4.2V @ 20mA; (max) 6.0V @ 20mA
- Luminous intensity: (min) 14.9mcd @ 20mA; (typical) 24.8mcd @ 20mA



Part No.	Cross Ref. No.	LED Material	Emitting Color	Lens Color	1	10	100
302535	LT1F24-A2-S8	GaP	Green	Clear	\$.99	\$.89	\$.79

\* CLA = Clare | FSC = Fairchild | JVP = Jameco ValuePro | LTO = Lite On | OMR = Omron | OPT = Optek | SIE = Siemens | + Major Brands




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# Standard-Output LEDs

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

					
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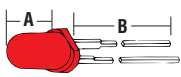


Fig. 1



Fig. 2

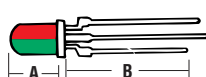


Fig. 3



Fig. 4

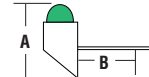


Fig. 5

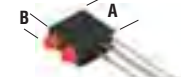


Fig. 6



Fig. 7



Fig. 8

## Standard-Output LEDs

\* Web Code: FAF

\* Order in multiples of 10

Part No.	Product No.	Mfr.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions		Lead Spacing	Typical Vf	Typical mcd	Wavelength nm	Viewing Angle°	Pricing			
								A"	B"						1	10	100	1000
697565	LTL-4211N	LTO	1	Red	Red diffused tinted	T1	0.119/3	0.17	1.00	0.10	2.1	4.4	697	60	* \$ .10	\$ .08	\$ .06	
94529	LH2040	JVP	1	Red	Red diffused (XC209RB)	T1	0.119/3	0.18	1.04	0.07	2.3	4.5	697	36	* .12	.10	.08	
202471	MVL-301HR**	UNI	1	Red	Red diffused	T1	0.119/3	0.14	1.12	0.10	2.0	9.0	640	40	* .10	.08	.06	
152785	LT0341R-41	JVP	1	Red	Red diffused	T1	0.119/3	0.20	0.89	0.10	2.1	15.5	635	56	* .12	.10	.08	
2186435	LTL-16KEE	LTO	2	Red	Red hi-eff transparent	T1	0.119/3	0.16	0.95	0.10	2.0	19	635	45	* .06	.05	.035	
333851	UT6371-41-M1	JVP	1	Red	Red diffused	T1	0.119/3	0.17	0.98	0.10	1.8	65	660	60	* .12	.10	.08	
152751	LT0344R-41	JVP	1	Red	Red clear	T1	0.119/3	0.20	0.89	0.10	2.1	60	635	36	* .10	.08	.06	
2197732	LSR2643-1	JVP	1	Red	Water clear	T1	0.119/3	0.13	1.04	0.10	2.1	120	660	40	* .15	.12	.10	
206498	LHR2041	JVP	1	Red	Red transparent	T1	0.119/3	0.17	0.69	0.08	2.4	350	660	30	* .15	.12	.10	
697590	LTL-4221N	LTO	1	Hi-eff Red	Red diffused	T1	0.119/3	0.175	1.00	0.10	2.0	8.7	635	60	* .079	.065	.055	
2006713	LTL-161CE	LTO	1	Hi-eff Red	Red diffused, flanged	T1	0.119/3	0.21	1.07	0.10	2.0	12.6	621	60	* .08	.06	.04	
2081932	BVL-300E5D	JVP	2	OrangeRed	Red diffused	T1	0.119/3	0.17	1.00	0.10	2.1	18	632	45	* .05	.04	.03	
94553	LHG2062	JVP	1	Red/Green	White diffused bi-color/bi-state	T1	0.119/3	0.18	1.06	0.08	2.6	3/1.2	697/565	36	* .19	.15	.12	
156946	LT0362-25-D61	JVP	3	Red/Green	White diffused bi-color/tri-state	T1	0.119/3	0.16	0.87	0.08	2.1	2.7/13.3	700/567	50	.39	.35	.29	.25
697688	LTL-4251N	LTO	2	Yellow	Yellow diffused	T1	0.118/3	0.175	1.00	0.10	2.1	5.6	585	60	* .17	.15	.12	
2155241	BVL-360YID	ADT	2	Yellow	Yellow diffused	T1	0.119/3	0.13	1.00	0.10	2.2	14	590	55	* .12	.10	.08	
34657	LY2040*	JVP	1	Yellow	Yellow diffused (XC209Y)	T1	0.119/3	0.16	0.68	0.08	1.2	20	585	36	* .15	.12	.10	
2125464	VX4SUGY91M	SLD	4	Yellow/Green	White diff. bi-color, quad-level	T1	0.119/3	0.47	0.20	0.10	2.1/2.2	24/6	590/565	130	* .19	.15	.12	
2006705	LTL-1CHYE*	LTO	1	Yellow	Water clear, flanged	T1	0.119/3	0.21	1.07	0.10	2.1	40	585	45	* .07	.05	.035	
206480	LVY2041	JVP	1	Yellow	Yellow transparent	T1	0.119/3	0.17	0.69	0.08	2.3	450	595	30	* .12	.10	.08	
253631	HLMP-1503	FSC	1	Green	Green diffused	T1	0.119/3	0.19	1.00	0.10	2.1	5.0	565	60	* .15	.12	.09	
333201	LG12340	JVP	1	Green	Green diffused	T1	0.119/3	0.13	0.98	0.10	1.7	9.6	565	112	* .12	.10	.08	
697629	LTL-4231	LTO	1	Green	Green diffused	T1	0.119/3	0.20	1.00	0.10	2.1	12.6	569	40	* .09	.07	.05	
211086	LTL-4231N-022	LTO	2	Green	Green diffused	T1	0.119/3	0.13	1.10	0.10	2.1	12.6	565	60	* .05	.04	.03	
697637	LTL-4231N	LTO	2	Green	Green diffused	T1	0.119/3	0.175	1.00	0.10	2.1	12.6	565	60	* .079	.059	.049	
34606	LSG2040*	JVP	1	Green	Green diffused (XC209G)	T1	0.119/3	0.13	1.05	0.08	2.2	15	560	50	* .15	.12	.10	
156930	LT0321-41-HE	JVP	1	Green	Green diffused	T1	0.119/3	0.16	0.88	0.10	2.1	32	567	56	* .15	.12	.10	
790111	LTL-16KGE	LTO	1	Green	Green diffused	T1	0.119/3	0.20	0.94	0.10	2.1	40	565	45	* .07	.055	.04	
175679	LVG2041	JVP	1	Green	Green transparent	T1	0.119/3	0.17	0.69	0.08	2.2	129	565	30	* .15	.12	.10	
114681	LVG2043*	JVP	1	Green	Water clear (BG209)	T1	0.119/3	0.14	0.98	0.07	2.2	129	565	30	* .12	.10	.08	
137411	LVB2040	JVP	1	Blue	Blue diffused	T1	0.119/3	0.21	0.98	0.10	3.5	10	430	50	.89	.79	.69	.65
333383	UT63B1-41-URC3	JVP	2	Blue	Blue diffused	T1	0.119/3	0.17	0.98	0.10	3.8	50	466	54	.59	.49	.39	.29
34690	LFH3360*	JVP	1	Red	Red diff. blinking (XC5410) <sup>2</sup>	T1 3/4"	0.197/5	0.30	0.94	0.07	3-12	2.8	697	—	.39	.35	.29	.25
94511	LH3330	JVP	1	Red	Red diffused (XC556RB)	T1 3/4"	0.197/5	0.31	0.81	0.08	2.3	3	697	36	* .15	.12	.10	
242844	LT1811-81	JVP	1	Red	Red diffused	T1 3/4"	0.197/5	0.30	0.88	0.10	2.1	4.1	700	44	* .12	.10	.08	
2125309	LS5469FH	SIE	1	Red	Red diffused	T1 3/4"	0.20/5.1	0.31	1.10	0.10	1.8	5	635	50	* .07	.05	.03	
253753	HLMP-3301	FSC	1	Red	Red diffused	T1 3/4"	0.197/5	0.36	1.00	0.10	2.4	5.4	635	60	* .19	.17	.12	
104248	LA93B/H-1*	JVP	5	Red	Red diffused (XC410R)	T1 3/4"	0.197/5	0.35	0.89	0.08	2.3	6.5	697	46	.25	.21	.19	.15
333973	UT1871-81-M1	JVP	1	Red	Red diffused	T1 3/4"	0.197/5	0.34	0.98	0.10	1.7	75	660	25	* .12	.10	.08	
2186558	MSB557DA-OHM	LTO	1	Red	Red diffused (blinking)	T1 3/4"	0.197/5	0.30	0.94	0.10	3.0	80	660	30	* .09	.07	.055	
333489	LUR3330/HO/A	JVP	1	Red	Red diffused	T1 3/4"	0.197/5	0.34	0.98	0.10	1.5	380	660	40	* .19	.15	.12	
302033	LT1814-81	JVP	1	Red	Red clear	T1 3/4"	0.197/5	0.34	0.88	0.10	2.1	10	650	10	* .15	.12	.10	
2155399	LTL-4268-H4	LTO	2	Red	Water clear	T1 3/4"	0.197/5	0.34	1.00	0.10	1.8	270	638	16	* .12	.10	.08	
697602	LTL-4223	LTO	1	Hi-eff Red	Red diffused	T1 3/4"	0.197/5	0.34	1.00	0.10	2.0	19	635	36	* .07	.055	.045	
697522	LTL-307E-002	LTO	2	Hi-eff Red	Red diffused	T1 3/4"	0.197/5	0.34	0.90	0.10	2.0	19	635	50	* .12	.10	.08	
2006730	LTL-307E-3**	LTO	1	Hi-eff Red	Red diffused, flanged	T1 3/4"	0.197/5	0.34	0.87	0.10	2.0	12.6	623	40	* .09	.07	.05	
790081	LTL-10223W	LTO	2	Hi-eff Red	Red diffused, flangeless	T1 3/4"	0.187/4.75	0.283	1.00	0.10	2.0	60	623	60	* .12	.09	.07	
697611	LTL-4224	LTO	1	Hi-eff Red	Red transparent	T1 3/4"	0.197/5	0.34	1.00	0.10	2.0	90	635	16	* .12	.10	.08	
697573	LTL-4213	LTO	1	Bright Red	Red diffused	T1 3/4"	0.197/5	0.34	1.00	0.10	2.1	3.7	657	36	* .06	.05	.04	
790225	LTL-307P	LTO	2	Bright Red	Red diffused	T1 3/4"	0.197/5	0.34	0.90	0.10	2.1	5.6	657	50	* .08	.06	.04	

\* 10 pcs./\*\* 100 pcs. in LEDs & LED Mounting Hardware cabinet kit, pg 27 <sup>1</sup> Reverse polarity to change color <sup>2</sup> Volt. shown is operating volt. range; no current limiting resistor required

\* ADT = Arndt Electronics | FSC = Fairchild Semi | JVP = Jameco ValuePro | LTO = Lite On | SIE = Siemens | SLD = Sunled Corp. | UNI = Unity Opto





## Standard-Output LEDs (Continued)

See pages 17 & 27 for LED Mounting Hardware

\* Web Code: FAF

\* Order in multiples of 10

Part No.	Product No.	Mfr.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions A" B"	Lead Spacing	Typical Vf	Typical mcd	Wavelength n.m	Viewing Angle°	Pricing			
														1	10	100	1000
1109260	TLUV5300	VSH	3	Red/Green	White diffused bi-color/bi-state <sup>1</sup>	T1 ¼	0.197/5	0.30 1.00	0.10	3.0	2.5	630/565	60	*	\$ .12	\$ .10	\$ .08
334182	LHG3362	JVP	1	Red/Green	White diff. bi-color/solid state <sup>1</sup>	T1 ¼	0.197/5	0.34 0.98	0.10	1.7	1.2/4.5	697/565	30	*	.19	.17	.15
34673	LHG3392*	JVP	3	Red/Green	White diff. bi-color/tri-state	T1 ¼	0.197/5	0.30 1.02	0.03	2.3	3 & 12	697/565	70	*	.19	.15	.12
2186460	LTL-30WJNF	LTO	2	Red/Green	White diffused, bi-color	T1 ¼	0.197/5	0.34 0.83	0.10	1.8/2.1	60/29	660/565	60	*	.15	.12	.10
1554831	HLMP-4000	AVT	3	Hi-eff Red/Gm	White diffused, bi-color	T1 ¼	0.2/5.08	0.36 1.00	0.10	1.9/2.2	2.1/4.2	635/568	65	*	.39	.29	.19
697557	LTL-30EFJ	LTO	3	Bright Red/Gm	White diffused, bi-color	T1 ¼	0.197/5	0.41 0.945	0.10	2.1/2.1	5.6/19	697/565	30	*	.15	.12	.09
1995960	LTL-30EHJ-002	LTO	3	Red/Orange/Gm	Diffused (3 lead)	T1 ¼	0.197/5	0.37 0.790	0.10	2.0/2.1	60/100	635/565	30	*	.25	.22	.17
34711	LEG3362*	JVP	1	Orange/Gm	White diffused bi-color/bi-state <sup>1</sup>	T1 ¼	0.197/5	0.30 1.01	0.09	1.7	4.5	635/565	30	*	.19	.15	.12
152857	LT1841R-81-R	JVP	1	Orange Red	Red diffused	T1 ¼	0.197/5	0.34 0.89	0.10	2.1	23.1	630	45	*	.06	.05	.04
210825	BVU-5M1QN1	BVO	2	Orange Red	Red diffused	T1 ¼	0.197/5	0.30 1.00	0.10	2.1	465	615	30	*	.06	.05	.04
107393	LE3330	JVP	1	Orange Red	Orange diffused (XC556A)	T1 ¼	0.197/5	0.30 1.02	0.08	2.3	24	635	36	*	.12	.10	.08
2155268	BVL-501EID	JVP	2	Orange Red	Orange diffused	T1 ¼	0.197/5	0.30 1.00	0.10	2.1	50	622	25	*	.09	.06	.04
2125288	LY5469FH	SIE	1	Yellow	Yellow diffused	T1 ¼	0.20/5.1	0.31 1.10	0.10	2.0	5	586	50	*	.07	.05	.035
34825	LY3330	JVP	1	Yellow	Yellow diffused (XC556Y)	T1 ¼	0.197/5	0.30 0.82	0.07	2.3	12	585	36	*	.15	.12	.10
1995927	LTL-10253	LTO	1	Yellow	Yellow diffused, flanged	T1 ¼	0.187/4.75	0.283 1.00	0.10	2.1	12.6	585	60	*	.15	.12	.10
697696	LTL-4253	LTO	1	Yellow	Yellow diffused	T1 ¼	0.197/5	0.34 1.00	0.10	2.1	19	585	36	*	.08	.06	.05
104264	LA93B/Y-1*	JVP	5	Yellow	Yellow diffused (XC410Y)	T1 ¼	0.197/5	0.35 0.89	0.08	2.3	25	585	46	*	.29	.25	.19
697549	LTL-307Y	LTO	2	Yellow	Yellow diffused	T1 ¼	0.197/5	0.34 0.90	0.10	2.1	29	585	50	*	.09	.055	.045
334108	UT1831-81-S	JVP	1	Yellow	Yellow diffused	T1 ¼	0.197/5	0.34 0.98	0.10	2.1	90	590	10	*	.12	.10	.08
333622	LHY3330/HO	JVP	1	Yellow	Yellow diffused	T1 ¼	0.197/5	0.34 0.98	0.10	1.7	350	595	40	*	.15	.12	.10
253833	HLMP-4740	FSC	1	Green	Green diffused	T1 ¼	0.197/5	0.36 1.00	0.10	2.2	2.3	565	50	*	.12	.10	.08
693901	MCDL-5013GD	MCD	1	Green	Green diffused	T1 ¼	0.197/5	0.34 1.04	0.10	2.1	12.5	565	60	*	.10	.08	.06
697653	LTL-4233	LTO	1	Green	Green diffused	T1 ¼	0.197/5	0.36 1.00	0.10	2.1	19	565	36	*	.12	.10	.08
697531	LTL-307G	LTO	1	Green	Green diffused	T1 ¼	0.197/5	0.36 0.88	0.10	2.1	19	565	50	*	.12	.10	.08
334086	LG13740	JVP	1	Green	Green diffused	T1 ¼	0.197/5	0.34 0.98	0.10	1.7	20	565	68	*	.10	.08	.06
34761	LG3330*	JVP	1	Green	Green diffused (XC556G)	T1 ¼	0.197/5	0.31 0.79	0.09	2.6	30	565	36	*	.15	.12	.10
104256	LA93B/G-1*	JVP	5	Green	Green diffused (XC410G)	T1 ¼	0.197/5	0.35 0.89	0.08	2.6	30	565	46	*	.17	.14	.10
152822	LT1821-81-HE	JVP	1	Green	Green diffused	T1 ¼	0.197/5	0.34 0.89	0.10	2.1	50	567	41	*	.19	.15	.12
697661	LTL4234	LTO	1	Green	Green transparent	T1 ¼	0.197/5	0.34 1.00	0.10	2.1	60	565	16	*	.07	.059	.045
333227	LG13530	JVP	2	Hi-eff green	Green diffused (flangeless)	T1 ¼	0.197/5	0.34 0.98	0.10	1.7	25	565	36	*	.10	.08	.06
2133641	LT641G1HR-H206	JVP	6	Green/Red	Green/Red diffused (dual)	T1 ¼	0.197/5	0.49 0.24	0.10	2.1	28/40	567/635	38	*	.35	.25	.19
138691	LVB3330	JVP	1	Blue	Blue diffused	T1 ¼	0.197/5	0.34 0.98	0.10	4.8	10	430	36	*	.99	.89	.75
2133421	SSL-LX5093SWC/A	LUM	1	White	Water clear	T1 ¼	0.197/5	0.30 1.00	0.10	3.6	200	—	16	*	.79	.69	.59
138683	LHR3630	JVP	2	Red	Red diffused	10mm	0.394/10	0.40 1.04	0.10	2.0	200	660	32	*	.29	.25	.19
2152112	MCDL-10003SED	JVP	2	Hi-eff red	Red diffused	10mm	0.394/10	0.43 1.00	0.1	2.0	35	635	60	*	.59	.55	.49
2152139	MCDL-10003ED-E	JVP	2	Orange	Orange diffused	10mm	0.394/10	0.43 1.00	0.1	2.0	25	610	60	*	.45	.39	.35
2152121	MCDL-10003SYD	JVP	2	Yellow	Yellow diffused	10mm	0.394/10	0.43 1.00	0.1	2.0	35	590	60	*	.59	.55	.49
98984	LVG3630	JVP	1	Green	Green diffused	10mm	0.394/10	0.40 1.07	0.08	2.3	40	565	32	*	.29	.25	.19
2152104	MCDL-10003SGD	JVP	2	Green	Green diffused	10mm	0.394/10	0.43 1.00	0.1	2.2	50	570	60	*	.59	.55	.49
2152147	MCDL-10003SBD	JVP	2	Blue	Blue diffused	10mm	0.394/10	0.43 1.00	0.1	4.2	20	430	60	*	1.49	1.35	1.19
104889	LEG5292	JVP	7	Orange/Gm	White diff. bi-color rectangular	2x5mm	—	0.27 1.02	0.08	2.3	6/6	635/565	116	*	.25	.22	.17
790356	LTL-433G	LTO	7	Green	Green diffused, rectangular	2x5mm	—	0.30 1.00	0.10	2.1	3.7	565	140	*	.12	.10	.08
2133464	SSL-3353SYD	LUM	8	Yellow	Yellow diffused, square	3x3mm	0.119/3	0.18 1.00	0.10	2.5	100	590	80	*	.04	.03	.02

\* 10 pcs. in LEDs & LED mounting hardware cabinet kit, pg 27

<sup>1</sup> Reverse polarity to change color

BEST SELLING LEDs										* Web Code: ZZT									
98968										2138825									
* Order in multiples of 10										* Order in multiples of 10									
Part No.	Mfr. Part No.	Mfr.	Color	1	10	100	1000			Part No.	Mfr. Part No.	Mfr.	Color	1	10	100	1000		
333851	UT6371-41-M1-R	JVP	Red	*	\$ .12	\$ .10	\$ .08			2133632	LT0333N-41-UR91	JVP	Yellow	*	\$ .05	\$ .035	\$ .02		
34657	LY2040	JVP	Yellow	*	.15	.12	.10			98968	QLMP-LB98	AVT	Blue	.39	.35	.29	.19		
333201	LG12340	JVP	Green	*	.12	.10	.08			2129625	LDUV3333	JVP	Purple	1.25	1.15	.99	.85		
333383	UT63B1-41-URC3	JVP	Blue	.59	.49	.39	.29			2138855	LUW30243	JVP	White	.99	.89	.79	.69		
107393	LE3330	JVP	Orange Red	*	.12	.10	.08			333447	UT1873-81-UR-P22-R	JVP	Red	.25	.19	.17	.15		
697653	LTL-4233-012	LTO	Green	*	.12	.10	.08			2188668	SSL-LX5093KUSBC	LUM	Blue	.89	.79	.69	.59		
2133421	SSL-LX5093SWC/A	LUM	White	.79	.69	.59	.49			2115493	UT5HW3-4D-URC3-4861-R	JVP	White	1.19	1.09	.95	.79		
138691	LVB3330	JVP	Blue	.99	.89	.75	.69			2205341	MCD-10003UWC	JVP	White	1.25	1.09	.89	.79		

\* AVT = Avago | BVO = BV Optotech | FSC = Fairchild Semi | JVP = ValuePro | LTO = Lite On | LUM = Lumex | MCD = MCD Elec. | SIE = Siemens | VSH = Vishay

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

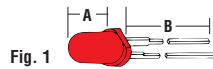
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# Medium & High-Output LEDs

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## Medium-Output LEDs



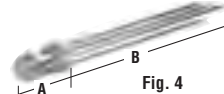
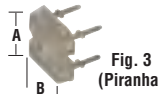
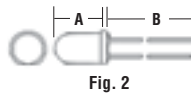
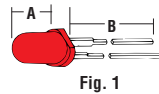
\* Web Code: MBW

\* Order in multiples of 10

Part No.	Product No.	Mfr.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions		Lead Spacing	Typical Vf	Typical mcd	Wavelength nm	Viewing Angle°	Pricing			
								A"	B"						1	10	100	1000
156954	UT0373-41	JVP	1	Red Super Bright	Water clear	T1	0.119/3	0.16	0.94	0.10	1.8	100	660	36	*	\$1.19	\$1.15	\$1.12
333340	LHE2643	JVP	1	Orange	Water clear	T1	0.119/3	0.13	0.98	0.10	1.7	700	620	40	*	.19	.17	.14
2133632	LT033N-41-UR91	JVP	1	Yellow	Water clear	T1	0.119/3	0.20	0.89	0.10	1.9	700	589	35	*	.05	.035	.02
333307	LUY2643-1	JVP	1	Yellow	Water clear	T1	0.197/5	0.13	0.98	0.10	1.7	900	595	40	*	.29	.25	.22
98968	QLMP-LB98	AVT	2	Blue	Blue clear (oval)	T1	0.119/3	0.28	0.94	0.10	3.2	550	470	70	*	.39	.35	.29
334749	UT6B3-41-UR33	JVP	1	Blue	Water clear	T1	0.119/3	0.17	0.94	0.10	3.2	900	470	45	*	.69	.59	.49
334764	LWK2043	JVP	1	White	Water clear	T1	0.119/3	0.17	0.98	0.10	3.5	900	—	30	*	.99	.89	.75
2193900	LTL-307UR-002	LTO	2	Red	Red diffused	T1 ¾	0.197/5	0.29	0.83	0.10	1.8	470	660	50	*	.15	.12	.10
333497	LSR13233	JVP	1	Red	Water clear	T1 ¾	0.197/5	0.30	0.98	0.10	1.5	720	660	18	*	.19	.15	.12
206519	LHR3331	JVP	1	Red	Red transparent	T1 ¾	0.197/5	0.30	0.98	0.10	1.5	900	550	20	*	.19	.15	.12
152864	BUV501SR4	JVP	1	Red Super Bright	Water clear	T1 ¾	0.197/5	0.34	0.89	0.10	1.9	600	660	20	*	.10	.07	.05
351089	MCDL-517URD-F	JVP	1	Super Red	Red diffused blinking	T1 ¾	0.197/5	0.30	1.00	0.10	1.8	500	660	120	*	.75	.65	.55
206501	LVY3331	JVP	1	Yellow	Yellow transparent	T1 ¾	0.197/5	0.30	1.02	0.10	1.7	1500	595	20	*	.14	.11	.08
153154	LVG3333	JVP	1	Green	Water clear (HLMP-8509)	T1 ¾	0.197/5	0.30	1.02	0.10	2.1	500	565	20	*	.10	.08	.06
156962	LT1823-81-HE	JVP	2	Green	Water clear	T1 ¾	0.197/5	0.30	1.00	0.10	2.1	500	567	19	*	.16	.13	.10
333551	LVG13233	JVP	1	Green	Water clear	T1 ¾	0.197/5	0.30	0.98	0.10	1.7	600	565	18	*	.19	.15	.12
2135267	TLHB-5100	VSH	1	Blue	Water clear	T1 ¾	0.197/5	0.30	0.90	0.10	3.9	250	466	9	*	.49	.45	.35
2211080	KTL050BLDI	JVP	2	Blue	Blue diffused	T1 ¾	0.197/5	0.30	1.00	0.10	3.5	350	470	120	*	.59	.49	.39
134333	383UBC/H2	JVP	1	Blue	Water clear	T1 ¾	0.197/5	0.30	1.00	0.10	3.8	630	428	30	*	.99	.89	.79
334465	LDBK3331/H0	JVP	1	Blue	Blue transparent	T1 ¾	0.197/5	0.30	0.98	0.10	3.5	900	470	26	*	.79	.69	.65
2133659	LT12W3-4D-UDE3-WD	JVP	3	White	Water clear	T1 ¾	0.181/4.6	0.30	1.00	0.10	3.2	850	—	100	*	.89	.79	.69
2129625	LDUV3333	JVP	1	Purple	Water clear	T1 ¾	0.197/5	0.30	1.00	0.10	3.0	450	400	20	*	1.25	1.15	.99
2152155	MCDL-833URD-U12	JVP	2	Super Red	Red diffused	10mm	0.394/10	0.43	1.00	0.10	1.8	600	660	60	*	.59	.55	.45
2209115	MCD-10003UBD	JVP	2	Blue	Diffused	10mm	0.394/10	0.47	1.00	0.10	3.5	600	470	60	*	.99	.89	.79

## High-Output LEDs

• Typical DC forward current 20mA



\* Web Code: RBJ

\* Order in multiples of 10

Part No.	Product No.	Mfr.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions		Lead Spacing	Typical Vf	Typical mcd	Wavelength nm	Viewing Angle°	Pricing			
								A"	B"						1	10	100	1000
98950	QLMP-LM98	AVT	2	Green	Green clear (oval)	T1	0.119/3	0.28	0.94	0.10	3.2	2400	525	70	*	\$1.19	\$1.15	\$1.12
2168421	3MMLED-BLUE	JVP	1	Blue	Blue diffused	T1	0.119/3	0.15	0.69	0.10	3.4	5000	465	120	*	.19	.15	.12
2169846	3MMLED-GREEN	JVP	1	Green	Green diffused	T1	0.119/3	0.15	0.69	0.10	3.4	5000	520	120	*	.19	.15	.12
2174881	3MMLED-WHITE	JVP	1	White	White diffused	T1	0.119/3	0.15	0.69	0.10	3.4	8000	—	120	*	.19	.15	.12
2138855	MCD-3014UEC-TL	JVP	2	White	Water clear	T1	0.119/3	0.17	1.00	0.10	2.1	3000	620	25	*	.99	.89	.79
217525	MCDPW-3004C	JVP	2	White	Water clear	T1	0.119/3	0.14	1.00	0.10	3.8	3000	—	30	*	1.39	1.25	1.09
2205430	MCD-3014UEC-TL	JVP	2	Red	Water clear	T1	0.119/3	0.17	1.00	0.10	2.1	3000	620	25	*	.69	.59	.49
333447	UT1873-81-UR-P22R	JVP	2	Super Red	Water clear	T1 ¾	0.197/5	0.30	0.89	0.10	1.9	1600	660	25	*	.25	.19	.17
333526	LUR3833	JVP	1	Red	Water clear	T1 ¾	0.197/5	0.30	1.02	0.10	1.5	2700	660	12	*	.25	.21	.19
2188449	LHRF333S/S46-PF-B01	JVP	1	Red	Water clear	T1 ¾	0.197/5	0.30	1.00	0.10	2.1	5000	625	30	*	.39	.35	.29
2203813	MCDL-5013UEC-TL-H	JVP	2	Super Red	Water clear	T1 ¾	0.197/5	0.30	1.00	0.10	2.0	7000	630	20	*	.49	.45	.39
2095171	RL50-PR543	JVP	2	Ult. Bright Red	Water clear	T1 ¾	0.197/5	0.30	1.02	0.10	1.7	8000	635	20	*	.39	.29	.19
1584917	HLMP-EG08-Y2000	AVT	1	Red	Red untinted/non-diffused	T1 ¾	0.197/5	0.30	0.94	0.10	1.9	9300	635	6	*	.69	.59	.49
333657	LUE3333	JVP	2	Orange	Water clear	T1 ¾	0.197/5	0.30	0.98	0.10	1.7	3400	620	20	*	.35	.29	.22
333673	LUE3833	JVP	2	Orange	Water clear	T1 ¾	0.197/5	0.30	0.98	0.10	1.7	5000	620	12	*	.49	.45	.35
333569	LVY3333/A*	JVP	1	Yellow	Water clear	T1 ¾	0.197/5	0.30	0.98	0.10	1.7	2500	590	20	*	.15	.12	.10
2186419	LTL-2H3VYKNT	LTO	1	Amber/Yellow	Water clear	T1 ¾	0.197/5	0.30	0.87	0.10	2.0	3400	595	15	*	.15	.12	.09
333614	LUY3833H	JVP	1	Yellow	Water clear	T1 ¾	0.197/5	0.30	0.98	0.10	1.7	5000	590	12	*	.39	.35	.29
2095189	RL50-PY543	JVP	2	Ultra Yellow	Water clear	T1 ¾	0.197/5	0.30	1.02	0.10	1.7	8000	595	20	*	.39	.29	.19
2006772	LTL-2H3VYKNT1	LTO	1	Amber/Yellow	Water clear, flanged	T1 ¾	0.197/5	0.30	0.87	0.10	2.0	3400	595	15	*	.10	.08	.06
2167251	MCDL-5013BGC-TL	JVP	2	Green/Blue	Water clear	T1 ¾	0.197/5	0.30	0.96	0.10	3.2	11000	510	30	*	.99	.89	.79
334473	LDGL3333/H0	JVP	1	Green	Water clear	T1 ¾	0.197/5	0.30	0.98	0.10	3.5	3400	505	22	*	.69	.59	.49
2210706	MCDL-5013BGC-T	JVP	1	Green	Water clear	T1 ¾	0.197/5	0.30	1.00	0.10	3.5	7000	505	18	*	.75	.69	.59
2077079	HLMP-CM39-JVCDD	AGT	2	Green	Untinted/non-diffused	T1 ¾	0.197/5	0.30	0.90	0.10	3.2	5000	535	30	*	.39	.35	.29
2179711	MCDL-5013UBD	JVP	2	Blue	Blue diffused	T1 ¾	0.197/5	0.34	1.06	0.10	3.3	995	460	20	*	1.09	.99	.89
2188668	SSL-LX5093XUSBC	LUM	1	Super Blue	Water clear	T1 ¾	0.197/5	0.34	1.04	0.10	3.5	2500	470	10	*	.89	.79	.69
2210896	Q62703Q5931	OSR	1	Blue	Water clear	T1 ¾	0.197/5	0.30	1.06	0.10	3.5	2800	470	15	*	.79	.69	.59
183222	MCDL-5013UBC-TL	JVP	1	Blue	Water clear	T1 ¾	0.197/5	0.30	0.94	0.10	3.5	6000	470	18	*	1.39	1.25	1.09
142894	BUV-5E1WK4-B	JVP	1	White	Water clear	T1 ¾	0.197/5	0.30	1.00	0.10	3.5	3700	—	15	*	1.49	1.35	1.19
334502	LWK3333	JVP	1	White	Water clear	T1 ¾	0.197/5	0.30	0.94	0.10	3.5	5000	—	16	*	.89	.79	.65
320531	MCDL-5013UWC	JVP	1	White	Water clear	T1 ¾	0.197/5	0.30	1.00	0.10	3.8	5000	—	15	*	.99	.89	.75
2077061	EM-503QWC-R12	JVP	2	White	Water clear	T1 ¾	0.197/5	0.30	1.04	0.10	4.5	5000	—	25	*	.89	.79	.69

\* 10 pcs. in LEDs & LED mounting hardware cabinet kit, pg 27

\* AGT = Agilent | AVT = Avago Technology | JVP = Jameco ValuePro | LTO = Lite-On | LUM = Lumex Optoelectronics | OSR = Osram | VSH = Vishay



# High-Output LEDs, Circuit Board Indicators & LED Drivers

## High-Output LEDs (Continued)

Figure images on previous page

\* Web Code: RBJ

Part No.	Product No.	Mfr.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions		Lead Spacing	Typical Vf	Typical mcd	Wavelength nm	Viewing Angle°	Pricing			
								A"	B"						1	10	100	1000
2115493	UT5HW3-4D-URC3-4861-R	JVP	1	White	Water clear	T1 ¾	0.197/5	0.30	0.95	0.10	4.0	7000	—	30	\$1.19	\$1.09	\$.95	\$.79
2160067	MVL-514SW-T-SI	UNI	2	White	Water clear	T1 ¾	0.197/5	0.30	1.04	0.10	3.2	11,000	—	15	1.09	.99	.89	.75
2144753	TLWB7600	VSH	3	Blue	Water clear (7.62mm sq.)	2mm dome	0.079/2	0.30	0.30	0.20	4.3	2000	470	30	.99	.89	.79	.69
2005702	LTL912VEKSA	LTO	3	Red	Water clear (7.62mm sq.)	3mm dome	0.119/3	0.30	0.30	0.20	2.15	1200	632	50	.49	.39	.35	.29
404603	MCDL-1860UGC-TL	JVP	3	Green	Water clear (7.62mm sq.)	3mm dome	0.119/3	0.30	0.30	0.20	3.5	3500	525	75	1.09	.99	.89	.79
404591	MCDL-1860UBC-15C	JVP	3	Blue	Water clear (7.62mm sq.)	3mm dome	0.119/3	0.30	0.30	0.20	3.5	2500	470	75	1.09	.99	.89	.79
664341	MCDL-1870UWC-15C	JVP	3	White	Water clear (7.62mm sq.)	3mm dome	0.119/3	0.30	0.30	0.20	3.5	6500	—	40	1.39	1.25	1.09	.95
404582	MCDL-1860UWC-15C	JVP	3	Ultra White	Water clear (7.62mm sq.)	3mm dome	0.119/3	0.30	0.30	0.20	3.5	3500	—	75	1.39	1.25	1.09	.95
2167429	MVL-914MW	UNI	3	White	Water clear (7.62mm sq.)	3mm dome	0.119/3	0.30	0.30	0.20	3.2	4000	528	50	.79	.69	.59	.49
2167390	MVL-904MW	UNI	3	White	Water clear (7.62mm sq.)	3mm dome	0.119/3	0.30	0.30	0.20	3.5	4000	528	30	.89	.79	.69	.59
2205296	MCD-10003URC	JVP	2	Red	Water clear	10mm	0.394/10	0.47	1.00	0.10	1.9	1500	660	20	1.09	.99	.79	.69
2205309	MCD-10003UEC	JVP	2	Orange	Water clear	10mm	0.394/10	0.47	1.00	0.10	2.0	2000	625	20	1.09	.99	.79	.69
2205317	MCD-10003UYC	JVP	2	Yellow	Water clear	10mm	0.394/10	0.47	1.00	0.10	2.0	1800	589	20	1.09	.99	.79	.69
2205325	MCD-10003BC	JVP	2	Blue	Water clear	10mm	0.394/10	0.47	1.00	0.10	3.5	3000	470	20	1.25	1.09	.89	.79
2205333	MCD-10003PGC	JVP	2	Green	Water clear	10mm	0.394/10	0.47	1.00	0.10	3.5	11000	525	20	1.25	1.09	.89	.79
2205341	MCD-10003UWC	JVP	2	White	Water clear	10mm	0.394/10	0.47	1.00	0.10	3.5	9000	—	20	1.25	1.09	.89	.79

Optos

## RGB High-Output LEDs

Figure images on previous page

\* Web Code: RKK

Part No.	Cross Ref. No.	Mfr.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions		Lead Spacing	Typical Vf	Typical mcd	Wavelength nm	Viewing Angle°	Pricing			
								A"	B"						1	10	100	500
2211119	MSL-504RGB-4P**	JVP	4	Red/Green/Blue	Water clear	T1 ¾	0.197/5	0.30	1.00	0.05	2.0/3.4/3.4	2000/3000/1200	625/525/470	25	\$1.75	\$1.59	\$1.39	\$1.25
2211127	MSL-504RGB-4P**	JVP	4	Red/Green/Blue	Water clear	T1 ¾	0.197/5	0.30	1.00	0.05	2.0/3.4/3.4	2000/3000/1200	625/525/470	25	1.75	1.59	1.39	1.25
2125181	MCDL-5T8R6G5B6C*	JVP	4	Red/Green/Blue	Water clear	T1 ¾	0.197/5	0.34	1.11	0.028	2.25/3.5/3.5	3500/4000/2000	624/525/470	20	2.49	2.25	1.95	1.75
2128500	MCDL-5013RGBC-TL-A	JVP	4	Red/Green/Blue	Water clear	T1 ¾	0.197/5	0.30	0.78	0.05	2.0/3.5/3.5	3000/5000/1000	628/525/470	25	2.49	2.25	1.95	1.75
2210829	MCDL-5T8R6G5B6C-CA**	JVP	4	Red/Green/Blue	Water clear	T1 ¾	0.197/5	0.34	1.11	0.028	2.25/3.5/3.5	3500/4000/2000	624/525/470	20	2.19	1.95	1.75	1.49
2157271	MCDL-5013RGBW-B	JVP	1	Red/Green/Blue†	Diffused	T1 ¾	0.197/5	0.30	1.00	0.10	2.3/3.5/3.5	300/300/300	630/525/470	40	2.25	1.95	1.75	1.49
2152163	MCDL-833RGBW-B	JVP	1	Red/Green/Blue†	Diffused	10mm	0.394/10	0.43	1.00	0.10	5.0/5.0/5.0	700/800/400	625/525/470	20	2.25	1.95	1.75	1.49

\* Common Cathode \*\* Common Anode † Auto blink/color change function

Dialight

## Standard-Output LED Circuit Board Indicators (CBI)

Part No.	Product No.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions		Lead Spacing	Typical Vf	Typical mcd	Wavelength nm	Viewing Angle°	Pricing			
							A"	B"						1	10	100	1000
2183082	551-3107	1	Yellow/Green*	Diffused, tinted	T1	0.119/3	0.28	0.17	0.100	2.1/2.1	4.3/6.3	585/565	80	*	\$0.07	\$0.05	\$0.03
1943609	553-0222	2	Green (2 LEDs)	Diffused, tinted	T1	0.119/3	0.38	0.17	0.100	1.9	1.6	565	60	*	.10	.07	.05
1716334	553-0711	2	Red/Grn (2 LEDs)*	Diffused, tinted	T1	0.119/3	0.38	0.17	0.100	2.0/2.1	4.7/10	635/565	50	.29	.25	.19	.15
2133552	550-1206	3	Yellow	Yellow diffused	T1 ¾	0.197/5	0.24	0.24	0.100	1.9	1.8	583	50	.29	.25	.19	.15
2183058	550-3006	3	Red/Green*	White diffused	T1 ¾	0.197/5	0.25	0.25	0.100	1.8/2.1	90/40	660/565	60	*	.15	.12	.09
2183496	550-0004-826	4	Yellow (4 LEDs) horiz.	Tinted, non-diffused	T1 ¾	0.197/5	0.98	0.24	0.100	1.7	7	585	55	.49	.39	.35	.29
2183146	561-1101-070	5	Red	Tinted, non-diffused	T1 ¾	0.197/5	0.70	0.28	0.100	1.8	2.0	635	50	*	.12	.09	.07
2203311	GB310	6	100 pcs. PCB	Housing LEDs	T1, T1 ¾ multiple LEDs, R/A, straight, various colors									8.95	7.95	6.95	5.95

\* Bi-color

## LITEON Standard-Output LEDs and Circuit Board Indicators (CBI)

5 Million pieces Lite-On LED Sale!

\* Web Code: SOI

Visit [Jameco.com](http://Jameco.com) and use web code

Part No.	Product No.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions		Lead Spacing	Typical Vf	Typical mcd	Wavelength nm	Viewing Angle°	Pricing			
							A"	B"						1	10	100	1000
2186515	LTL-4202	1	Red	Transparent	T1	0.119/3	0.17	1.00	0.10	1.7	5.6	655	20	*	\$0.06	\$0.045	\$0.03
2186371	LTL-1BEWJ	2	Red/Green	Diffused (3 lead)	T1	0.119/3	0.16	0.79	0.10	1.8/2.1	12.6/5.6	660/565	140	*	.07	.055	.039
2186451	LTL-1BEHKVMP1	3	Hi Eff. Red/Green	Water Clear (3 lead)	T1	0.119/3	0.16	0.19	0.10	2.0/2.1	19/29	650/565	55	*	.07	.055	.039
790111	LTL-16KGE	1	Green	Diffused	T1	0.119/3	0.16	0.95	0.10	2.1	40	569	45	*	.07	.055	.04
2186304	LTL-14CHJE	4	Green/Red Orange	Diffused (4 lead)	T1	0.119/3	0.13	0.14	0.10	2.1/2.0	4.8	565/630	200	*	.069	.055	.039
2186275	L934JQ/2GC-C15	5	Green/Green (dual)	Diffused	T1	0.119/3	0.50	0.18	0.10	1.8	20	568	60	*	.069	.055	.039
2186321	LTL-4204	6	Red	Transparent	T1 ¾	0.197/5	0.30	1.00	0.10	1.7	19	655	16	*	.099	.075	.059
2186259	LTL-5238	7	Green (low profile)	Water Clear	T1 ¾	0.197/5	0.18	1.00	0.10	2.1	34	565	44	*	.06	.045	.029

\* JVP = Jameco ValuePro | LTO = Lite-On | UNI = Unity Opto Technology | VSH = Vishay

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
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# High Power LEDs & Modules

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## LIGITEK MCD High Power LEDs with Heat Sink

- Superior high-flux output and high luminance
- Lambertian or 'High Dome' LED has a high hemispherical dome with a wider 140° viewing angle
- Represents Star form factor with heat sink
- High dome series projects a wider and clearer light beam
- ESD protection

★ Web Code: HPL

2096851



Part No.	Mfr.	Mfr. Part No.	Power (W)	Color	Volt. @ Curr. (Vf @ If)	Luminous Flux (lm)	Viewing Angle (°)	Pricing		
								1	10	50
2096843	MCD	MCDL-L20-350HPCWS	1	White	3.2 @ 0.35A	90	140	\$5.49	\$4.95	\$4.49
2096851	MCD	MCDL-L20-350HPWWS	1	Warm white	3.2 @ 0.35A	86	140	5.49	4.95	4.49
2006908	Ligitek	L-HP3PW	3	White	3.2 @ 1A	120	90	7.95	6.95	6.25
2197767	MCD	MCDL-L20-750HPCW	4	White	3.7 @ 1A	220	140	8.95	7.95	6.95
2197775	MCD	MCDL-L20-350HP3RE	2	Red	2.4 @ 1A	80	140	6.95	6.49	5.95

## JKL 12-24V LED Dimmer

Control the brightness of single channel constant voltage LED devices and fixtures operating at 12-24VDC. Dim from 100% full brightness to 20% brightness without flickering. Good for display cases, architectural and cove lighting applications.

- 8 amps maximum load
- Size 2.0"L x 3.0"W
- Operating temperature: 0°F – 140°F

Part No.	Mfr. Part No.	1	5
2153140	ZDM-01	\$16.95	\$14.95

## JAMECO ValuePro Water Clear Lens RGB LEDs

★ Web Code: RKK

Now you can have red, green, and blue (RGB) colors from one single LED that provides high radiant power and intensity.

Complete selection of LEDs on pages 18-23

2125181



- LED size: T1 1/4 (5mm)
- Lens color: water clear
- 4 lead connection

Part No.	Mfr. Part No.	Type	1	10	100
2125181	MCDL-5T8R6G5B6C	Common cathode	\$2.49	\$2.25	\$1.95
2128500	MCDL-5013RGBCL-TL-A	Common anode	2.49	2.25	1.95

## THINK M BlinkM Programmable Smart LEDs



2123645



2123637



2123653

Choose virtually any color, fade between two colors or make your own blinking sequence. No knowledge of programming or electronics required.

2123637/2123653: 24-bit, 4-pin I<sup>2</sup>C interface

★ Web Code: SLS

Part No.	Mfr. P/N	Description	1	5
2123645	MiniM	6000 mcd, 120° FOV, 3.6-5V op. volt, 60mA max	\$14.95	\$13.95
2123637	BlinkM	8000 mcd, 140° FOV, 3.6-5V op. volt, 60mA max	13.95	12.95
2123653	MaxM	445,000 mcd, 30° FOV, 5-24V op. volt, 3A max	24.95	23.49

## JKL Festoon LED Lamps and Sockets

★ Web Code: FES

- Scratch and shock resistant glass encapsulated
- Size: 2113261: 43mm
- 2204314: 44mm



2113261



Shown with Socket (sold separately)

### Lamps

Part No.	Mfr. Part No.	Voltage @ Current	Color	Lumens	1	10
2113261	LE-0603-02W	12VDC @ 20mA	White	10.0	\$3.95	\$3.49
2204314	LE-0909-14NW	12/24VDC/AC @ 45mA	Neutral White	43	5.95	5.49

### Socket

Part No.	Mfr. Part No.	Description	1	10	50
2113367	2910F-47	Fits 40-44mm lamps, 1.97"L x .66"W x .76"H	\$ .99	\$ .89	\$ .75

★ LED Light Strips — Enter Web Code FLX

## 10-Watt Constant Current LED Driver

- Type: AC – DC
- Input volt.: 100-240VAC @ 50-60Hz
- 3-watt LED drivers can drive 2 to 8 1-watt LEDs or 1 to 3 3-watt LEDs
- Operating temperature range: -20°C to 40°C
- 10-watt LED drivers can drive 3 to 8 1-watt LEDs
- UL/CUL/CE approved
- Plug in type, 7 ft. cable with 2.1mm x 5.5mm center positive plug



Part No.	Mfr. Part No.	Description	Output Volt./Curr.	1	5
2006879	LD-PI3536AF	10-watt LED driver	3-36VDC @ 350mA	\$16.95	\$15.49



## 12" Slim Aluminum Light Bar Strips

Equivalent to a standard 40W light bulb!

- Ultra bright LEDs
- Consumes only 5W
- Stylish modern design
- USB mini-B connection
- Operating voltage range: 10-30VDC
- Aluminum bar with glass cover
- Up to 6 bars can be daisy-chained together with P/N 2177635
- Life expectancy: over 50,000 hours



Part No	Color	Brightness	1	5
2177571	Cool white	408 lumens .....	\$44.95	\$39.95
2177580	Warm white	360 lumens .....	27.95	26.95
Part No	Description		1	10
2177635	6" mini USB connector cord .....		\$2.95	\$2.59

## Ultra Brite LED Module with Built-In LED Driver

★ Web Code: HPL

An all-in-one solution to your high power LED lighting needs! Connect directly to any 12V power supply. Only at 1" x 1.25" in size and linkable up to 30 modules!



Part No.	Mfr. Part No.	#Leds	Power	Volt.	Color	Viewing Angle	Im	1	10
2125763	LHA-06B12-N-00	6	150mA	12*	White	120°	87	\$9.95	\$8.95

\* Unregulated 12V

## JKL 3-LED Module

- 12VDC per module @ 45mA
- Color temperature: 6000K
- LED viewing angle: 120 degrees

Part No.	Mfr. Part No.	Description	1	10
2204349	ZM-1968-CW	Water resistant LED module	\$4.95	\$4.49

## White LED Backlight Modules

- Near-uniform light output
- 3V @ 20mA
- 3.5mm thick

2214379

Part No.	Mfr. Part No.	Size (L" x W")	1	5
2214379	1626	1.57 x 0.47	\$2.95	\$2.65
2214352	1622	2.95 x 0.91	3.49	2.95
2214361	1621	3.39 x 1.77	4.49	3.95

## Distributed Array Gen II LED Module

- Operating voltage: 33-39VDC
- 36 LEDs
- Constant current module
- High brightness and contrast
- 10 years lifetime @ below 79°C (board temp)
- 9 watts, 250mA, 36VDC
- Color temperature: 4000°
- Lumens: 1225 (overall brightness)
- Binned and chipping binned LED for good color and consistency



NEW MARKED IN PINK

Part No.	Mfr. Part No.	Size (in.)	1	10
2218097	71914-3CK1	11.4 x 1.5	\$19.95	\$17.95

## Electronic Flashing Xenon Siren Light

For alarm systems, discos and personal use.

- Long-life Xenon tube
- Reverse polarity protection
- Fully sealed and waterproof
- Input: 12VDC @ 150mA
- Power output: 1 watt
- Flash rate: 80-100 flashes/min.
- Size: 2.8"Dia. x 2.5"H
- IP44 rating
- Cable length: 17.6"



Part No.	Mfr. Part No.	Color	1	5	25
2075911	HAA40R	Red	\$11.95	\$10.95	\$9.95



# LED Cables, Infrared Emitters & Detectors



## Assembled Flex-Lite Colored LED Cables

\*Web Code: FLX

CLOSEOUT

- Assembled Flex-Lite LED cable kits
- Sealed LEDs in clear flexible silicon gel
- Applications: lighting art, accent lighting
- Includes power supply, power cable and mounting hardware • Length: 6'

\* Square: 0.41" x 0.5"; Round: 0.5" diameter



Red (Light On)

Part No.	Mfr. Part No.	Color	Voltage	Type*	mcd/ft.	Price
2131531	RL-12F-02-ASSBLY	Amber	12VDC	Square	7200	\$14.95
2131514	RL-12F-08-ASSBLY	Yellow	12VDC	Square	7200	14.95
2131549	RL-12F-04-ASSBLY	Green	12VDC	Square	18000	14.95
2131653	RL-12R-08-ASSBLY	Yellow	12VDC	Round	7200	14.95

\*LED Drivers — Enter Web Code LDD

## Infrared & Visible Light Emitters & Detectors

- Use for remote control and/or for fiber optics

\*Web Code: VAP

Fig. 1

Fig. 2

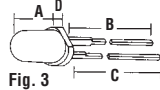


Fig. 3

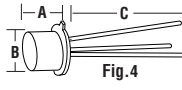


Fig. 4

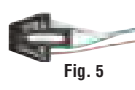


Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

\* Order in multiples of 10

Part No.	Product No.	*Mfr.	Fig.	Description	Size	Diameter inch/mm	Dimensions (inches)				Forward Voltage @ Current	Wavelength nm	mWatts	Pricing		
							A	B	C	D				1	10	100
2099403	PS5022	JVP	1	Phototransistor	Dome	0.06/1.7	0.13	0.35	0.35	—	5.0 @ 20mA	880	1	*	\$0.09	\$0.07
790057	LTE-302	LTO	2	Infrared emitter diode (GaAs) side look	Dome	0.06/1.5	0.23	0.63	0.63	0.18	1.2 @ 20mA	940	40	*	.15	.10
1070238	QSE114	FSC	2	Infrared silicon phototransistor	Dome	0.13/3	0.20	0.50	0.50	0.2	30VBRCE0 @ 1mA	880	100	.59	.49	.39
112150	LIR2043	LIG	3	Infrared emitter diode (GaAs)	T1	0.125/3	0.18	0.95	0.98	0.03	1.2 @ 20mA	940	5	*	.19	.15
1950825	L-34F3CS	JVP	3	Infrared emitter diode (GaAs)	T1	0.125/3	0.20	1.00	1.06	0.04	1.2 @ 20mA	940	80	.39	.35	.29
112176	LPT2023	LIG	3	Infrared phototransistor	T1	0.12/3	0.18	0.95	0.98	0.03	30 @ 0.1A	940	100	.39	.35	.29
2125261	TSHA4400	VSH	3	Infrared emitter diode (GaAlAs) water clear	T1	0.114/2.9	0.13	0.90	1.00	0.04	1.5 @ 100mA	875	20	.35	.29	.25
2120410	RPT-38PB3F	RHM	3	Phototransistor	T1	0.125/3	0.18	0.95	0.98	0.03	5 @ 30mA	800	150	*	.19	.15
1872265	OP505A	OPT	3	Infrared silicon phototransistor	T1	0.125/3.2	0.20	0.50	0.50	0.03	30VBRCE0 @ 100µA	850	100	.69	.59	.55
2162548	LTE-2871	LTO	3	Infrared emitter diode	T1 ¾	0.197/5	0.29	1.00	1.03	0.03	1.6 @ 20mA	940	90	.59	.49	.39
1623349	SFH484-2	SYL	3	Infrared emitter diode	T1 ¾	0.197/5	0.30	0.50	1.14	1.07	1.5 @ 100mA	880	25	.69	.59	.49
372737	UT1883-81-880	JVP	3	Infrared emitter diode (GaAs) water clear	T1 ¾	0.200/5	0.30	0.88	0.94	0.04	1.5 @ 50mA	880	16	.35	.29	.25
1471138	TSHG8200	VHS	3	Infrared emitter diode	T1 ¾	0.197/5	0.30	1.00	1.05	0.07	2.3 @ 1A	830	250	.99	.89	.79
1872151	OP290A	OPT	3	Infrared emitter diode	T1 ¾	0.195/5	0.30	0.75	1.00	0.04	4.0 @ 1.5A	890	333	1.29	1.19	1.09
106526	LVR3333	LIG	3	Infrared emitter diode (GaAs)	T1 ¾	0.200/5	0.34	0.78	0.84	0.04	1.2 @ 20mA	940	8	*	.19	.15
372762	UT1883-81-940	JVP	3	Infrared emitter diode (GaAs)	T1 ¾	0.200/5	0.30	0.88	0.94	0.04	1.3 @ 50mA	940	16	.25	.19	.12
1110914	TSAL6100	VSH	3	High power infrared emitting diode	T1 ¾	0.23/5.8	0.30	0.98	1.04	0.04	1.35 @ 100mA	940	210	.49	.45	.35
373001	UT1893-91-0125	JVP	3	Infrared phototransistor	T1 ¾	0.200/5	0.34	0.88	0.94	0.04	30 @ 0.1A	870	20	.35	.29	.25
2129385	UT1893-45-0125	JVP	3	Infrared phototransistor	T1 ¾	0.200/5	0.34	0.88	0.94	0.04	30 @ 0.1A	860/940	20	.35	.29	.25
2205350	SFH205	JVP	3	PIN silicon photodiode	T1 ¾	0.201/5	0.272	0.70	0.75	0.04	1.3 @ 28mA	950	150	1.09	.99	.89
1872441	AP999	OPT	3	PIN silicon photodiode	T1 ¾	0.205/3	0.31	0.69	0.75	0.04	1.2 @ 1mA	200	100	1.19	1.09	.99
1108144	TEPT5600	VSH	3	Silicon NPN phototransistor	T1 ¾	0.197/5	0.30	0.97	1.03	0.04	6 @ 20mA	570	100	.65	.55	.45
120221	BPW77NA	VSH	4	NPN phototransistor	TO-18	0.18/4.69	0.24	0.19	0.52	0.01	70VCEO @ 50mA	850	250	2.75	2.49	2.25
1872759	OPB704WZ	OPT	5	Infrared emitting diode/phototransistor	—	0.61/15.5	0.61	24	24	—	1.7 @ 40mA	890	68	4.95	4.49	3.95
2159904	PT101SCOLZOF	SHP	6	Phototransistor rect. R/A	Rect.	0.118/0.7	—	0.56	0.61	—	3.5 @ 2mA	620	5	.29	.25	.19
874939	QRD1114	FSC	7	Reflective object sensor phototransistor	Rect.	0.24/6.1	0.18	0.17	0.5	—	1.7 @ 20mA	940	100	1.29	1.09	.89
1621132	BPW34	SYL	8	PIN silicon photodiode chip	Square	—	0.075	0.157	0.118	—	1.3 @ 80µA	850	150	.99	.89	.79
2109691	350-00014	PLX	2	Infrared receiver (38kHz)	Dome	0.24/6	0.27	0.92	0.118	—	3.3 @ 0.35mA	940	10	1.25	.99	.69
2129772	GP1UM287RK	SHP	9	Infrared receiver (56.8kHz)	Dome	0.20/5	0.22	0.30	0.118	0.14	5 @ 0.95mA	940	8	1.49	1.25	.99
2211047	GP1UD271XKOF	SHP	9	Infrared receiver (38kHz)	Dome	0.15/4	0.29	0.40	0.118	0.14	5 @ 140µA	1000	1	.95	.85	.75
2203670	SFH5110-38	SYL	2	Infrared receiver (38kHz)	Dome	0.15/4	0.24	0.24	0.118	—	5 @ 1.3mA	940	50	1.09	.89	.75

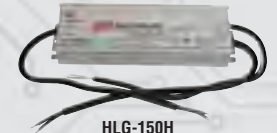
## TOP SELLING LED SWITCHING POWER SUPPLIES

The HLG family of power supplies from Mean Well are designed for LED signage

- Constant current output
- Meets IP67 & UL 1310 standard
- Up to 95% efficiency
- Potted
- 120-320 watts
- Plastic body



Part No.	Description	Price
2148105	HLG-120H-12B	\$56.95
2147903	HLG-320H-24	114.95
2148009	HLG-150H-30B	64.95



HLG-150H

LED Power Supplies on page 105

\* FSC = Fairchild Semi | JVP = Jameco ValuePro | LIG = Ligatek | LTO = Lite-On | OPT = Optek | PLX = Parallax | RHM = Rohm | SYL = Sylvania | SHP = Sharp | VSH = Vishay

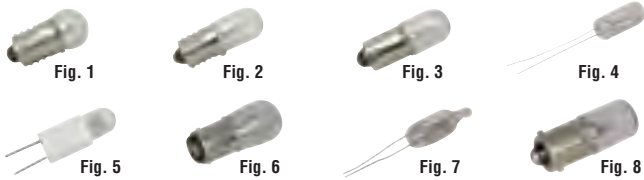
\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Incandescent, Neon, LED Replacement Lamps & Laser Products

Optos



## JAMECO ValuePro Incandescent Lamps

Part No.	Cross Ref.	Fig.	Description	Volts	MSCP	1	10	100
209390	14	1	G3 1/2 miniature screw	2.47	.50	\$.59	\$.49	\$.39
209402	40	2	T3 1/4 miniature screw	6.3	.50	.49	.45	.39
209437	47	3	T3 1/4 miniature bayonet	6.3	.50	.49	.45	.39
141073	2182	4	T1 3/4 wire terminal	14	.34	.49	.45	.39
141066	2200	4	T1 3/4 wire terminal	5	.05	.44	.39	.34
210008	7328	5	T1 3/4 bi-pin	6	.60	.69	.59	.49
210032	7382	5	T1 3/4 bi-pin	14	.30	.69	.59	.49
2203303	6S6DC	6	S6 DC Bayonet Base	120	4.3	1.95	1.75	1.49

## JAMECO ValuePro Neon Lamps

Part No.	Cross Ref.	Fig.	Description	Voltage	1	10	100
27351	A1A (NE-2)	7	Wire terminal .5mA, 12mm L	65-120	\$.49	\$.39	\$.29
210260	A9A (NE-2E)	7	Wire terminal .7mA	65-120	.45	.35	.25
210315	C2A (NE-2H)	7	Wire term. 1.9mA, 18mm L	65-120	.45	.35	.25
2203291	B2A (NE-51H)	8	T3 Bay Base 1.2mA	105-125	1.19	1.09	.89

## JAMECO ValuePro Cluster Type T1-3/4 LED Lamp

- Cluster type 4 orange-red 5mm LEDs • 634mm
- Lens: red tinted transparent • Luminous uniformity: 16cd
- Vf @ If = 9V @ 20mA (typical) • 26mm diameter case size
- 21" long-2-wire with connector • 30 degree viewing angle

Part No.	Cross Ref. No.	Description	1	10	100
2155276	BVM-R26QT4	LED cluster lamp	\$.99	\$.89	\$.75

## 650nm Laser Diodes

- 2120428:**
- Output power: 5mW min.
  - Operating voltage & current: 2.6V max @ 70mA
  - Wavelength: 650nm (typical)
  - Beam divergence: 8° from center

- 2210204:**
- Output power: < 5mW
  - Operating voltage: 3VDC
  - Input power: 150mW
  - Wavelength: 650nm (typical)
  - 2 wire connection

Part No.	Mfr.	Mfr. Part No.	1	10	100
2120428	Lite-On	LTLD505T	\$2.95	\$2.59	\$2.39
2210204	ValuePro	154145	3.49	2.95	2.59

## OSRAM Infrared Pulsed Laser Diode

- Emission wavelength: 905nm (typical)
- Pulse width (FWHM): 100ns
- Peak output power: 25W
- Operating voltage: 4.3V typical
- Beam divergence (perpendicular to pn junction: 25°)
- Typical applications: hand-held laser range finders, traffic surveillance, professional laser sensors, automotive applications.
- Threshold current: 0.75A
- Forward current: 40A • Reverse voltage: 3V
- Operating temperature: -40°C to +85°C

Part No.	Mfr. Part No.	1	10	25
2192763	SPL-PL90	\$9.95	\$8.95	\$7.95

## alpec 5mW Red Laser Pointers

Part No.	Mfr. P/N	Case Color	nm	Range	Size (L" x Dia.)	1	5
223731	5608*	Black	532	>6000'	5.6 x 0.5	\$79.95	\$71.95
2215566	4077†	Silver	650	3000'	.75 x 3.5	24.95	22.49
2215558	4070††	Silver	650	3000'	.75 x 3.5	12.95	11.49
153605	4012	Black	670	1500'	5.2 x 0.4	21.95	19.95
2205552	4000#	Silver	630 - 650	1500'	5.2 x 0.4	14.95	13.49
2215523	6290	Matte Silver	650	1500'	1.75 x 3 x 0.6	7.95	6.95
2215540	6203	Black	650	1500'	3.6 x 0.9 x 0.25	4.95	4.49
2215531	6206	Silver	650	1500'	3.6 x 0.9 x 0.25	3.95	3.59
2215603	4823-R	Red	650	1500'	0.8 x 0.5 x 3.5	3.95	3.49
2215611	4824-W	White	650	1500'	0.8 x 0.5 x 3.5	2.95	2.59
2215620	4825-Y	Yellow	650	1500'	0.8 x 0.5 x 3.5	1.95	1.75

\*Green laser †With AC wall adapter ††With "C" cell batteries #With black gift case

## JKL Wedge Base LED Lamp

\*Web Code: WBL

Wedge LEDs can replace filament bulbs commonly found in automotive and water craft applications. The LEDs feature an integrated diode for reverse voltage protection and a current limiting resistor.

Part No.	Mfr. Part No.	Volt. @ Current	Color	Wavelength	Lumens	1	10	100
2123371	LE-0503-03W	12VDC @ 15mA	White	X=0.3; Y=0.29	2.5	\$1.25	\$1.09	\$.99

## JKL 12" Fluorescent Lamp & Power Supply

Now you can easily and affordably mount these fluorescent lamps to add cool cold-cathode effects and give your display a richer look and feel.

Part No.	Mfr.	Mfr. Part No.	Description	Size (L" x Dia.)	1	10	25
2077466	JKL	FLC12-12	Cool white lamp†	12 x .120	\$1.49	\$1.35	\$1.19
2077440	Velleman	FLPS	12VDC power supply for above lamps		4.95	4.49	3.95

† solder terminals

## Ultraviolet Lamp & Ballast (Rapid Start)

Part No.	Mfr.	Product No.	Description	1	10	100
2100128	ValuePro	TUV25W/G25	20" T5 ultraviolet lamp	\$2.95	\$2.59	\$2.39
2100005	Lightwave	LW20EB20-120	25W rapid start ballast	3.95	3.49	2.95

## JAMECO ValuePro Multi-Chip Based LED Lamps

### T1¼ - Midget Flange (Polarized)

Part No.	Product No.	Color	Nominal Voltage	Forward Current (mA) typ.	Intensity (mcd) typ.	Wavelength (nm)	Pricing		
							1	10	100
392690	585-1413	Yellow	14	30	23	585	\$3.95	\$3.59	\$3.29
392681	585-1313	Green	14	28	70	565	2.95	2.59	2.29
392702	585-1215	Red	28	16	64	660	1.95	1.75	1.49

## 650nm Line and Dot Laser Diodes

### 143845/173243:

- Focus adjustable with locking set screw
- Wattage: 5mW
- Oper. volt.: 3-5V
- Size: 3.3" L x 0.9" Dia.
- One-year warranty

### 143845: Line laser module

- Laser line width: 1mm • Laser fan angle: 60°

### 173243: Cross hair laser diode module

- Laser fan angle: 60° • Size: 3.0" L x 0.9" D
- Female 2.1mm power connector

### 1940660: Module regulated power supply

- Output: 5VDC @ 1A
- Short-circuit protection
- Input voltage: 90-264VAC or 190-250VAC switchable
- Size: 2.6" H x 1.3" W x 1.9" D
- Weight: 0.6 lbs.

### 143853: Laser module mount

- X-Y tilt, θ movement
- Built to hold laser diode on target
- Tightening screw for tilt adjustment

Part No.	Description	1	5
143845	Line laser diode module	\$139.95	\$124.95
173243	Cross hair laser diode module	149.95	134.95
1940660	Power supply, 5VDC/1A	11.95	10.95
143853	Laser diode module mount	69.95	59.95

\*Laser Products — Enter Web Code LAZ

\*Soldering Irons — Enter Web Code QAS

\*Rocker Switches — Enter Web Code VBU



# Panel Mount Indicators & Lamps



## Panel Mount Indicators (LED, Neon)

★ Web Code: SOL

These bright indicator lights come equipped with quick and easy connections. Available in many different types for your specific needs.

- 14/28/125/250/277/480 volts
- Red, amber, yellow, green, blue or white
- .187"/.250" tabs; clamp screw; stripped & tin wires termination
- UL/CUL/TUV/CE approved

### KF 12/13 series:

- 22mm (0.88") mounting hole
- Diffuser: polyacetal
- Lens and hex nut: polycarbonate
- Housing: PBT w/ 20% glass
- Hex nut and panel seal mounting hardware



Fig. 1



Fig. 2



Fig. 3

Part No.	Mfr. Part No.	Fig.	Voltage (V)	Color	Mounting Hole	Type	Termination	1	10	100
2126424	KE12-4-03-01020	1	14	Amber (translucent lens)	0.63"	LED	0.250" tabs	\$.99	\$.89	\$.79
2126416	KE12-4-03-01040	1	14	Green (translucent lens)	0.63"	LED	0.250" tabs	.99	.89	.79
2126408	KE12-4-03-01050	1	14	Blue (translucent lens)	0.63"	LED	0.250" tabs	.99	.89	.79
2126483	2415-3-12-216-1	2	125	Red	0.312"	LED	0.187" tabs	.99	.89	.79
2129545	4416-1-20-010-1	3	250	Red	0.250"	LED	9" wires	.59	.49	.39
2126512	2954-X-11-373-10	4	480	Red	0.50"	Neon	15" wires	.59	.49	.39



Fig. 4



Fig. 5

### Neon Bulb

★ Web Code: NOB

Part No.	Mfr. Part No.	Fig.	Description	1	10	100
2129553	9950-X-00-00000-0002	5	125V Neon bulb with 46k resistor, 2" wires	\$.39	\$.29	\$.19



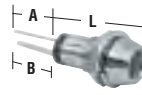
## LED Panel Mount Indicators

- Easy panel installation
- Panel/status/instrument indicators

★ Web Code: SOL



141111



141129/141137



637183

Part No.	Cross Ref. No.	Mfr.	LED Size	Color	Dimensions (in.)			Mounting Hole	VI @ If	Pricing		
					L	A	B			1	10	100
141111	L922SRD	JVP	T1	Red	.56	.34	.25	.23"	2V @ 20mA	\$1.09	\$.99	\$.85
141129	L913RD	JVP	T1	Red	.56	.39	.32	.24"	2V @ 20mA	1.22	1.09	.99
141137	L917RD\$	JVP	T1 3/4	Red	.70	.55	.47	.31"	2V @ 20mA	1.25	1.09	.99
637183	UT2U1G-H113-R801-W051*	JVP	T1 3/4	Green	.55	5.5	5.5	.24"	12V @ 10mA	1.09	.99	.89
2158936	UT2U1W-H113-R801-1739*	LED	T1 3/4	White	.55	5.5	5.5	.24"	12V @ 30mA	1.09	.99	.89
2215427	11-2426B	LKG	T1 3/4	Green	.66	6.0	6.0	.25"	12-14V range	2.95	2.59	2.25

† Has internal resistor to run 12V @ 10mA \* Has 5.5" wire leads \$ Additional panel mounting hardware, P/N 2182602 (pg 78)



## 12V Incandescent Panel Mount Lamps

- 215715: Solder terminals - 0.196" (5mm)

★ Web Code: JBJ

Part No.	Cross Ref. No.	Fig.	Color	Mounting Hole	Wire Length	1	10	100
2181360	NN792-12V-12CM-RED\$	1	Red	9/32" (7mm)	4.7" (120mm)	\$1.49	\$1.25	\$1.09
2158506	F151-12G\$	1	Green	9/32" (7mm)	Terminals	.99	.89	.79
2181378	FNN792-12V-12CM-GRN	1	Green	9/32" (7mm)	4.7" (120mm)	1.49	1.25	1.09
215715	R9-71B-05-12V-R	2	Red	5/8" (16mm)	Terminals	2.25	1.95	1.79

\$ Additional panel mounting hardware, P/N 2182688 (pg 78)



Fig. 1



Fig. 2



## Neon Panel Mount Lamps

- Input voltage: 120V
- Mounting hole diameter: 5/8" (16mm)
- Solder terminals: 0.196" (5mm)

### 1585485:

- Rectangular
- 6" wire leads
- Size: .91"L x .38"W x .77"D

★ Web Code: JBJ



1585485

Part No.	Cross Ref. No.	Color	1	10	100
215803	R9-71N-05-120V-R	Red	\$1.95	\$1.75	\$1.49
215812	R9-71N-05-120V-Y	Yellow	1.95	1.75	1.49
215830	R9-71N-05-120V-G	Green	1.95	1.75	1.49
2202651	2 red, 1 yellow, 1 green		5.95	5.39	4.29
1585485	32501001714	Green	.29	.19	.15

\* Order in multiples of 10



## Incandescent/Neon Panel Mount Lamps

- Mounting hole: .310"Dia.
- Color: red
- 2099788: Incandescent type
- 2.7VDC @ 60mA
- 2179737: Neon type
- 105VAC to 125VAC

★ Web Code: JBJ

Part No.	Mfr. Part No.	Lead Wire	1	10	100
2099788	970D00146*	10" .....	\$.49	\$.45	\$.35
2179737	11-2062B	6" .....	3.49	2.95	2.59

\* Manufacturer: Jameco ValuePro



2183269



2182910



2182928



2183007

## 30 ASSORTED LED INDICATORS GRAB BAG

P/N 2125616 \$9.95



## Panel Mount Indicators

The panel mount indicator chart below shows a variety of lens and lamps to complete your lighting requirements.											
Panel Indicators	2183269	2183437	2182881	2182872	2182910	2182901	2182899	2182928	2182995	2183007	2183605
	\$14.95	\$14.95	\$12.95	\$12.95	\$12.95	\$14.95	\$14.95	\$6.95	\$1.75	\$.79	\$14.95
Voltage for Indicators	110-125VAC	110-125VAC	110-125VAC	110-125VAC	105-125 VAC/VDC	210-250 VAC/VDC	210-250 VAC/VDC	110-125VAC/ 30VDC	1-28VDC	1-28VDC	110-125VAC
Lens	2182952 2182830	2182952 2182830	2182864 2182856 2182848 2182944 2183445 2183584	2182864 2182856 2182848 2182944 2183445 2183584	2182864 2182856 2182848 2182944 2183445 2183584	2182864 2182856 2182848 2182944 2183445 2183584	2182864 2182856 2182848 2182944 2183445 2183584	2183517 2183525	2182987 2182979	* Lens not Available (See below)	2182864 2182856 2182848 2182944 2183445 2183584
	\$10.95	\$10.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$2.95	\$4.95	—	\$3.95
Lamps	2203303	2203303	209437 209402	209437 209402	2203291	2203291	2203291	392690 392681 392702	392690 392681 392702	392690 392681 392702	2203291
	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10
	\$1.95 \$1.75	\$1.95 \$1.75	\$.49 \$.45	\$.49 \$.45	\$1.19 \$1.09	\$1.19 \$1.09	\$1.19 \$1.09	\$3.95 \$3.59	\$3.95 \$3.59	\$3.95 \$3.59	\$1.19 \$1.09

\* Available from Dialight (manufacturer's part numbers are 302-3471, 302-3472, 302-3473 and 302-3475). Jameco doesn't stock these items.

★ For additional products, availability and specifications visit [Jameco.com](http://www.Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# LED Displays

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



## 7 & 16-Segment LED Displays

\* Web Code: PBW

### Soldering:

- Soldering bath: not more than 5 sec. @ 260°C
- Soldering iron: not more than 3 sec. @ 300°C under 30W

NEW  
MARKED IN PINK



## Single Digit 7-Segment Numeric LED Displays

Single Digit LHDP/ RHDP (24732)    Single Digit RHDP (7-seg.) (17209)    2-Digit RHDP (2125481)    2-Digit RHDP (16-seg.) (2005382)    3-Digit RHDP (2125229)    4-Digit RHDP (7-seg.) (2006836)

Part No.	Manufacturer	Product No.	Character Height	Illuminated Color	Bus Polarity *	Pins/ Leads	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Decimal Point #	Pricing		
											1	10	100
24732	MCD	GNS-3011BH-11	0.30"	Red	CA	10	1.9 @ 20	0.3 @ 20	697	LHDP/RHDP	\$ .89	\$ .79	\$ .69
24782	Ligitek	LS03211-11	0.30"	Red	CC	10	2.1 @ 20	2.5 @ 20	697	LHDP/RHDP	.99	.89	.75
24740	Ligitek	LS03221-11	0.30"	Red	CA	11	2.1 @ 20	2.5 @ 20	697	LHDP/RHDP	.99	.89	.75
878201	Lite-On	LTS312AHR	0.30"	Hi-eff Red	CA	11	2.1 @ 20	2.0 @ 10	623	RHDP/LHDP	.99	.89	.69
335011	ValuePro	UA3041-12	0.30"	Orange	CA	11	2.1 @ 20	3.3 @ 10	635	RHDP	.39	.35	.31
2188895	Hewlett Packard	HDSP-7301	0.30"	Red	CA	10	1.6 @ 25	1.1 @ 20	640	RHDP	1.09	.99	.89
1955714	Lite-On	LTS-367R	0.36"	Red	CC	10	1.7 @ 20	0.5 @ 10	655	RHDP	.69	.59	.49
2125245	Vishay	TDSR3163-G	0.40"	Red	CC	10	1.6 @ 30	0.18 @ 30	660	RHDP	.59	.55	.45
334800	Lite-On	LTS-4710AP	0.40"	Hi-eff Red	CA	14	2.1 @ 20	0.8 @ 10	697	RHDP	.89	.79	.69
2005411	Lite-On	LTS-4980AHR	0.40"	Hi-eff Red	CC	14	2.1 @ 20	2.2 @ 10	635	RHDP	.39	.35	.25
17209	MCD	GNS-5011BH-11	0.50"	Red	CA	10	2.1 @ 20	0.9 @ 20	697	RHDP	1.09	.99	.89
17187	Ligitek	LS05051-11	0.50"	Red	CC	10	2.1 @ 20	0.9 @ 20	697	RHDP	1.09	.99	.89
335090	ValuePro	UA5651-11	0.56"	Red	CA	10	2.1 @ 20	0.8 @ 10	700	RHDP	1.09	.99	.89
2203565	Lite-On	LTS-5001AWC	0.56"	Red AlGaAs	CA	10	1.8 @ 20	0.7 @ 10	660	RHDP	1.09	.99	.89
334896	ValuePro	UC5641R-11	0.56"	Hi-eff Red	CC	10	2.1 @ 20	3.3 @ 10	635	RHDP	.79	.69	.59
2203581	Lite-On	LTS-6660E	0.56"	Orange Red	CC	10	2.6 @ 20	2.4 @ 10	630	RHDP	.99	.89	.79
334880	ValuePro	UC5641-11-EWRNR	0.56"	Orange	CC	10	2.1 @ 20	3.3 @ 10	635	RHDP	.79	.69	.59
790639	Lite-On	LTS6460G	0.56"	Green	CA	10	2.1 @ 20	2.4 @ 10	569	RHDP	1.09	.89	.69
334862	ValuePro	UC5621-11	0.56"	Green	CC	10	2.1 @ 20	2.9 @ 10	567	RHDP	.89	.79	.69
1955829	Lite-On	LTS-3403AP	0.80"	Red Gap	CC	18	2.1 @ 20	0.95 @ 10	697	LHDP/RHDP	.79	.69	.59
18753	Ligitek	LS08151-10	0.80"	Red	CC	13	2.1 @ 20	1.0 @ 20	697	LHDP/RHDP	.79	.69	.59
2188879	Hewlett Packard	HDSP-3401	0.80"	Red	CA	13	1.6 @ 20	12 @ 50	655	RHDP	.79	.69	.59
2186110	Hewlett Packard	HDSP-4200	0.80"	Yellow	CA	12	2.6 @ 100	3.4 @ 20	586	LHDP	1.49	1.35	1.19
97199	Ligitek	LS023265-10	2.24"	Red	CA	10	6.8 @ 20	30 @ 20	660	RHDP	4.49	3.95	3.59
97201	Ligitek	LS023255-10	2.24"	Red	CC	10	1.7 @ 20	21 @ 20	660	RHDP	4.49	3.95	3.59
2202061	SunLED	XDMR57C-A	2.24"	Red	CC	10	3.6 @ 10	189 @ 10	660	RHDP	5.95	5.49	4.95
105591	Ligitek	LS040054-20	4.00"	Orange Red	CC	10	2.0 @ 20	18 @ 20	635	RHDP	8.95	7.95	7.15
2202079	SunLED	XDMR100C-A	4.00"	Red	CC	10	3.6 @ 10	110 @ 10	660	RHDP	9.95	8.95	7.95

## 2-Digit 7-Segment Numeric LED Displays

24715	Ligitek	LDD5121-20	0.56"	Red	CA	18	2.1 @ 20	0.8 @ 20	697	RHDP	\$1.59	\$1.39	\$1.19
2125481	China Semi	SD-525R	0.56"	Red	CC	18	1.7 @ 20	1.0 @ 20	655	RHDP	.79	.69	.59
24723	Ligitek	LDD5111-11	0.56"	Red	CC	18	2.1 @ 20	0.8 @ 20	697	RHDP	1.59	1.39	1.19
1551509	Hewlett Packard	HDSP-S523	0.56"	Hi-eff Red	CC	18	2.1 @ 20	2.8 @ 20	635	RHDP	2.95	2.59	2.29
24707	Ligitek	LDD5114-20	0.56"	Orange Red	CC	18	2.0 @ 20	2.4 @ 20	635	RHDP	1.59	1.39	1.19
2188887	Hewlett Packard	HDSP-5721	0.56"	Yellow	CA	18	2.1 @ 20	1.8 @ 10	583	RHDP	.99	.89	.79
1551568	Hewlett Packard	HDSP-5621	0.56"	Green	CA	18	2.1 @ 20	2.5 @ 10	566	RHDP	1.95	1.75	1.49

## 3-Digit 7-Segment Numeric LED Displays

335055	ValuePro	UN4043-13 EWRS	0.40"	Orange	CA	12	2.1 @ 20	3.3 @ 10	635	RHDP	\$ .89	\$ .79	\$ .69
2125229	Arndt Electronics	LN5643R-11	0.56"	Orange	CA	12	2.1 @ 20	4.5 @ 10	630	RHDP	1.75	1.49	1.25
308224	ValuePro	LM5643R-11RRRN	0.56"	Orange	CC	12	2.1 @ 20	7.4 @ 20	630	RHDP	1.75	1.49	1.25
225963	ValuePro	KW3-562A2B	0.56"	Green	CA	28	2.2 @ 20	15 @ 20	568	RHDP	2.95	2.49	2.25

## 4-Digit 7-Segment Numeric LED Displays

Part No.	Manufacturer	Product No.	Character Height	Illuminated Color	Bus Polarity *	Pins/ Leads	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Decimal Point #	Pricing		
											1	10	100
2203557	Lite-On	LTG-0520KR	0.36"	Red	CC	16	2.0 @ 20	4.9 @ 10	639	RHDP	\$1.95	\$1.75	\$1.49
2006836	Ligitek	LFD5221-20/A-PF	0.56"	Red	CA	12	2.1 @ 20	1.0 @ 10	697	RHDP	1.75	1.49	1.25
2218062	Arndt Electronics	MSD-0566GWY	0.56"	Green	CA	12	2.1 @ 20	2.2 @ 10	568	RHDP	2.95	2.59	2.25
335194	ValuePro	UM5624-11-EWRS	0.56"	Green	CC	12	2.1 @ 20	2.9 @ 10	567	RHDP	2.95	2.49	2.19

## 2-Digit 16-Segment Alphanumeric LED Display

Part No.	Manufacturer	Product No.	Character Height	Illuminated Color	Bus Polarity *	Pins/ Leads	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Decimal Point #	Pricing		
											1	10	100
2005382	Lite-On	LTP-4323P	0.40"	Bright Red	CC	20	2.1 @ 20	0.75 @ 10	697	RHDP	\$1.49	\$1.25	\$1.09
2203549	Lite-On	LTP-4823G	0.40"	Green	CA	20	2.1 @ 20	2.2 @ 10	565	RHDP	1.75	1.49	1.25

\* CA-Common Anode/CC-Common Cathode    # LHDP-Left Hand Decimal Point / RHDP-Right Hand Decimal Point    † 5 diodes per segment

# LED Displays, Bar Graph Arrays & Dot Matrix Displays

## LITEON LED Bar Graph Arrays (10 Elements)

697477

2115531

790188

\* Web Code: LBW

Part No.	Manufacturer	Product No.	Character Height	Illuminated Color	Number of Elements	Pins/Leads	Typical V <sub>f</sub> @ I <sub>f</sub> (mA)	Typical mcd @ mA	Wavelength nm	Pricing		
										1	10	100
697477	Lite-On	LTA-1000HR	0.20"	Hi-eff. Red	10	20	2.0 @ 20	2.0 @ 10	635	\$1.39	\$1.25	\$1.09
334529	ValuePro	UL10000-HR-RRAK	0.20"	Red	10	20	2.1 @ 20	1.6 @ 10	635	1.39	1.25	1.09
334537	ValuePro	UL10000-Y-EWAK	0.20"	Yellow	10	20	2.1 @ 20	1.1 @ 10	585	1.19	1.05	.95
2115531	Ledtronics	LBG1000G3B	0.20"	Hi-eff Green	10	20	2.1 @ 10	5 @ 10	565	.99	.89	.79
697469	Lite-On	LTA-1000G	0.20"	Green	10	20	2.1 @ 20	2.0 @ 10	565	1.39	1.25	1.09
1551402	Avago	HDSP-4832	0.20"	Hi-eff. Red, Yellow, Green	10	20	2.1/2.2 @ 20; 2.1 @ 10	3.5/1.9/1.9 @ 10	635/583/566	6.95	5.95	5.49
2117596	Seed Studio	LED207A6B	0.20"	Red, Yellow, Green	10	20	5.0 @ 20	20/25/20 @ 20	635/585/565	1.49	1.35	1.19
2188908	Hewlett Packard	HLMP-2655	0.35"	Hi-eff. Red	4	8	1.8 @ 25	45 @ 2	626	.99	.89	.79
790188	Lite-On	LTL-2620HR	0.35"	Hi-eff. Red	4	16	2.0 @ 20	4.2 @ 10	635	.29	.25	.19

## LITEON LED Dot Matrix Displays (5 x 7, 5 x 8 & 8 x 8 Arrays)

5 x 7 Dot Matrix

5 x 8 Dot Matrix

8 x 8 Dot Matrix

\* Web Code: HAV

Part No.	Manufacturer	Product No.	Character Height	Illuminated Color	Array Polarity*	Pins/Leads	Typical V <sub>f</sub> @ I <sub>f</sub> (mA)	Typical mcd @ mA	Wavelength nm	Pricing		
										1	10	100
218843	ValuePro	CSM57041T-11	0.7"	Red	5 x 7 CC/AR	12	1.8 @ 20	8.0 @ 20	660	\$2.49	\$1.95	\$1.59
2005497	Lite-On	LTP-757G	0.7"	Green	5 x 7 CC/AR	12	2.1 @ 20	2.0 @ 80	565	2.95	2.59	1.95
2005518	Lite-On	LTP-1557AKA	1.2"	AlInGaP Red Orange	5 x 7 CC/AR	14	2.05 @ 20	3.8 @ 80	621	1.95	1.75	1.49
1955159	Lite-On	LTP-2757AA	2.0"	Green/Red Orange	5 x 7 CC/AR	28	2.1/2.0 @ 20	4.8 @ 80	630/565	1.29	1.15	.99
1955183	Lite-On	LTP-2158AHR	1.9"	Hi-efficiency Red	5 x 8 CC/AR	14	2.1 @ 20	4.0 @ 48	635	4.95	4.49	3.95
2186048	Lite-On	LTP-2558AA-RA	2.3"	Red Orange/Green	5 x 8 CC/AR	28	2.6 @ 20	4.8 @ 80	565/630	2.95	2.59	2.25
2132349	ValuePro	LD788BS-SS22	0.8"	Hi-efficiency Red	8 x 8 CC/AR	16	2.0 @ 10	25.9 @ 10	632	3.95	3.59	2.95
2158581	ValuePro	GNM-23881BSG-11	1.9"	Super Red/Green	8 x 8 CC/AR	24	1.8/2.1 @ 10	3/2.5 @ 10	660/565	10.95	9.95	8.95
2151961	ValuePro	GNM-23881BUEPGUB-11	2.3"	Red/Green/Blue	8 x 8 CC/AR	32	2.0/3.5/3.5 @ 20	110/80/55 @ 20	632/520/470	22.95	21.49	19.95

\* AC-Anode Column / AR-Anode Row / CC-Cathode Column / CR-Cathode Row

## TEXAS INSTRUMENTS LED Dot Matrix with Decoder Driver (4 x 7 Hexadecimal Array)

\* Web Code: HAV

Part No.	Manufacturer	Mfr. Part No.	Character Height	Illuminated Color	Supply Voltage (V)	No. of Characters	Array Polarity	Pins/Leads	Typical mcd	Wavelength nm	Pricing		
											1	10	100
32951	Texas Instruments	TIL311	0.27"	Red	5	1	4 x 7 Hex	11	0.1	660	\$19.95	\$17.95	\$15.95

## National Semiconductor Monolithic Multi-Digit Array Display

National's LED numeric arrays are PCB mounted, magnified, monolithic, 7 or 14 segment red digits, with digit heights of 100, 110 and 140 mil (2.54, 2.79, 3.56mm), and are intended for small, low cost numeric indication.

- Number of digits: 6 • Digit height: 0.100" (2.54mm)
- Lens/magnification: clear, bubble, 2x
- Viewing angle: 25°C horizontal/32°C vertical
- Luminous intensity: 0.40 mcd @ 5mA
- Forward voltage: 1.65V @ 5mA
- Package code: NH
- PCB length: 2.00" (5.08mm)

Part No.	Mfr. Part No.	Description	1	10	50	100
2210976	NSA1166	LED array.....	\$3.95	\$3.59	\$3.25	\$2.95

## T1 & T1<sup>3</sup>/<sub>4</sub> LEDs & LED Mounting Hardware Kit (560 pcs.)

- Includes:** • 20-drawer component cabinet (319600), 20 clear plastic drawers (319601), 20 clear dividers (319611), pg 132 and labels
- 10 ea. standard-output LEDs (114673, 34657, 34606, 114681, 104248, 34690, 34711, 34673, 333497, 34761, 104256, 333551, 2006705, 333569, 2133552), pgs 18-20 and LED lens mount (14277), pg 17
  - 100 ea. LEDs (202471), pg 18 & (2006730), pg 19
  - 100 ea. LED mounting hardware (95513, 23077), pg 17

\* Web Code: CKS

Part No.	Description	Wt. (lbs.)	1	5
84996	560-piece LEDs & LED hardware kit	5.0	\$59.95	\$53.95

## Scott Edwards Electronics, Inc. Organic LED (OLED) Serial Displays

ST

\* Web Code: OSD

High brightness, high contrast, brilliant display. This display operates in wide temperature ranges, consumes low power and has EEPROM storage. Choose from four font sizes, from regular 16 x 2 to huge 8 x 1 characters.

Part No.	Mfr. Part No.	Characters x Lines	Input Data	Input Voltage (VDC @ mA)	Letters/Backlight	Module Size (in.)	Display Size (in.)	Pricing		
								1	5	25
2136382	GLO-216Y	16 x 2 or 8 x 1	9600	3.3 - 5.3 @ 40 (50mA max.)	Yellow/Black	3.2 x 1.4 x 0.2	2.6 x 0.6	\$49.95	\$44.95	\$39.95
2144032	GLO-416Y	16 x 4 or 4 x 1	9600	4.8 - 5.3 @ 50 (60mA max.)	Yellow/Black	3.9 x 2.4 x 0.6	3.0 x 1.0	59.95	57.95	55.95
2157407	MINI-I2C OLED	96 x 16 pixels	400kbit/s	5 @ 27.5	Light Blue/Black	1.2 x 0.6 x 0.2	0.84 x 0.14	22.95	20.95	18.95

## ROBOT Serial/Parallel LCD Displays

- Supply voltage: +5V
- Arduino-compatible

\* Web Code: DFD

Part No.	Mfr. Part No.	Characters/Resolution	Communication	Color Backlight-Lettering	Controller	Size (L" x W")	Pricing	
							1	5
2160374	FIT0127	16 characters x 2 rows	Parallel	Blue-White	KS 0066	3.1" x 1.4"	\$10.95	\$9.95
2160358	DFR0063	16 characters x 2 rows	I <sup>2</sup> C/TWI	Blue-White	HD44780U	3.2" x 1.4"	21.95	19.95
2160366	DFR0154	20 characters x 4 rows	I <sup>2</sup> C/TWI	Blue-White	HD44780U	3.9" x 2.4"	32.95	29.95



2160374



2160358



2160366

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

27



# Serial, Parallel & TFT LCD Displays

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



## Serial LCD Displays



\* Web Code: QAW

- For detailed specification sheets, please visit [www.Jameco.com](http://www.Jameco.com).
- One-year warranty



2118651



2135638



2154927



158166



2118686



2118555

Part No.	Manufacturer	Mfr. Part No.	Characters x Lines	Input Data	Input Voltage (V @ mA)	Letters - Backlight	Notes†	Module Size (W" x H" x D")	Display Size (W" x H")	Pricing	
										1	5
2188967	Newhaven	NHD-0216K3Z-NSW-BBW-V3	16 x 2	300-115200	4.7-5.5 @ 34	White-Blue	—	3.1 x 1.4 x 0.5	2.8 x 1.0	\$19.95	\$17.95
2118651	Newhaven	NHD-0216K3Z-FL-GBW	16 x 2	9600 (default)	5.0 @ 125	Blue-Yellow/Green	—	3.2 x 1.4 x 0.5	2.5 x 0.6	21.95	19.95
2135638	Arndt	LK162-12-WB-C166	16 x 2	1200-19200	5.0 @ 9	White-Blue	1,3,5	3.2 x 1.5 x 0.8	2.5 x 0.7	17.95	15.95
2118660	Newhaven	NHD-0126K3Z-FS(RGB)-FBW	16 x 2	9600 (default)	5.0 @ 18	Black-RGB	—	3.2 x 1.4 x 0.5	2.5 x 0.6	21.95	19.95
2154927	Newhaven	NHD-0216K3Z-NS(RGB)-FBWV3	16 x 2	300-115200	4.7-5.5 @ 33	RGB-Black	—	3.1 x 1.4 x 0.5	2.5 x 0.6	23.95	21.49
2118539	Newhaven	C0220BIZ-FS(RGB)-FBW-3VM	20 x 2	9600 (default)	2.7-3.5 @ 1	Black-Red/Green/Blue	—	3.0 x 1.1 x 0.3	2.4 x 0.6	13.95	12.49
158166	Scott Edwards	SGX-120L	20 x 4 w/ graphics	2400 or 9600	4.8-5.5 @ 15	Yellow-None	1,2,4	3.1 x 1.9 x 0.8	2.6 x 1.1	69.95	62.95
2188983	Newhaven	NHD-0420D3Z-NSW-BBW-V3	20 x 4	300-115200	4.7-5.5 @ 35	White-Blue	—	3.9 x 2.4 x 0.5	3.4 x 1.6	25.95	23.49
2118686	Newhaven	NHD-0420D3Z-FL-GBW	20 x 4	9600 (default)	5.0 @ 245	Blue-Yellow/Green	1,6	3.9 x 2.4 x 0.5	3.0 x 1.0	25.95	23.49
2118555	Newhaven	NHD-C12832A1Z-FSW-FBW-3V3	128 x 32 pixels	—	2.7-3.3 @ 30	Black-White	7	1.6 x 1.0 x 0.2	1.6 x 0.6	10.95	9.95

- For a power supply, Jameco recommends P/N 164101, pg 90
- Includes instruction codes for character generation, cursor control, printing, etc. (Examples for Stamps in PBASIC included)
- Connect 16 modules using the same two wire interface
- E2PROM stores text font, settings and text screen
- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping and auto scroll feature
- 122 x 32 pixel graphic display, text display using built-in or user supplied fonts, adjustable contrast, backlighting & keypad interface
- COG (Chip-on-Glass) LCD module



## Parallel LCD Displays



\* Web Code: GCG



2138791



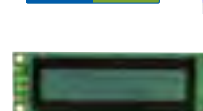
2118619



2205368



210761



2138775



2118635

Part No.	Mfr.	Mfr. Part No.	Characters x Lines	Character Font	Input Data	Input Voltage (V @ mA)	Letters-Backlight	Notes†	Module Size (W" x H" x D")	Display Size (W" x H")	Pricing		
											1	5	25
2138791	P-Tec	PC1601J-YLFYDLX	16 x 1	5 x 8	8-bit	5.0 @ 2.0	Black-Yellow/Green	—	4.8 x 1.7 x 0.3	3.9 x 0.9	\$1.95	\$1.75	\$1.49
2167293	Hantronix	HDM1621H-B-S905	16 x 2	5 x 7	8-bit	5.0 @ 2.2	Gray-STN-None	5	3.3 x 1.7 x 0.4	2.4 x 0.6	3.95	3.49	2.95
2211071	Microtips	MTC-S16204XFYHSAY-08	16 x 2	5 x 7	4-bit	5.5 @ 3.0	Black-Yellow/Green	—	3.3 x 1.7 x 0.5	2.5 x 0.7	6.95	5.95	4.95
2118619	Newhaven	NHD-021682-FL-YBW	16 x 2	5 x 8	4-bit or 8-bit	5.0 @ 1.5	Blue-Yellow/Green	2, 3	3.3 x 1.7 x 0.5	2.5 x 0.6	10.95	9.95	8.95
2118580	Newhaven	NHD-02161Z-FL-YBW	16 x 2	5 x 8	4-bit or 8-bit	5.0 @ 1.5	Blue-Yellow/Green	3, 4	3.2 x 1.4 x 0.5	2.5 x 0.6	9.95	8.95	7.95
2118598	Newhaven	NHD-0216K1Z-NSW-BBW-L	16 x 2	5 x 8	4-bit or 8-bit	5.0 @ 1.5	White-Blue	2, 3	3.2 x 1.4 x 0.5	2.5 x 0.6	10.95	9.95	8.95
2138783	P-Tec	PC1602J-YLFYDLX	16 x 2	5 x 8	8-bit	5.0 @ 2.0	Black-Yellow/Green	—	4.8 x 1.7 x 0.3	3.9 x 0.9	3.95	3.49	2.95
2205368	Arndt	AC-162E	16 x 2	5 x 8	8-bit	5.0 @ 2.0	Black-Yellow/Green	—	4.8 x 1.7 x 0.6	3.7 x 0.8	3.95	3.49	2.95
2173159	Vikay	2035STLDYGTN	16 x 2	5 x 8	4-bit or 8-bit	5.0 @ 1.0	Blue-Yellow/Green	—	3.1 x 1.4 x 0.5	2.4 x 0.6	3.95	3.49	2.95
210761	ValuePro	UC-16401 (Samsung)	16 x 4	5 x 8	4-bit or 8-bit	6.5 @ 2.2	Black-None	1, 5	3.4 x 2.4 x 0.3	2.4 x 1.0	8.95	7.95	6.95
2167488	Arndt	HC164001YFHLBY	16 x 4	5 x 7	8-bit	5.0 @ 0.35	Black-Yellow/Green	—	3.2 x 2.3 x 0.5	2.4 x 1.0	6.95	6.25	5.59
2138775	Hantronix	HDM20216H-3-S00F	20 x 2	5 x 7	8-bit	5.0 @ 2.2	Black-None	7	4.5 x 1.5 x 0.4	3.3 x 0.7	4.95	3.95	2.95
2155372	Arndt	HC20216NYU-LYVO	20 x 2	5 x 8	8-bit	5.0 @ 2.0	Black-Yellow/Green	6	5.7 x 1.7 x 0.6	4.8 x 0.9	4.95	4.49	3.95
2118635	Newhaven	NHD-0220DZ-FL-YBW	20 x 2	5 x 8	4-bit or 8-bit	5.0 @ 1.5	Blue-Yellow/Green	2, 3	4.6 x 1.5 x 0.4	3.3 x 0.7	14.49	13.49	11.95
2158207	Tianma	TM204JAA7	20 x 4	5 x 8	8-bit	5.0 @ 1.4	Blue-Black/White	—	3.0 x 1.8 x 0.4	2.3 x 0.0	9.95	8.95	7.95
2118643	Newhaven	NHD-0420DZ-FL-YBW	20 x 4	5 x 8	4-bit or 8-bit	5.0 @ 3.5	Blue-Yellow/Green	2, 4	3.9 x 2.4 x 0.6	3.0 x 1.0	21.95	20.49	18.95
2179340	Vikay	2240STGYBN	40 x 2	5 x 8	4-bit or 8-bit	5.0 @ 2.5	Grey-None	—	7.1 x 1.3 x 0.5	6.4 x 1.1	12.95	11.95	10.49
2179331	Vikay	2440STLDYGTN	40 x 4	5 x 8	4-bit or 8-bit	5.0 @ 2.5	Black-Yellow/Green	—	7.5 x 2.1 x 0.5	6.6 x 1.6	14.95	13.49	11.95

- Recommended power supply P/N 164101, pg 90
- Recommended power supply P/N 252701, pg 89
- Controller SPLC780D or equivalent
- Controller SPLC780D-01 or equivalent
- Control LSI HD44780 & column driver MSM5259 or equivalents
- Controller SGA006
- 14-pin connector installed

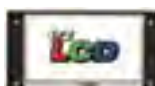


## TFT Display and Development Kit

### 2169897: 4.3" Smart Touch TFT Display

- Integrated 4-wire resistive touchscreen
- 500:1 contrast ratio
- 4MB flash memory for storage

2169897



### 2169871: 2.6" Touch LCD Development Kit

- 3.3V operating voltage with less than 100mA draw current
- 4MB flash memory for storage
- Includes module, EDK board, 3.7V lithium battery, 2 USB cables, standoffs and shunts

2169871



## TFT Displays



### 2213253: 2.8" USB Touch Display Module

- Touchscreen-resistive single point
- Color depth: 16bpp
- USB 2.0 with micro-USB connection
- Supports Raspberry Pi, pcDuino and Cubieboard



2213253

### 2190936: 7" VGA/HDMI Display

- 5 buttons to set screen or reset
- Scan frequency: 60Hz
- Illumination: white LED
- Panel brightness: 400 cd/m<sup>2</sup>
- Supports Raspberry Pi, Cubieboard2, ML802 and PC display

Part No.	Mfr. Part No.	Description	1	5	Part No.	Mfr. Part No.	Description	1	5
2169897	EZLCD-304	4.3" screen, 480 x 272 pixels	\$154.95	\$144.95	2213253	DFR0275	2.8" screen, 320 x 240 pixels	\$45.95	\$43.95
2169871	EZLCD-301-DK	2.69" x 1.61" screen, 400 x 240 pixels	199.95	189.95	2190936	FIT0326	7" screen, 1280 x 800 pixels	114.95	104.95

JAMECO ValuePro

## Most Popular Components with Extra Spaces for Expansion

- Each kit includes drawer component cabinet (319600) and 20 plastic dividers (319611)
- Each kit has the most popular components in its category
- Each kit is designed for your specific expansion
- Includes identification labels for each drawer, w/ reorder numbers to replenish stock and blank adhesive labels for empty drawers
- Free standing or wall mountable cabinet • Weight of kits: 4.6 to 6.4 lbs.
- Cabinet size: 6.0"L x 15.0"W x 7.9"H • Drawer size: 5.5"L x 2.7"W x 1.5"H
- 20 clear plastic drawers (319601) and 20 dividers (319611)
- Cabinet: ABS-black (P/N 319600 see pg 132)

20-drawer component cabinet with every kit!



81841 (Capacitor Kit)

\* Web Code: CKS

### 7400 Series IC Kit

Includes 350 pcs. (30 Types) 7400 (TTL) Integrated Circuits

20 each	10 each	10 each	10 each	10 each	10 each
7400	7402	7416	7432	74121	74157
7404	7405	7417	7438	74123	74160
7406	7408	7420	7447	74132	74174
7407	7410	7427	7485	74151	74175
7474	7414	7430	74107	74153	74279

Part No.	Description	1	5
84953	350 pcs. 7400 series IC kit .....	\$219.95	\$199.95

### 74LS00 Series IC Kit

Includes 420 pcs. (35 Types) 74LS00 (TTL) Integrated Circuits

20 each	10 each	10 each	10 each	10 each
74LS00	74LS05	74LS73	74LS125	74LS193
74LS02	74LS10	74LS75	74LS139	74LS240
74LS04	74LS11	74LS85	74LS151	74LS244
74LS08	74LS14	74LS86	74LS155	74LS245
74LS32	74LS20	74LS90	74LS157	74LS273
74LS74	74LS30	74LS93	74LS174	74LS373
74LS138	74LS47	74LS123	74LS175	74LS374

84961	420 pcs. 74LS series IC kit .....	\$169.95	\$153.95
130391	Refill for 84961 (420 pcs.) .....	154.95	139.95

### CD4000 Series (CMOS) IC Kit

Includes 300 pcs. (25 Types) CD 4000 Series Integrated Circuits

20 each	10 each	10 each	10 each	10 each
CD4001	CD4015	CD4024	CD4051	CD4093
CD4011	CD4016	CD4027	CD4069	CD4511
CD4013	CD4017	CD4040	CD4070	CD4538
CD4049	CD4020	CD4046	CD4071	CD4543
CD4066	CD4023	CD4050	CD4081	CD4584

84970	300 pcs. CD 4000 series IC kit .....	\$89.95	\$79.95
130403	Refill for 84970 (300 pcs.) .....	74.95	67.95

### Linear IC Kit

Includes 480 pcs. (40 Types)

20 each	10 each	10 each	10 each	10 each
LM317T	TL072CP	LM337T	LF412CN	ULN2803A
LM324N	TL074CN	LF353N	LMC555CN	NE5532N
LM339N	TL082CP	LF356N	LM556N	7808T
LM741CN	TL084CN	LM358N	LM723CN	78L12CZ
LM555CN	MAX232CPE	LM386N-1	LM1458N	7815T
7805T	LM301N	LM386N-3	DS1488N	7905T
78L05CZ	LM308N	LM393N	DS1489N	7912CT
7812T	LM311N	LF411CN	ULN2003AN	7915CT

84988	480 pcs. (40 types) Linear IC kit .....	\$199.95	\$179.95
130411	Refill for 84988 (480 pcs.) .....	184.95	169.95

### Transistor Kit

Includes 560 pcs. (20 Types)

100 each	10 each	10 each	10 each	10 each
2N3904	2N2222A	2N4401	MJE3055T	TIP31A
2N3906	2N2907A	2N4403	MPSA18	TIP32A
PN2222	2N3053	2N5401	MPSA06	TIP102
PN2907	2N3055	2N7000	MPSA13	TIP120

82595	560 pcs. Transistor kit .....	\$69.95	\$59.95
130374	Refill for 82595 (560 pcs.) .....	54.95	49.95

### Diode and Rectifier Kit

Includes 420 pcs. (15 Types) Zener Switching & Silicon Rectifiers

100 each	10 each	10 each	10 each	10 each
1N914	1N270	1N4007	1N4735A	1N5408
1N4004	1N751A	1N4150	1N4742A	C106B1
1N4148	1N4001	1N4733A	1N5404	KBPO4M

82587	420 pcs. Diode kit .....	\$44.95	\$39.95
130366	Refill for 82587 (420 pcs.) .....	29.95	26.95

### 1/8-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 Values) 1/8-Watt 5% Resistors

10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	390Ω	2.2kΩ	6.8kΩ	47kΩ	100Ω	4.7kΩ
47Ω	470Ω	2.7kΩ	15kΩ	470kΩ	220Ω	10kΩ
150Ω	680Ω	3.3kΩ	22kΩ	1MΩ	1kΩ	100kΩ
270Ω	1.5kΩ	5.1kΩ	27kΩ	10MΩ	—	—
330Ω	2kΩ	5.6kΩ	33kΩ	—	—	—

Part No.	Description	1	5
108329	540 pcs. 1/8-watt Resistor kit .....	\$29.95	\$26.95
108303	Refill for 108329 (540 pcs.) .....	14.95	13.49

### 1/4-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 Values) 1/4-Watt 5% Resistors

10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	390Ω	2kΩ	5.6kΩ	47kΩ	100Ω	4.7kΩ
47Ω	470Ω	2.2kΩ	15kΩ	470kΩ	220Ω	10kΩ
150Ω	680Ω	2.7kΩ	20kΩ	1MΩ	1kΩ	100kΩ
270Ω	1.2kΩ	3.3kΩ	22kΩ	10MΩ	—	—
330Ω	1.5kΩ	5.1kΩ	33kΩ	—	—	—

81832	540 pcs. 1/4-watt Resistor kit .....	\$29.95	\$26.95
103166	Refill for 81832 (540 pcs.) .....	14.95	13.49

### 1/2-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 Values) 1/2-Watt 5% Resistors

10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	390Ω	2.2kΩ	6.8kΩ	47kΩ	100Ω	4.7kΩ
47Ω	470Ω	2.7kΩ	15kΩ	470kΩ	220Ω	10kΩ
150Ω	680Ω	3.3kΩ	22kΩ	1MΩ	1kΩ	100kΩ
270Ω	1.5kΩ	5.1kΩ	27kΩ	10MΩ	—	—
330Ω	2kΩ	5.6kΩ	33kΩ	—	—	—

107879	540 pcs. 1/2-watt Resistor kit .....	\$39.95	\$34.95
107853	Refill for 107879 (540 pcs.) .....	24.95	22.49

### 1/2-Watt Single Turn Cermet Pot Kit

Includes 200 pcs. (160 pcs) below, (40 pcs) misc 1/4, 1/2, 3/4W

20 each	10 each	10 each	10 each	10 each	10 each	10 each
500Ω	50Ω	2kΩ	10kΩ	25kΩ	100kΩ	1MΩ
1kΩ	100Ω	5kΩ	20kΩ	50kΩ	500Ω	2MΩ

85032	200 pcs. single turn Pot kit .....	\$69.95	\$62.95
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### 3/4-Watt 15 Turn Cermet Pot Kit

Includes 200 pcs. (160 pcs) below, (40 pcs) misc 1/4, 1/2, 3/4W

20 each	10 each	10 each	10 each	10 each	10 each	10 each
500Ω	100Ω	2kΩ	10kΩ	25kΩ	100kΩ	1MΩ
200kΩ	1kΩ	5kΩ	20kΩ	50kΩ	500kΩ	2MΩ

85041	200 pcs. 15 turn Pot kit .....	\$79.95	\$71.95
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### LEDs & Mounting Hardware Kit

Includes 600 pcs. (24 Types) LEDs and Mounting Hardware

100 each	10 each	10 each	10 each	10 each	10 each	10 each
23077	333497	2186435	790111	2183154	2186419	
95513	14277	2186558	2133413	2006705	2135267	
697590	2169846	2155268	2193897	2183146	2183023	
2006730	1995960	697661	2121666	2095189	152864	

84996	600 pcs. LED & Hardware kit .....	\$59.95	\$53.95
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### Switch Kit

Includes 180 pcs. (18 Types) Pushbutton, DIP & Toggle Switches

100 each	10 each	10 each	10 each	10 each	10 each	10 each
2082231	2180893	2181167	26649	2210853	2182442	
1932707	2181845	2182039	2180834	21910	1945241	
567752	2181301	26623	109171	153251	2178566	

85059	180 pcs. Switch kit .....	\$89.95	\$79.95
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## SAE Panel Mounting Hardware Kit

Includes 350 pcs. 8 thread types nuts, washers, keyways

SAE Thread	Hex Nut*	Flat Washer*	Int. Tooth Washer*	Keyway Washer†
10-32 UNS	2183314			
10-48 UNS	578110		2182531	2182590
1/4-32 UNS	2183331	2183381	578339	
1/4-40 UNS	578321			578347
5/16-32 NEF	2182784	2182792		
3/8-32 NEF	2182514	2183293	2185791	
15/32-32 NS	578371		2182557	578380
1/2-28 NEF	740914		527646	

Part No.	Description	1	5
2186056	351 pcs. SAE Hardware kit .....	\$59.95	\$53.95
2186054	Refill for 2186056 (350 pcs.) .....	44.95	39.95

## Spacers & Electronic Hardware Kit

Includes 2700 pcs. (27 Types) Spacer, Hex Nuts

Flat, Tooth & Lock Washers and Slotted PH Screws

100 each	100 each	100 each	100 each	100 each	100 each
Spacers	Hex Nuts	Flat	Internal Tooth	Split Lock	PH Machine
—	2-56	#2	#2	#2	2-56 x 1/4, 1/2
4-40	4-40	#4	#4	#4	4-40 x 1/4, 1/2
6-32	6-32	#6	#6	#6	6-32 x 1/4, 1/2
8-32	8-32	#8	#8	#8	8-32 x 1/4, 1/2

108433	2700 pcs. Electronic Hardware kit .....	\$79.95	\$71.95
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## Monolithic Ceramic Capacitor Kit

Includes 280 pcs. (10 Types) 50V ±20% Monolithic Ceramic Caps.

100 each	10 each	10 each	10 each	10 each
.01μF	22pF	.001μF	.22μF	.47μF
.1μF	100pF	.047μF	.33μF	1μF

171475	280 pcs. Monolithic Cap. kit .....	\$34.95	\$31.95
171483	Refill for 171475 (280 pcs.) .....	19.95	17.95

## Radial Electrolytic Capacitor Kit

Includes 240 pcs. (15 Values) Radial Electrolytic Capacitors

20 each	20 each	20 each	10 each	10 each
1μF @ 50V	3.3μF @ 50V	22μF @ 50V	100μF @ 50V	1000μF @ 16V
1μF @ 100V	4.7μF @ 50V	47μF @ 50V	220μF @ 25V	2200μF @ 25V
2μF @ 50V	10μF @ 50V	100μF @ 25V	470μF @ 25V	3300μF @ 25V

81867	240 pcs. Radial Capacitor kit .....	\$44.95	\$39.95
130331	Refill for 81867 (240 pcs.) .....	29.95	24.95

## Axial Capacitor Kit

Includes 140 pcs. (10 Values) ±20% Axial Electrolytic Capacitors

20 each	20 each	10 each	10 each	10 each
1μF @ 50V	4.7μF @ 50V	47μF @ 50V	220μF @ 50V	1000μF @ 25V
2.2μF @ 50V	10μF @ 50V	100μF @ 50V	470μF @ 50V	2200μF @ 16V

81875	140 pcs. Axial Capacitor kit .....	\$44.95	\$39.95
130340	Refill for 81875 (140 pcs.) .....	29.95	26.95

## Ceramic Disc Capacitor Kit

Includes 520 pcs. (10 Values) 50V Ceramic Disc Capacitors

100 each	100 each	20 each	20 each	20 each
.01μF	.047μF	10pF	47pF	470pF
.022μF	.1μF	22pF	100pF	.001μF

81859	520 pcs. Ceramic Capacitor kit .....	\$39.95	\$34.95
130323	Refill for 81859 (520 pcs.) .....	24.95	22.49

## Mylar Capacitor Kit

Includes 280 pcs. (10 Values) 100V ±10% Mylar Capacitors

100 each	10 each	10 each	10 each	10 each
.01μF	.001μF	.022μF	.047μF	.47μF
.1μF	.0068μF	.033μF	.22μF	1μF

<b>81883</b>	280 pcs. Mylar Capacitor kit .....	<b>\$39.95</b>	<b>\$34.95</b>
<b>130358</b>	Refill for 81883 (280 pcs.) .....	<b>24.95</b>	<b>22.49</b>

# Component Grab Bags

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



135271 - LEDs



18201 - LED Displays



2125616 - LED Indicators



18294 - Toy Motors



149649 - Fans



2133739 - Connectors



319600 - Cabinet

JAMECO ValuePro

• Opened grab bags are not returnable

• Use our 20-drawer cabinet w/ labels to store your components, P/N 319600

\* Web Code: GBS

Shaded in brown on this page you will find Jameco's nine (9) most popular component Grab Bags. They are all individually bagged and are combined to make up the Schwab's School Selection (P/N 163213).

## Capacitors and Inductors/Chokes

Part No.	Product No.	Description	Wt. (lbs.)	1	10
2202677	GB214	100 asst. ceramic caps, 0402/1206 SMD	1.0	\$2.95	\$2.69
17857	GB100	200 assorted ceramic disc capacitors	0.2	6.95	5.95
135335	GB100LB	900 assorted ceramic disc capacitors	1.0	16.95	14.95
17881	GB101	100 assorted mylar capacitors	0.3	7.95	6.95
135458	GB101LB	400 assorted mylar capacitors	1.0	19.95	17.95
17911	GB102	100 assorted electrolytic capacitors radial, axial, snap, 85°C, 105°C, ±20%	0.5	9.95	8.95
135394	GB102LB	300 assorted electrolytic capacitors	1.0	19.95	17.95
17945	GB103	100 assorted tantalum capacitors (dipped epoxy and solid tubular)	0.1	9.95	8.95
2081342	GB200	100 assorted axial chokes & inductors	2.0	19.95	17.95

## Bumpers and Rubber Feet Assortment

2081385	GB201	100 assorted bumpers & adhesive rubber feet	\$8.95	\$7.95
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## Resistor and Resistor Network Assortments

2202669	GB215	100 asst. resistors (1%), 0805/1206 SMD	0.2	\$2.95	\$2.69
134130	GB115	200 asst. 1/8, 1/4, 1/2 resistors (1.5&10%)	0.8	6.95	5.95
18104	GB116	200 assorted 1/4W resistors (1.5&10%)	0.1	6.95	5.95
18139	GB117	200 assorted 1/2W resistors (5&10%)	0.2	6.95	5.95

## Trimmers, Single and Multi-Turn Potentiometers

18075	GB113	100 assorted 1/10W to 1/5W trimmer pots (100Ω to 2MΩ values)	0.1	\$9.95	\$8.95
18278	GB174	100 asst. 1/4W to 3/4W linear, single & multi-turn pots (100Ω to 5MΩ assorted values)	0.2	12.95	11.49
135407	GB174LB	300 asst. 1/4W to 3/4W linear pots (above)	1.0	29.95	26.95

## LEDs, Displays, Indicators, Photocells & Solar Cells

2202706	GB216	100 asst. colored LEDs, 0603 SMD pkg.	0.3	\$4.95	\$4.49
18041	GB110	100 assorted LEDs & lamps (T1 & T1½ round and rectangular)	0.1	7.95	6.95
18323	GB186	500 assorted LEDs & lamps (#18041)	0.3	29.95	26.95
135271	GB110LB	1800 assorted LEDs & lamps (#18041)	1.0	69.95	62.95
2203311	GB310	100 assorted PCB housing colored LEDs (T1 & T1½ single to multiple rt. angle LEDs)	0.5	8.95	7.95
18201	GB162	50 assorted sizes of colored displays (7-seg, LCD, dot-matrix, bar graph)	0.5	19.95	17.95
2125616	GB205	30 assorted LED indicators, panel mount, LED, neon, incandescent, various volts/colors	0.8	9.95	8.95
169578	GB125	50 assorted values photocells	0.2	16.95	14.95
2113666	GB213	40 assorted size solar cells	0.1	9.95	8.95

## Schwab's Electronic Component School Selection

Jameco's nine (9) most popular Grab Bags (highlighted on this page) are all individually bagged. North Dakota Engineer Loren Schwab recommended this selection of products as standard items. He also recommended a 20-drawer component cabinet with labels (319600, see photo above) for storage.

**Includes:** Ceramic and electrolytic capacitors, diodes, transistors, potentiometers, LEDs, 1/4W resistors, switches, spacers and standoffs.

What's your suggestion?

Part No.	Product No.	Description	Wt. (lbs.)	1	10
163213	GB197	Schwab's School Selection	2.2	\$69.95	\$63.95
319600	6897CAB	20 drawer component cabinet	3.5	19.95	17.95

\$89.55 Value

## Integrated Circuits and IC Sockets

Part No.	Product No.	Description	Wt. (lbs.)	1	10
17996	GB108	100 assorted TTL series DIP & SMD (SOIC) (74, 74ALS, 74HC, 74HCT, 74F, 74LS, 74S)	0.2	\$12.95	\$11.49
135280	GB108LB	400 assorted TTL series DIP & SMD (SOIC)	1.0	39.95	35.95
2202802	GB217	50 asst. TTL, linear series SOIC/SMD pkg.	0.3	4.95	4.49
18024	GB109	100 assorted linear series (NSC, Motorola, TI) TO-3, 8 & 14-pin DIP, SOIC packages	0.1	12.95	11.49
145242	GB109LB	300 assorted linear series (NSC, Motorola, TI)	0.5	29.95	26.95
114964	GB171	50 assorted Micros, RAMs, SRAMs, PROMs, EPROMs, CPU, DRAMMs (DIP)	0.2	12.95	11.49
105620	GB120	100 assorted sockets (DIP, PGA, SIMM, SIP)	0.3	6.95	5.95
135386	GB120LB	300 assorted sockets (DIP, PGA, SIMM, SIP)	1.0	14.95	12.95

## Diodes, Transistors and Crystals/Oscillators

17961	GB107	200 assorted diodes (zener, switching, silicon rectifiers)	0.1	\$9.95	\$8.95
18171	GB127	100 asst. transistors (NPN, PNP, power)	0.1	9.95	7.95
114446	GB150	100 assorted crystals/oscillators	0.2	7.95	6.95

## Switches, Toy Motors, Gears and Fans

2133472	GB206	50 assorted DIP switches (2-12 position, low profile, slide, rocker, R/A, standard)	0.2	\$6.95	\$5.95
18235	GB165	50 assorted switches (toggle, pushbutton, rocker, slide, DIP)	0.4	9.95	8.95
135378	GB165LB	150 assorted #18235 switches	2.0	19.95	17.95
18294	GB182	5 assorted toy DC motors (1.5-24V)	0.5	7.95	6.95
1810072	GB210	10 pcs. gear set, plastic, black T10, 20, 30, 40, 50 with bushings	0.2	7.95	6.95
2134310	GB208	5 assorted 5VDC fans (sizes & cfm vary)	3.5	7.95	6.95
149649	GB193	5 assorted (one each) AC & DC fans (5, 12, 24, 48VDC & 115/220VAC fans)	4.5	12.95	11.49

## Spacer, Standoff and Terminal Assortments

55968	GB140	100 assorted 4-40, 6-32, 8-32 round/hex, aluminum/steel, spacers/standoffs	0.3	\$14.95	\$12.95
135423	GB140LB	300 assorted same as P/N 55968	1.0	29.95	26.95
2082118	GB203	100 assorted solderless terminals spade, ring, faston, butt, crimp types	0.2	7.95	6.95

## Screw Hardware and Drill Bit Assortments

• Plastic • Steel • Brass • Aluminum

171571	GB149	500 assorted types of screws, #2, 4, 6, 8 nuts, washers & lock washers	1.0	\$7.95	\$6.95
171635	GB149LB	1400 asst. same as P/N 171571	3.2	17.95	15.95
2082038	GB202	20 assorted drill bits 7 sizes: .021" (#75) through .125" (#1/8)	0.3	19.95	18.49

## Molex/Tyco Style Headers, Connectors & Contacts

2095138	GB204	100 asst. .079-/100 male headers (straight, right angle, single and double row)	0.3	\$9.95	\$8.95
2133739	GB207	100 asst. IDC, CMNL, Mini-Fit JR/SR, power connectors, .100, .118, .165 (straight & R/A)	0.4	9.95	8.95
2202693	GB218	100 asst. contacts, 12-14, 16, 22-28 AWG male and female crimp style contacts	0.3	4.95	4.49

## Surprise Electronic Component Grab Bag

Axial and radial electrolytics, monolithic, dipped silver mica and mylar capacitors, ICs, connectors, sockets, headers, thermistors, LEDs, resistor networks, diodes, standoffs, transistors, oscillators/resonators, inductors, crystals, resistors, pots and switches (hundreds).

Part No.	Product No.	Description	1	10
135263	GB191LB	Hundreds of assorted electronic components	\$19.95	\$17.95

Best Seller!



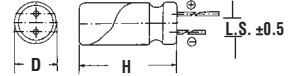
# Electrolytic Capacitors

JAMECO ValuePro

## Aluminum Radial-Lead Polarized Electrolytic Capacitors (±20%) 85°C

\* Web Code: CCE

Leakage Current (20°C)	After 1 min.	0.03CV or 4μA, whichever is greater
	After 2 min.	0.01CV or 3μA, whichever is greater



† CROSS REFERENCES: Nichicon: LB/VX/USA/SR/SA/UVR; Elna: RC2/RE2; IC: RAR/RSS; Marcon: SEM/SSM; Rubycon: MS7/TWSS; Sprague: 501D/513D; UCC: SME/SRE/SRA/SG; Panasonic: KA/KS/SU

\* Order in multiples of 10

\* Order in multiples of 10

Part No.	Cross Ref. No.†	Value (μF)	Volt	Size (mm)* D x H x L.S.	Pricing			
					1	10	100	500
2151970	R0.1/50	0.1	50	5 x 11 x 5	*	\$ .15	\$ .09	\$ .06
609043	UVR2A0R1MDD	0.1	100	5 x 11 x 2	*	.12	.09	.07
330465	RA0.47/50	0.47	50	5 x 11 x 2	*	.19	.11	.08
330431	RA1/25	1	25	5 x 11 x 2	*	.15	.09	.06
94161	5R1/50	1	50	4 x 5 x 1.5	*	.19	.10	.07
29831	R1/50	1	50	5 x 11 x 2	*	.15	.09	.06
29833	R1/50-R	1	50	5 x 11 x 2	*	.19	.10	.07
115423	R1/63#	1	63	5 x 11 x 2	*	.15	.09	.06
93729	R2.2/50	2.2	50	5 x 11 x 2	*	.12	.07	.05
93731	R2.2/50-R	2.2	50	5 x 11 x 2	*	.15	.09	.06
135184	R3.3/50	3.3	50	5 x 11 x 2	*	.15	.09	.06
2143460	R4.7/25	4.7	25	4 x 7 x 5	*	.15	.09	.06
31000	R4.7/50	4.7	50	5 x 11 x 2	*	.15	.09	.06
31002	R4.7/50-R	4.7	50	5 x 11 x 2	*	.15	.09	.07
198839	R10J/16	10	16	5 x 11 x 2	*	.15	.09	.06
94212	5R10/25	10	25	4 x 5 x 1.5	*	.19	.12	.09
1946367	R10/25ATR	10	25	5 x 11 x 5	*	.15	.09	.08
94221	5R10/35	10	35	5 x 5 x 2	*	.19	.12	.09
29891	R10/50	10	50	5 x 11 x 2	*	.15	.09	.07
29893	R10/50-R	10	50	5 x 11 x 2	*	.19	.12	.09
1946295	R22/16	22	16	5 x 12 x 5	*	.09	.05	.04
93739	R22/50	22	50	5 x 11 x 2	*	.15	.09	.07
93747	R33/50	33	50	6.3 x 11 x 2.5	*	.19	.11	.08
93746	R33/50RA#	33	50	8 x 13 x 3.5	*	.12	.07	.05
1946244	R47/16TR	47	16	5 x 12 x 5	*	.12	.07	.06
198952	R47J/35	47	35	5 x 11 x 2	*	.15	.09	.07
31114	R47/50	47	50	6 x 11 x 2.5	*	.12	.09	.06
31116	R47/50-R	47	50	6.3 x 11 x 2.5	*	.15	.09	.07
330617	R47/250	47	250	13 x 25 x 5	.69	.49	.35	.29
1946261	R68/16TR	68	16	5 x 11 x 5	*	.09	.07	.05
330422	RA100/16	100	16	5 x 11 x 2	*	.15	.09	.07
94432	7R100/16	100	16	6 x 7 x 2.5	*	.12	.07	.05
94289	5R100/16	100	16	6.5 x 5 x 2.5	*	.15	.09	.07
93761	R100/25	100	25	6 x 11 x 2.5	*	.12	.09	.07
198970	R100J/35	100	35	6.3 x 11 x 2.5	*	.12	.09	.07
29962	R100/50	100	50	8 x 11 x 3.5	*	.15	.10	.08
29964	R100/50-R	100	50	8 x 11.5 x 3.5	*	.17	.12	.09
330529	RA100/100	100	100	10 x 17 x 5	.49	.29	.19	.15

Part No.	Cross Ref. No.†	Value (μF)	Volt	Size (mm)* D x H x L.S.	Pricing			
					1	10	100	500
330580	RA100/160S	100	160	16 x 25 x 7.5	\$ .69	\$ .59	\$ .35	\$ .29
330625	RA100/250	100	250	16 x 31.5 x 7.5	1.09	.89	.59	.39
330684	RA100/450	100	450	22 x 42.5 x 10.5	2.25	1.95	1.75	1.49
198872	R220J/16	220	16	6.3 x 11 x 2.5	*	.15	.09	.07
30496	R220/25	220	25	8 x 11 x 3.5	*	.19	.11	.08
93772	R220/35	220	35	8 x 12 x 3.5	*	.19	.12	.09
93778	R220/50	220	50	10 x 12 x 5	*	.19	.15	.12
609115	UVR2C221MHD	220	160	16 x 30 x 7.5	1.09	.89	.69	.55
93796	R330/25	330	25	10 x 12 x 5	*	.12	.08	.06
198978	R330J/35	330	35	10 x 12.5 x 5	*	.19	.15	.12
330473	RA330/50	330	50	10 x 16 x 5	.39	.25	.16	.14
93809	R470/16	470	16	8 x 11 x 3.5	*	.15	.10	.09
31183	R470/25-R	470	25	10 x 12 x 3.5	.35	.22	.15	.14
31181	R470/25	470	25	10 x 12 x 5	.39	.25	.19	.15
93817	R470/35	470	35	10 x 16 x 5	.29	.22	.15	.13
93819	R470/35-R	470	35	10 x 16 x 5	.39	.25	.16	.15
93827	R470/50	470	50	10 x 20 x 5	.49	.35	.22	.19
158465	R470B63	470	63	13 x 20 x 5	.65	.49	.35	.29
330456	RA680/25S	680	25	8 x 16 x 3.5	.39	.29	.25	.19
30015	R1000/16	1000	16	10 x 16 x 5	.25	.19	.15	.12
30017	R1000/16-R	1000	16	10 x 16 x 5	.29	.19	.15	.12
93833	R1000/25	1000	25	10 x 20 x 5	.45	.29	.19	.17
93835	R1000/25-R	1000	25	10 x 20 x 5	.39	.29	.21	.19
93841	R1000/50	1000	50	13.6 x 25.8 x 5.5	.75	.59	.39	.35
199111	R1000J/100	1000	100	18 x 41 x 7.5	1.95	1.59	1.25	1.09
133148	R2200/16†	2200	16	18 x 16 x 5	.59	.39	.25	.19
30533	R2200/25	2200	25	12 x 25 x 5	.69	.49	.35	.29
30535	R2200/25-R	2200	25	13 x 21 x 5	.79	.55	.39	.35
198986	R2200J/35	2200	35	16 x 25 x 7.5	.85	.69	.55	.49
608956	UVR1H222MHD	2200	50	16 x 30 x 7.5	1.09	.89	.69	.59
198898	R3300J/16	3300	16	13 x 21 x 5	.79	.55	.39	.35
30893	R3300/25	3300	25	13 x 29 x 5	.89	.75	.59	.49
2033551	UVR1V332MHD†	3300	35	16 x 35.5 x 7.5	1.49	1.25	1.09	.99
198901	EC470016H1626-R	4700	16	16 x 25 x 7.5	.89	.69	.55	.45
93850	R4700/25	4700	25	16 x 31 x 7.5	1.25	.99	.79	.69
199006	R4700J/35	4700	35	18 x 35 x 7.5	1.75	1.39	.99	.89
163301	R4700/50	4700	50	22 x 42 x 10	1.95	1.59	1.25	1.09
198935	R6800J/25	6800	25	18 x 35.5 x 7.5	2.25	1.95	1.59	1.25

Note: Above case sizes may have ± tolerances "TR" at the end of Cross Ref. numbers are Tape and Reel

\*Capacitor dimensions and styles may vary #Mfr.:Arndt †Mfr.: Nichicon

JAMECO ValuePro

## Snap-Mount Large-Can Aluminum Electrolytic Capacitors (±20%)



2188684

\* Web Code: EBG

- Operating temperature range: (SMG, SNA & ECO) -40°C to +85°C; (SNB) -40°C to +105°C
- Can-top safety vent

Part No.	Cross Ref. No.	*Mfr.	Value (μF)	Volt	Size (mm)* D x H x L.S.	Pricing		
						1	10	100
2188684	SMG470/200	NIP	470	200	22 x 41 x 10	\$2.49	\$2.25	\$1.95
331901	SNB6800/50	JVP	6800	50	25.2 x 42.4 x 9	3.95	3.59	3.25
157738	SNB10000/50	JVP	10000	50	35 x 40 x 12	4.49	3.95	3.59
331716	SNA15000/25	JVP	15000	25	25 x 41 x 9	2.95	2.75	2.49

\*Capacitor dimensions and styles may vary

\* JVP = Jameco ValuePro | NIP = Nippon

## Radial Electrolytic Capacitor Kit

240 pcs. (15 Values) Radial Electrolytic Capacitors

Includes: 20 drawer component cabinet (319600), 20 clear plastic drawers (319601), 20 clear dividers (319611) and 30 adhesive labels for drawers to identify parts in kit.

10 each: 100μF @ 50V, 220μF @ 25V, 470μF @ 25V, 1000μF @ 16V, 2200μF @ 25V, 3300μF @ 25V

20 each: 1μF @ 50V, 1μF @ 100V, 2μF @ 50V, 3.3μF @ 50V, 4.7μF @ 50V, 10μF @ 50V, 22μF @ 50V, 47μF @ 50V, 100μF @ 25V

\* Web Code: CKS

Part No.	Description	1	5
81867	240 pcs. Radial Capacitor kit	\$44.95	\$39.95
130331	Refill for 81867 (240 pcs.)	29.95	24.95



JAMECO ValuePro

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

# Electrolytic, Memory Back-Up & Ceramic Trimmer Capacitors

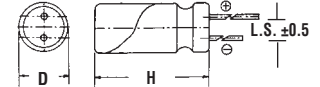
JAMECO ValuePro

## Aluminum Radial-Lead Polarized Electrolytic Capacitors (±20%) 105°C

\* Web Code: HAA

### 105°C – HT Type General Purpose

Leakage Current (20°C)	After 1 min.	0.03CV or 4μA, whichever is greater
	After 2 min.	0.01CV or 3μA, whichever is greater



† CROSS REFERENCES: Nichicon: LB/VX/USA/SR/SA/UPW/UVZ/UHE; Elna: RC2/RE2; IC: RAR/RSS; Marcon: SEM/SSM; Rubycon: MS7/TWSS; Sprague: 501D/513D; UCC: SME/SRE/SRA/SRG; Panasonic: KA/KS/SU  
\* Order in multiples of 10

Part No.	Cross Ref. No.†	Mfr.	Value (μF)	Volt	Size (mm)* D x H x L.S.	Pricing			
						1	10	100	500
609545	UV21H0R1MDD	JVP	0.1	50	5 x 11 x 2	*	\$ .15	\$ .11	\$ .09
330772	RB1/50	JVP	1	50	5 x 11 x 2	*	.12	.09	.07
158491	R1B100	JVP	1	100	5 x 11 x 2	*	.15	.11	.09
609561	UV21H2R2MDD	JVP	2.2	50	5 x 11.5 x 2	*	.15	.11	.09
330781	RB4.7/50	JVP	4.7	50	5 x 11 x 2	*	.15	.11	.09
330692	RB10/16	JVP	10	16	5 x 11 x 2	*	.15	.11	.09
330799	RB10/50	JVP	10	50	5 x 11 x 2	*	.16	.12	.10
609641	UV21J100MDD	JVP	10	63	5 x 11 x 2	*	.15	.12	.09
610036	UV22W100MHD	JVP	10	450	13 x 21 x 5	.85	.75	.59	.49
158327	R22B35	JVP	22	35	5 x 11 x 2	*	.12	.09	.07
93737	RB22/50TR	JVP	22	50	5.3 x 12 x 5	*	.15	.10	.08
609975	UV22E220MHD	JVP	22	250	13 x 20 x 5	.49	.45	.39	.29
608374	UPW2A330MPD6	JVP	33	100	8 x 15 x 3.5	.29	.19	.15	.12
609502	UV21C470MDD	JVP	47	16	5 x 11 x 2	*	.19	.15	.12
1945428	R47/35	JVP	47	35	6.3 x 11 x 2	*	.12	.09	.07
330820	RB47/50	JVP	47	50	6.3 x 11 x 2.5	*	.15	.12	.09
2100241	RB47/100	JVP	47	100	10 x 16 x 5	.29	.25	.19	.15
610010	UV22E470MHD	JVP	47	250	13 x 25 x 5	.85	.69	.45	.39
1946228	RB100/10	JVP	100	10	5 x 11 x 3.5	*	.09	.07	.05
330740	RB100/25	JVP	100	25	6.3 x 11 x 2.5	*	.15	.12	.09
158394	R100B50	JVP	100	50	8 x 11.5 x 3.5	.25	.21	.15	.12
608032	UPL1J101MHH6	JVP	100	63	13 x 15 x 5	.29	.23	.17	.13
609967	UV22E101MHD	JVP	100	250	16 x 31 x 7.5	1.69	1.49	1.25	1.09
2158426	RC120/400	ADT	120	400	16 x 35 x 7	1.25	1.09	.95	.79
608340	ECA1JFQ151L	JVP	150	63	10 x 21 x 5	.29	.25	.19	.15
606934	EEUFC1J181	JVP	180	63	10 x 20 x 5	.29	.25	.19	.15
158263	R220B25	JVP	220	25	8 x 11 x 3.5	*	.19	.15	.12
93770	R220/35	JVP	220	35	10 x 16 x 5	*	.19	.15	.12
606820	UHE1H221MPD	JVP	220	50	10 x 16 x 5	.35	.25	.19	.15
609721	UV21V331MPD	JVP	330	35	10 x 16 x 5	.29	.25	.19	.15
158203	R470B16	JVP	470	16	8 x 11 x 3.5	.29	.25	.19	.15

\* Capacitor dimensions and styles may vary

Part No.	Cross Ref. No.†	Mfr.	Value (μF)	Volt	Size (mm)* D x H x L.S.	Pricing			
						1	10	100	500
158289	R470B25	JVP	470	25	10 x 16 x 5	\$ .35	\$ .29	\$ .25	\$ .19
606740	UHE1E471MPD6	JVP	470	25	10 x 17 x 5	.29	.25	.19	.15
606854	UHE1H471MPD	JVP	470	50	13 x 20 x 5	.49	.35	.29	.25
2133430	EEU-FN1C681L	PAN	680	16	8 x 21 x 2.5	.39	.29	.25	.22
2129781	CETM01V681M1321BB	SAM	680	35	13 x 21 x 4	.59	.55	.39	.35
606871	UHE1H681MHD	JVP	680	50	13 x 28 x 5	.75	.65	.55	.49
607355	UPW01821MPD	JVP	820	6.3	14.5 x 8.2 x 3.5	.35	.25	.17	.15
606432	UHEQ102MPD	JVP	1000	6.3	8 x 14 x 3.5	.29	.25	.19	.15
607363	UPW1A102MPD	JVP	1000	10	8 x 20 x 3.5	.39	.35	.25	.19
330722	RB1000/16	JVP	1000	16	10 x 20 x 5	.49	.39	.35	.25
158298	R1000B25	JVP	1000	25	10 x 17 x 5	.49	.39	.35	.25
1984494	EEU-EB1V102	PAN	1000	35	12.5 x 25 x 5	.65	.59	.55	.49
158378	R1000B35	JVP	1000	35	13 x 21 x 5	.69	.59	.49	.39
609553	UVE21H102MHD	JVP	1000	50	13 x 25 x 5	.79	.69	.59	.49
607232	UPW0J152MPD	JVP	1500	6.3	10 x 20 x 5	.39	.35	.29	.25
607398	UPW1A152MPD6	JVP	1500	10	10 x 20 x 5	.45	.29	.25	.19
607742	UPW1E152MHD6	JVP	1500	25	12.5 x 25 x 5	.55	.49	.45	.39
607873	UPW1H152MHD	JVP	1500	50	16 x 30 x 7.5	.99	.89	.79	.69
606467	UHEQ182MHD	JVP	1800	6.3	10 x 20 x 5	.45	.29	.25	.19
607751	UPW1E182MHD	JVP	1800	25	13 x 25 x 5	.69	.59	.49	.45
609342	UV20J222MPD	JVP	2200	6.3	10 x 20 x 5	.49	.29	.25	.19
606563	UHE1A222MPD	JVP	2200	10	10 x 21 x 5	.69	.59	.39	.35
609490	UV21C222MHD	NIC	2200	16	13 x 25 x 5	.75	.65	.45	.39
609705	UV21V222MHD	JVP	2200	35	16 x 26 x 7.5	.89	.79	.69	.59
158432	R2200B50	JVP	2200	50	16 x 30 x 7.5	.95	.85	.75	.60
608278	UPW1V332MHD	JVP	3300	35	18 x 33 x 7.5	1.49	1.29	1.09	.95
609588	UV21H332MHD	JVP	3300	50	18 x 36 x 7.5	1.59	1.39	1.25	1.09
607814	UPW1E472MHD	JVP	4700	25	18 x 39 x 7.5	.99	.89	.79	.69
2203098	R5600B6.3	ARN	5600	6.3	12.5 x 40 x 5	.59	.49	.39	.29
2125641	R5600B16	NIC	5600	16	16 x 40 x 7.5	.49	.39	.29	.25
609473	UV21C103MHD	JVP	10000	16	18 x 41 x 7.5	1.25	1.09	.99	.89

\* Capacitor dimensions and styles may vary

JAMECO ValuePro

## Memory Back-Up Capacitors

### Applications:

- Back-up on CMOS microcomputers, static RAM, DTSs (digital tuning systems)
- Memory back-up of remote controllers

- Features:
- Voltage: 5.5VDC, 8VDC
  - Small size vs. capacitance

\* Web Code: SAB



Part No.	Cross Ref. No.	Type	Value (F)	Volts	Dia. x Thick x Pin (mm)	1	10	100
142957	MBC1.0/5.5	1	1.0	5.5	19.8 x 7.5 x 5.3	\$3.49	\$3.09	\$2.85
227811	S5R5V105	2	1.0	5.5	18.8 x 5.1 x 5.8	3.49	3.09	2.85

## ULTRASONIC DISTANCE SENSORS

JAMECO ValuePro

Used for motion and distance sensing, these sensors use sonar to communicate from transmitter to receiver. Now you can have wireless automatic control of your applications. See page 74 for complete specifications.

\* Web Code: CAU



Part No.	Mfr. Part No.	Description	1	10
139492	40TR12B	Distance sensor	\$7.95	\$7.19

\* Suppression Capacitors — Enter Web Code SNC

JAMECO ValuePro

## Ceramic Trimmer Capacitors

### 5mm (.197")

\* Web Code: PBZ

- Working voltage: 200VDC
- Withstand voltage: 400VDC
- Turning torque: 35–200 g-cm
- Q Factor @ 1MHz: >200
- Operating temperature range: -30°C ~ +85°C
- Insulation resistance: >10MΩ min. @ 250VDC

2172762: 100VDC working / 200VDC withstand  
Torque: 15–360 g-cm

Part No.	Capacitance Range (pF)	Color Code	1	10	100	500
2178822	2.5–5.0	NIL	\$ .59	\$ .49	\$ .39	\$ .29
136979	9.0–50.0	Green	.89	.79	.69	.59
2172762	12.0–180.0	Orange	1.95	1.75	1.59	1.35



### 8mm (.315")

- Working voltage: 250VDC
- Turning torque: 40–200 g-cm
- Operating temperature range: -55°C ~ +85°C
- Insulation resistance: 10MΩ min. @ 250VDC
- Withstand volt.: 550VDC
- Q Factor @ 1MHz: >300

Part No.	Capacitance Range (pF)	Color Code	1	10	100	500
134818	3.5–13.0	Ivory	\$ .59	\$ .49	\$ .29	\$ .25
32839	4.0–34.0	Yellow	.99	.89	.79	.69
32855	6.0–70	Nil	1.19	1.09	.99	.89
94449	8.5–100	Purple	1.19	1.09	.99	.89
94466	8.5–120	Nil	1.49	1.25	1.09	.95



\* ADT = Arndt Electronics | JVP = Jameco ValuePro | NIC = Nichicon | PAN = Panasonic | SAM = Samsung

# Electrolytic, Dipped Tantalum & Ceramic Capacitors

## JAMECO ValuePro Aluminum Axial-Lead Electrolytic Capacitors (±20%) 85°C

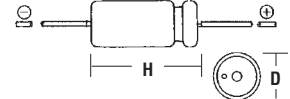
★ Web Code: GAA

Operating temperature range	-40°C to +85°C
Leakage Current (After 2 minutes 20°C)	0.02CV or 2μA, whichever is greater

\* Order in multiples 10

Part No.	Product No.	Value (μF)	Voltage	Size (mm)* D x H	Pricing			
					1	10	100	500
10868	A1/50-R	1	50V	5 x 12	\$ .29	\$ .25	\$ .19	\$ .15
10866	A1/50	1	50V	5 x 13	.35	.29	.25	.22
2215638	A2.0/35	2.0	35V	6 x 13	*	.19	.15	.12
93569	A2.2/50	2.2	50V	6 x 13	.39	.35	.29	.27
11076	A4.7/50	4.7	50V	6 x 13	.39	.35	.29	.27
2215646	A5.0/35	5.0	35V	6 x 13	*	.19	.15	.12
1946199	A10/16	10	16V	4 x 7	.39	.35	.29	.27
10882	A10/50	10	50V	6 x 12	.49	.45	.39	.37
331425	AB10/450	10	450V	13 x 25	1.75	1.49	1.25	1.15
199268	A22J/25	22	25V	6 x 12.5	.39	.35	.29	.27
2202520	A22/35#	22	35V	6 x 13	.35	.29	.25	.19
331433	AB22/450	22	450V	16 x 26.5	1.75	1.49	1.25	1.15
135319	A47/25	47	25V	8 x 16	.49	.45	.39	.37
11105	A47/50	47	50V	8 x 16	.55	.49	.45	.39
199188	A100J/16	100	16V	6 x 12.5	.55	.49	.45	.39
93551	A100/35	100	35V	8 x 16	.59	.55	.49	.45
10913	A100/50-R	100	50V	8 x 16	.79	.75	.69	.59
10911	A100/50	100	50V	8 x 20	.79	.75	.69	.59
331417	AB100/250	100	250V	18 x 39	1.75	1.49	1.25	1.15

\* Capacitor dimensions and styles may vary #105°C



Part No.	Product No.	Value (μF)	Voltage	Size (mm)* D x H	Pricing			
					1	10	100	500
2150811	A220/16	220	16V	10 x 21	\$ .59	\$ .55	\$ .49	\$ .45
11019	A220/50	220	50V	10 x 17	.79	.69	.59	.55
199217	A470J/16	470	16V	8 x 17	.79	.69	.59	.55
199381	A470J/35	470	35V	10 x 21	1.25	1.09	.99	.89
11123	A470/50	470	50V	13 x 22	1.35	1.19	1.09	.99
2215689	T200V680UF	680	200V	25 x 50	4.95	4.49	3.95	3.49
10956	A1000/25-R	1000	25V	10 x 20	1.59	1.39	1.25	1.15
10954	A1000/25	1000	25V	13 x 26	1.59	1.39	1.25	1.15
93649	A1000/35	1000	35V	13 x 31	1.95	1.75	1.49	1.35
147256	A1000/50	1000	50V	16 x 31	2.25	1.95	1.75	1.59
11033	A2200/16	2200	16V	16 x 40	1.95	1.75	1.49	1.35
93658	A2200/35	2200	35V	16 x 30	2.25	1.95	1.75	1.59
199479	A2200J/50	2200	50V	18 x 33	2.49	2.25	1.95	1.75
199487	A3300J/50	3300	50V	22 x 43	2.49	2.25	1.95	1.75
93673	A4700/25	4700	25V	18 x 41	2.25	1.95	1.75	1.59
158650	A4700A25	4700	25V	22 x 40	1.95	1.75	1.49	1.35
158811	A4700A50	4700	50V	22 x 40	2.95	2.59	2.29	2.09
93681	A10000/16	10000	16V	22 x 51	2.95	2.59	2.29	2.09
2215671	16V22000	22000	16V	25 x 60	4.95	4.49	3.95	3.49

\* Capacitor dimensions and styles may vary

## JAMECO ValuePro Resin Dipped Solid Tantalum Capacitors (±10%) 85°C

- Operating temperature range: -55°C to +85°C (+125°C with derating)
- Exceptional temperature stability
- Flame retardant coating
- Designed for entertainment and commercial equipment
- Rated voltage DC: ≤ +85°C
- Moisture-resistant
- Low leakage current

† P/Ns 2178726/2167357/2178785/2178769: ±20%

★ Web Code: VAE



Part No.	Product No.	Value (μF)	Volt (V)	Size (mm)* D x H x L.S.	Pricing			
					1	10	100	500
545561	TAP104K035SCS	.10	35	4.0 x 6.0 x 2.5	\$ .45	\$ .35	\$ .29	\$ .25
33488	TM.1-R	.10	35	4.5 x 7.0 x 2.5	.45	.35	.29	.25
33486	TM.1/35	.10	35	4.5 x 7.0 x 5.2	.39	.29	.25	.19
33507	TM.22/35	.22	35	4.5 x 7.0 x 5.0	.45	.35	.29	.25
2178726	TM.33/35/20†	.33	35	3.4 x 6.5 x 5.0	.35	.29	.25	.19
33523	TM.33/35	.33	35	4.5 x 7.0 x 2.5	.39	.29	.25	.19
33525	TM.33-R	.33	35	4.5 x 7.0 x 2.5	.45	.35	.29	.25
33533	TM.47-R	.47	35	4.5 x 7.0 x 2.5	.45	.35	.29	.25
33531	TM.47/35	.47	35	4.5 x 7.0 x 2.7	.39	.29	.25	.19
545588	TAP105K025SCS	1	25	4.3 x 7.0 x 2.5	.45	.35	.29	.25
154860	TM1/25	1	25	4.5 x 7.0 x 4.7	.39	.29	.25	.19
545596	TAP105K035SCS	1	35	4.3 x 7.0 x 2.5	.45	.35	.29	.25
33662	TM1/35	1	35	4.5 x 7.0 x 2.7	.39	.29	.25	.19
545609	TAP105K050SCS	1	50	4.7 x 7.5 x 2.5	.59	.49	.39	.29
2167357	TAP155M035BRS†	1.5	35	4.5 x 8.0 x 5.0	.39	.29	.25	.19
94001	TM2.2/16	2.2	16	4.5 x 7.0 x 4.7	.45	.35	.29	.25
33736	TM2.2/35	2.2	35	5.0 x 8.0 x 2.5	.49	.45	.35	.29
545941	TAP335K025SCS	3.3	25	4.3 x 7.0 x 2.5	.59	.49	.39	.29
94035	TM4.7/16	4.7	16	5.0 x 8.0 x 2.5	.49	.45	.35	.29
546071	TAP475K025SCS	4.7	25	4.3 x 7.0 x 2.5	.59	.49	.39	.29
546089	TAP475K035SCS	4.7	35	4.7 x 7.5 x 2.5	.69	.59	.49	.39
33806	TM4.7/35	4.7	35	5.5 x 9.5 x 2.5	.59	.49	.39	.29

\* Capacitor dimensions and styles may vary Note: Above case sizes may have ±20% tolerances

Manufacturer: AVX

## JAMECO ValuePro Axial Leaded Ceramic Capacitors (±5 & ±10%)

50, 100 and 200 Volt, NPO and X7R Temperature Coefficient

- Operating temperature range: -55°C to +125°C

\* Order in multiples 10

Part No.	Product No.	Mfr.	Value	Volt (V)	Temp Co-eff.	Tol.	Pricing		
							1	10	100
546265	SA102A101JAA	JVP	100pF	200	NPO	5	*	\$ .09	\$ .07
1069763	SA101C222KAA	AVX	2200pF	100	X7R	10	*	.12	.09

\* AVX = AVX Corp. | JVP = Jameco ValuePro

Part No.	Product No.	Mfr.	Value	Volt (V)	Temp Co-eff.	Tol.	Pricing		
							1	10	100
546290	P10R103K5	JVP	0.01μF	50	X7R	10	*	\$ .15	\$ .12
536542	P20R104K5	JVP	0.1μF	50	X7R	10	.45	.39	.35

\* Order in multiples 10

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)



# Ceramic Disc, Radial Capacitors & Resonator

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## JAMECO ValuePro Ceramic Disc Capacitors ( $\pm 5\%$ , $\pm 10\%$ or $\pm 20\%$ ) 85°C

★ Web Code: HBW

25, 50, 500 and 1000 Volt, Z5U Temperature Coefficient

- Dielectric withstanding voltage: 2.5 times rated volt. for not < 1 sec.
- Operating temperature range: +10°C to +85°C
- Capacitance change over temp. range: +22% to -56%

\* Order in multiples of 10

Part No.	Product No.	Mfr.	Value	Volt (V)	Tol.	Dia. (mm)	Pricing				
							1	10	100	500	1000
332291	CD3.3/1000	JVP	3.3pF	1000	20	5	*	\$ .09	\$ .05	\$ .03	\$ .02
15333	DC10	JVP	10pF	50	20	5	*	.09	.06	.05	.03
15405	DC22	JVP	22pF	50	20	6	*	.09	.06	.05	.03
15407	DC22-R	JVP	22pF	50	20	6	*	.09	.06	.05	.03
332217	CD33/50	JVP	33pF	50	20	5	*	.09	.06	.05	.03
1947010	DC33TR*	JVP	33pF	100	10	5	*	.09	.05	.03	.02
1947028	DC33ATR*	JVP	33pF	500	5	5	*	.09	.05	.03	.02
15512	DC47	JVP	47pF	50	20	5	*	.10	.08	.06	.04
1947036	DC47TR*	JVP	47pF	500	5	6	*	.12	.07	.05	.04
15552	DC68	ADT	68pF	50	5	8	*	.08	.04	.02	.015
15341	DC100	JVP	100pF	50	20	5	*	.09	.06	.05	.03
1947044	DC100TR*	JVP	100pF	100	10	8	*	.12	.07	.05	.04
2162741	DC100/500	ADT	100pF	500	20	18	*	.09	.06	.05	.03
15413	DC220	JVP	220pF	50	20	5	*	.09	.06	.05	.03
1947132	DC220TR*	JVP	220pF	50	5	8	*	.07	.03	.02	.015
2162767	DC220/1000	ADT	220pF	1000	10	7	*	.09	.05	.03	.02
1947301	DC330TR*	JVP	330pF	100	20	5	*	.09	.05	.03	.02
15528	DC470	JVP	470pF	50	20	5	*	.09	.06	.05	.03
1947319	DC470TR*	JVP	470pF	100	20	5	*	.06	.04	.02	.015
2162759	DC820	ADT	820pF	1000	20	7	*	.09	.05	.03	.02
15190	DC.001	JVP	.001μF	50	20	6	*	.12	.09	.07	.06
15192	DC.001-R	JVP	.001μF	50	20	6	*	.12	.07	.05	.04
1947415	DC.0018TR*	JVP	.001μF	500	10	7	*	.12	.07	.05	.04
332436	CD1000/1000	JVP	.001μF	1000	20	5	*	.12	.09	.07	.05

\* Tape and Reel



\* Order in multiples of 10

Part No.	Product No.	Mfr.	Value	Volt (V)	Tol.	Dia. (mm)	Pricing				
							1	10	100	500	1000
1947327	DC.0022TR*	JVP	.0022μF	25	20	4	*	\$ .06	\$ .04	\$ .02	\$ .015
1947386	DC.0022ATR*	JVP	.0022μF	500	20	7	*	.09	.05	.03	.02
1947407	DC.0033	JVP	.0033μF	500	20	9	*	.12	.07	.05	.04
2159883	DC.0033/1000	ADT	.0033μF	1000	20	7	*	.09	.05	.03	.02
15211	DC.0047	JVP	.0047μF	50	20	8	*	.09	.06	.05	.03
1947335	DC.0047TR*	JVP	.0047μF	100	20	5	*	.09	.05	.03	.02
15229	DC.01	JVP	.01μF	50	20	6	*	.12	.09	.07	.05
15231	DC.01-R	JVP	.01μF	50	20	6	*	.10	.08	.06	.04
97375	DC.01/1K20	JVP	.01μF	1000	20	6	*	.19	.15	.12	.09
97377	DC.01/1K20-R	JVP	.01μF	1000	20	8	*	.25	.19	.15	.12
1936898	S103M47Z5UN63K0	VSH	.01μF	1000	20	10	*	.19	.15	.12	.09
332487	CD20000/1000	JVP	.02μF	1000	20	16	*	.55	.45	.35	.29
15245	DC.022	JVP	.022μF	50	20	8	*	.10	.08	.06	.04
1947351	DC.047B	JVP	.047μF	25	20	7	*	.09	.06	.05	.03
15253	DC.047	JVP	.047μF	50	20	8	*	.12	.09	.07	.05
332507	CD50000/1000	JVP	.05μF	1000	20	16	*	.49	.45	.39	.35
151116	DC.1/25	JVP	.1μF	25	20	6	*	.13	.11	.09	.07
151118	DC.1/25-R	JVP	.1μF	25	20	6	*	.15	.12	.09	.07
2146302	DC.1-5MM	JVP	.1μF	50	20	5	*	.15	.12	.09	.07
15270	DC.1	JVP	.1μF	50	20	8	*	.19	.15	.12	.09
15272	DC.1-R	JVP	.1μF	50	20	8	*	.29	.19	.15	.12
2146311	SC45Y1H104Z	JVP	.1μF	50	20	11	*	.19	.15	.12	.09
332516	CD100000/1000	JVP	.1μF	1000	20	21	*	.59	.49	.39	.35

\* Tape and Reel

## JAMECO ValuePro Monolithic Radial Ceramic Capacitors ( $\pm 5\%$ , $\pm 10\%$ or $\pm 20\%$ )

Applications:

- Data processing
- Communications engineering

**NPO (COG) Series ( $\pm 5\%$ )**

★ Web Code: JBW

- Operating temp. range: -55°C to +125°C

Order in multiples of 10

Part No.	Product No.	Mfr.	Value	Volt. (V)	Size (mm)* W x T x H x L.S.	Pricing			
						10	100	500	1000
2159816	B37986N5102K1	ADT	1nF	63	4.7 x 1.7 x 6.1 x 2.6	\$ .19	\$ .09	\$ .07	\$ .05
332523	COG10/100	JVP	10pF	100	4.0 x 2.0 x 3.2 x 5.1	.19	.12	.08	.07
332541	COG22/100	JVP	22pF	100	3.6 x 2.3 x 3.6 x 2.5	.19	.12	.08	.07
332567	COG47/100	JVP	47pF	100	3.8 x 2.0 x 3.3 x 2.5	.19	.12	.08	.07

**X7R Series ( $\pm 10\%$ )**

★ Web Code: JBX

- Operating temp. range: -55°C to +125°C

\* Order in multiples of 10

Part No.	Product No.	Mfr.	Value	Volt. (V)	Size (mm)* W x T x H x L.S.	Pricing			
						1	10	100	500
332583	MOC100/100	JVP	100pF	100	5.0x5.0x3.0x2.5	*	\$ .19	\$ .12	\$ .08
332612	MOC470/100	JVP	470pF	100	5.0x5.0x3.0x2.5	*	.19	.12	.08
544825	SR151C102KAA	JVP	1000pF	100	3.8x2.5x3.8x2.5	*	.19	.12	.08
544833	SR151C103KAA	JVP	.01μF	100	3.8x2.5x3.8x2.5	.29	.25	.15	.09
597281	SR211C103KAA	JVP	.01μF	100	3.8x2.5x3.8x5.1	.25	.19	.12	.07
332647	MOC10000/100	JVP	.01μF	100	5.0x5.0x3.0x2.5	.25	.19	.12	.07
332655	MOC22000/100	JVP	.022μF	100	5.0x5.0x3.0x2.5	.29	.25	.15	.09
544905	SR211C333KAA	JVP	.033μF	100	3.8x2.5x3.8x5.1	.29	.25	.15	.09
544913	SR211C473KAA	JVP	.047μF	100	3.8x2.5x3.8x5.1	.29	.25	.15	.09
544921	SR215C104KAA	JVP	.1μF	50	3.8x2.5x3.8x5.1	*	.15	.12	.09
544884	SR211C104KAA	JVP	.1μF	100	3.8x2.5x3.8x5.1	.29	.25	.19	.15
332672	MOC100000/100	JVP	.1μF	100	5.0x5.0x3.0x2.5	.29	.25	.15	.12
544948	SR305C474KAA	JVP	.47μF	50	3.8x2.5x3.8x5.1	.39	.35	.29	.25

\* Capacitor dimensions and styles may vary

Note: Above case sizes may have ± tolerances

**Z5U Series ( $\pm 20\%$ )**

- Operating temp. range: +10°C to +85°C

\* Order in multiples of 10

Part No.	Product No.	Mfr.	Value	Volt. (V)	Size (mm)* W x T x H x L.S.	Pricing			
						1	10	100	500
81543	MD10	JVP	10pF	50	3.5 x 2 x 3 x 2.5	*	\$ .09	\$ .05	\$ .03
81533	MD22	JVP	22pF	50	4 x 2 x 4 x 5.1	*	.15	.12	.09
81525	MD100	JVP	100pF	50	3.3 x 2 x 3 x 2.5	*	.15	.12	.09
81517	MD.001	JVP	.001μF	50	4.5 x 2 x 3 x 2.5	*	.15	.12	.06
138202	MD.0047	JVP	.0047μF	50	3.3 x 2.2 x 5.5 x 4.6	*	.15	.12	.09
25507	MD.01	JVP	.01μF	50	3.5 x 2 x 3 x 2.5	*	.19	.15	.12
57621	MD.047	JVP	.047μF	50	2.5 x 2.5 x 3 x 2.5	*	.19	.15	.10
25525	MD.1	JVP	.1μF	50	3.4 x 2.2 x 3.6 x 5.1	.29	.25	.19	.15
544868	SR205E104MAA	JVP	.1μF	50	4.0 x 2.6 x 3.8 x 2.5	*	.19	.15	.10
25523	MD.1-R	JVP	.1μF	50	6 x 2 x 4 x 5.1	*	.19	.15	.10
25540	MD.22	JVP	.22μF	50	6 x 2 x 4.5 x 5.1	.29	.25	.19	.15
544930	SR215E334MAA	JVP	.33μF	50	3.8 x 2.5 x 3.8 x 5.1	.29	.25	.19	.15
138237	MD.33	JVP	.33μF	50	6 x 2 x 8 x 5.1	.29	.25	.19	.15
25558	MD.47	JVP	.47μF	50	4.5 x 2.5 x 4.5 x 5.1	.39	.29	.19	.15
544956	SR305E105MAA	JVP	1μF	50	3.8 x 2.5 x 3.8 x 5.1	.45	.35	.25	.19
81509	MD1	JVP	1μF	50	6 x 3 x 7 x 5.1	.49	.39	.29	.25

\* Capacitor dimensions and styles may vary

Note: Above case sizes may have ± tolerances

## JAMECO ValuePro Ceramic Resonator

- Frequency accuracy:  $\pm 0.5\%$  @ 25°C
- Extended temp. range: -20°C to +85°C
- Withstanding volt. (5 sec): 100V max.

★ Web Code: CRS

Part No.	Product No.	Frequency	Resistance	Pins	1	10	100
324672	TZTT-20.00MT	20.0MHz	30Ω	3	\$ .49	\$ .45	\$ .39



\* ADT = Arndt Electronics | JVP = Jameco ValuePro | KMT = Kemet | VSH = Vishay

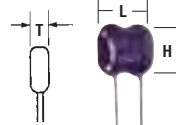
# Capacitors, Varistors, Thermistors & Photocells

## JAMECO ValuePro Dipped Silver Mica Capacitors (±5%)

### Metallized Polyester Film

- Case type: DM15 • Lead space: 0.23"
- Operating temp. range: -55° to +125°C
- Tolerance: ±5%

\* Web Code: HAB



Part No.	Product No.	Value	Volt. (V)	Size (mm) L x T x H*	1	10	100	1000
15991	DM100	10pF	500	11 x 4 x 9	\$.65	\$.59	\$.55	\$.49
16037	DM220	22pF	500	11 x 4 x 9	.65	.59	.55	.49
16096	DM470	47pF	500	11 x 4 x 9	.69	.65	.59	.55
16002	DM101	100pF	500	11 x 4 x 9	.69	.65	.59	.55
16088	DM331	330pF	500	11 x 4 x 9	.85	.75	.69	.65
16109	DM471	470pF	500	11 x 4 x 9	.95	.85	.75	.69
16011	DM102	1000pF	100	11 x 4 x 9	1.25	1.09	.99	.89

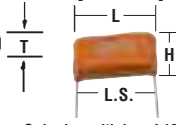
\* Capacitor dimensions and styles may vary † Manufacturer: Cornell Dubille

## Metallized Polyester Film Mylar Capacitors (±10%)

- Non-inductive construction
- Operating temp. range: -40°C to +85°C
- Dissipation factor: 0.01 (at 1kHz)
- Dielectric strength: 150% of rated voltage for 5 sec.

JAMECO ValuePro

\* Web Code: KWJ



\* Order in multiples of 10

Part No.	Product No.	Value (µF)	Volt. (V)	Size (mm)* L x T x H x L.S.	Pricing			
					1	10	100	1000
26833	MY.001	.001	100	7.0 x 3.0 x 7.0 x 5.1	*	\$.12	\$.08	\$.06
1946164	MY.0068	.0068	100	5.5 x 2.5 x 10 x 5.1	*	.12	.08	.06
26884	MY.01	.01	100	6.0 x 3.0 x 7.0 x 5.1	*	.19	.15	.12
2217326	103MPR400K	.01	350	11.6 x 3.4 x 6.55 x 9.9	.25	.19	.13	.11
2217334	EQ-E6103JF	.01	630	12.3 x 4.1 x 6.85 x 10.3	.29	.25	.17	.15
207837	MY.018/50	.018	50	6.1 x 2.6 x 11.3 x 5.1	*	.09	.07	.05
26905	MY.022	.022	100	6.0 x 3.0 x 10 x 5.1	*	.19	.15	.10
26921	MY.033	.033	100	8.0 x 4.0 x 11 x 16.1	*	.19	.15	.10
26930	MY.047	.047	100	8.0 x 4.0 x 12 x 5.1	*	.19	.15	.12
2217342	0.47MFD-400V	.047	400	17.6 x 8.5 x 8.9 x 5.7	.25	.19	.13	.11
1946172	MY.068	.068	100	8.6 x 4.0 x 11 x 7.6	*	.15	.12	.07
26956	MY.1	.10	100	12.5 x 5.0 x 9.5 x 7.6	.29	.25	.19	.15
93921	MY.1/250	.10	250	12.5 x 5.5 x 10 x 10.1	.29	.22	.17	.14
1983424	MY.1/630	.10	630	16.7 x 4.9 x 11 x 14.5	.45	.39	.35	.29
920561	EQ-V1H224JL	.22	50	6.8 x 3.6 x 5.0 x 4.7	*	.19	.15	.11
26972	MY.22	.22	100	9.2 x 5.1 x 7.8 x 4.7	.35	.29	.25	.19
2203101	MY.22K	.22	100	12.5 x 6.0 x 17 x 10	.29	.25	.19	.15
2217351	EQ-E6224JF	.22	630	17.5 x 8.1 x 14.7 x 13.7	.49	.39	.29	.25
2208930	QXJ2J224KTP†	.22	630	23 x 7.0 x 15 x 21	.49	.39	.29	.25
93964	MY.33/250	.33	250	18 x 7.0 x 12.5 x 15.2	.49	.45	.39	.29
26999	MY.47	.47	100	18 x 6.0 x 11.5 x 16.1	.49	.45	.35	.25
27001	MY1	1.0	100	18 x 7.5 x 14 x 15.2	.69	.59	.49	.35
93981	MY1/250	1.0	250	26 x 9.0 x 16 x 15.2	.29	.25	.19	.15
1983395	MY1/400	1.0	400	24.5 x 6.8 x 14.8 x 21.9	.79	.65	.49	.39
93999	MY2.2/250	2.2	250	26 x 9.0 x 16 x 27.9	1.25	1.09	.95	.69
2129852	MKT368†	6.8	100	27 x 10 x 18 x 22	2.75	2.49	2.25	1.49

\* Capacitor dimensions and styles may vary #105°C † Manufacturer: Vishay

## JAMECO ValuePro Cadmium Sulfide (CdS) Photocells

- Generate variable signal based on detection of light levels
- Operating temperature: -30°C to +70°C
- Soldering: 230°C for 3 seconds

**Applications:** Auto-focus lenses, exposure meters, contrast controls for TVs, dimmer or light switches, flame detectors, electronic toys, street lamp switches, photocouplers

Part No.	Cross Ref. No.	Rating		Resistance (Ω)		Size (inches)		Lead Spacing (inches)	Lead Length (inches)	Pricing			
		Vp	mW	Dark	Light	A	B			1	10	100	500
2215451	NSL4140	80	50	800k	14k	0.19	0.18	0.10	1.50	\$1.95	\$1.75	\$1.59	\$1.29
202366	CDS0029001	150	90	300k	4k	0.14	0.17	0.10	1.02	1.49	1.35	1.19	.95
120310	CDS0029004	150	90	2M	27k	0.14	0.17	0.10	1.44	1.49	1.35	1.19	.95
202391	CDS0029203	150	90	10M	5k	0.14	0.17	0.10	1.02	1.49	1.35	1.19	.95
202382	CDS0029008	150	90	20M	10k	0.14	0.17	0.10	1.02	1.49	1.35	1.19	.95
202403	CDS0018001	150	100	200k	3k	0.17	0.20	0.13	1.02	1.15	.99	.89	.79
202420	CDS0018003	150	100	500k	16k	0.17	0.20	0.13	1.02	1.15	.99	.89	.79
202411	CDS0018006	150	100	5M	80k	0.17	0.20	0.13	1.02	1.15	.99	.89	.79
120301	CDS0037001	200	150	300k	3k	0.25	0.29	0.20	1.02	1.49	1.35	1.19	.95
202438	CDS0037004	200	150	500k	15k	0.25	0.29	0.20	1.02	1.49	1.35	1.19	.95
120299	CDS0045001	350	400	300k	8k	0.37	0.43	0.30	1.44	1.79	1.59	1.45	1.19
202454	CDS0045003	350	400	1M	12k	0.37	0.43	0.30	1.44	1.79	1.59	1.45	1.19

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

## Panasonic® Metallized Film Capacitors (±5%)

### V Series – Stacked

- Operating temp. range: -40°C to 85°C
- Low dissipation factor: 1% max.

\* Web Code: KWJ

Order in multiples of 10

Part No.	Mfr. Part No.	Value (µF)	Voltage	Dimensions (mm) W x H x Th. x L.S.	Pricing		
					10	100	500
920464	ECQ-V1103JM	.01	100	7.5 x 7 x 3.2 x 5	\$.19	\$.15	\$.12
920510	ECQ-V1H104JL	.1	50	7.3 x 4 x 5 x 5	.19	.15	.12
920595	ECQ-V1H474JL	.47	50	7.3 x 6 x 7.3 x 5	.19	.15	.12

## JAMECO ValuePro SMD Capacitor Assortment Kit

\* Web Code: CKS

Now you can have all your SMD capacitor values clearly sorted and organized. 24 different values and 50 pieces of each value.

- Capacitance range: 1pF to 1µF • Volt. range: 10V to 50V

Part No.	Description	1	5
2169416	0603 size SMD capacitor kit	\$17.95	\$15.95

## JAMECO ValuePro Radial Leaded Varistors

- LA equivalent series
- Recognized as transient voltage surge suppressors
- Designed to be operated continuously across AC power lines
- No derating up to 85°C ambient • UL/CSA/VDE approved

\* Web Code: CEF

Part No.	Product No.	Continuous Voltage		Transient Energy Joules	Max. Clamping Voltage		Pricing		
		V <sub>M(AC)</sub>	V <sub>M(DC)</sub>		V <sub>C</sub>	I <sub>PK(A)</sub>	1	10	100
667059	DNR200201K	130	170	95	340	100	\$.55	\$.49	\$.45
34446	V130LA10A	130	175	38	340	50	.35	.29	.25
34462	V130LA20A	130	175	70	340	100	.39	.35	.29
34471	V250LA20	250	330	72	650	50	.45	.39	.35
2208796	DNR20D431K	275	350	140	710	100	.59	.55	.49
2208809	DNR20D751K	460	615	175	1240	100	.59	.55	.49

## JAMECO ValuePro NTC Thermistors

- Typical applications: temperature measurement/control/compensation; power supply fan control; PCB temperature monitoring
- Max. allowable power (@ 250°C): 0.55W
- Thermal dissipation factor: 6.5mW/°C (@ 250°C)
- Resistance value allowable difference: 10%

\* Web Code: RBG

Part No.	Product No.	Resistance (Ω @ 25°C)	B Constant (25/50°C >10%)	Temp. Coef. @ 25°C (%/°C)	Pricing		
					1	10	100
207521	NTC-101	100	3100	-3.5	\$.55	\$.49	\$.45
207483	NTC-102	1k	3800	-4.3	.55	.49	.45
207466	NTC-302	3k	3900	-4.4	.59	.55	.45
207441	NTC-502	5k	3900	-4.4	.55	.49	.45
207037	NTC-103	10k	4100	-4.6	.59	.55	.45
207002	NTC-503	50k	4200	-4.7	.55	.49	.45

# Carbon Film Resistors

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## 1/8-Watt Carbon Film Resistor (±5%) Assortment

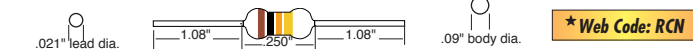
Part No.	Cross Ref.	Values	Description (see chart, right)	1	5
108303	ASST1830	x	10 ea. of 24 values marked by x and 50 ea. of 6 values marked below by # (540 pcs.)	\$14.95	\$13.49
108329	CAB182R	See description	1/8 watt resistor component cabinet kit 30 values (540 pcs.) see page 29	29.95	26.95

### 1/8-Watt Resistor Assortment Values (Ohms)

10 x	150 x	330 x	680 x	2.0k x	3.3k x	5.6k x	15k x	33k x	470k x
47 x	220 #	390 x	1.0k #	2.2k x	4.7k #	6.8k x	22k x	47k x	1.0M x
100 #	270 x	470 x	1.5k x	2.7k x	5.1k x	10k #	27k x	100k #	10M x

## 1/4-Watt Carbon Film Resistors (±5%) RoHS

\* Component Kits — Enter Web Code CKS



\* Web Code: RCN

### Assortment Pricing: 1/4-Watt Carbon Film Resistors (±5%)

Assortments may not be combined for quantity price breaks

Part No.	Cross Ref. No.	Values Included	Description (see chart below)	Pricing		
				1	5	50
10720	ASST8-R	—	5 ea. 70 values (350 pcs.)	\$10.95	\$9.95	\$8.95
2131039	K/RES-E12	■	10 ea. 61 values (610 pcs.)	11.95	10.95	9.95
103166	ASST30-R	●	10 ea. 24 values marked ● and 50 ea. 6 values marked * (540 pcs.)	14.95	13.49	11.95
10664	ASST27-R	▲	100 ea. 27 values marked (2,700 pcs.)	34.95	31.49	28.95
81832	—	—	1/4-watt resistor cabinet kit 30 values, see pg 29 (540 pcs.)	29.95	26.95	24.95

### Single Value Resistor Pricing: 1/4-Watt Carbon Film Resistors (±5%)

To order: Use part number adjacent to ohms in chart below. Values may not be combined for quantity price breaks. \*Values marked below also come in 10 packs.

Pricing per Resistor (Please order in increments of 10* or 100)				
Specify Part No. & Resistor Value	*10	100	1000	5000
(See Standard Resistor Values Chart below)	\$ .099	\$ .04	\$ .03	\$ .02

Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms
690216	2.2	690427 ■	15	690620 ▲ x	100	690822 ▲ ●	680	691024 ▲ x	4.7k	691227 ▲ ●	33k	691420 ■	220k	691622 *	1.5M
690224	2.4	690435	16	690638	110	690831	750	691032 ▲ ●	5.1k	691235	36k	691438	240k	691631	1.6M
690232	2.7	690443 ■	18	690646 ■	120	690849 ■	820	691041 ▲ ●	5.6k	691243 ■	39k	691446 ■	270k	691639	1.8M
690241	3.0	690451 *	20	690654	130	690857	910	691059	6.2k	691251	43k	691454 *	300k	691649	2.0M
690259	3.3	690460 ■	22	690662 ▲ ●	150	690865 ▲ x	1.0k	691067 ■	6.8k	691260 ▲ ●	47k	691462 ■	330k	691657	2.2M
690267	3.6	690478 *	24	690671 *	160	690873	1.1k	691075	7.5k	691278	51k	691471	360k	691665	2.4M
690275	3.9	690486 ■	27	690689 ■	180	690881 ●	1.2k	691083 ■	8.2k	691286 ■	56k	691489 ■	390k	691673	2.7M
690283	4.3	690494	30	690697 *	200	690890	1.3k	691091	9.1k	691294	62k	691497	430k	691681	3.0M
690291 *	4.7	690507 ■	33	690700 ▲ x	220	690902 ▲ ●	1.5k	691104 ▲ x	10k	691307 ■	68k	691500 ▲ ●	470k	691690	3.3M
690304	5.1	690515	36	690718 *	240	690911	1.6k	691112	11k	691315	75k	691518	510k	691702	3.6M
690312	5.6	690523 ■	39	690726 ▲ ●	270	690929 ■	1.8k	691121 ■	12k	691323 ■	82k	691526 ■	560k	691711 *	3.9M
690321	6.2	690531	43	690734 *	300	690937 ▲ ●	2.0k	691139	13k	691331	91k	691534	620k	691737	4.7M
690339	6.8	690540 ▲ ●	47	690742 ▲ ●	330	690945 ▲ ●	2.2k	691147 ▲ ●	15k	691340 ▲ x	100k	691542 *	680k	691745	5.1M
690347	7.5	690558	51	690751 *	360	690953	2.4k	691155	16k	691358	110k	691551	750k	691753	5.6M
690363	8.2	690566 ■	56	690769 ●	390	690961 ▲ ●	2.7k	691163 ■	18k	691366 ■	120k	691569 ■	820k	691761	6.2M
690371	9.1	690574	62	690777	430	690970	3.0k	691171 ●	20k	691374	130k	691577	910k	691770	6.8M
690380 ▲ ● *	10	690582 ■	68	690785 ▲ ●	470	690988 ▲ ●	3.3k	691180 ▲ ●	22k	691382 ■	150k	691585 ▲ ●	1.0M	691788	7.5M
690398	11	690591	75	690793 *	510	690996	3.6k	691198	24k	691391	160k	691593	1.1M	691796	8.2M
690401 ■	12	690603 ■	82	690806 ■	560	691008 ■	3.9k	691201 ■	27k	691403 ■	180k	691606	1.2M	691809	9.1M
690419	13	690611	91	690814	620	691016	4.3k	691219	30k	691411	200k	691614	1.3M	691817 ▲ ● *	10M

## 1/2-Watt Carbon Film Resistors (±5%) RoHS



\* Web Code: SCH

### Assortment Pricing: 1/2-Watt Carbon Film Resistors (±5%)

Assortments may not be combined for quantity price breaks

Part No.	Cross Ref. No.	Values Included	Description (see chart below)	1	5
107853	ASST1230	x	10 ea. of 24 values marked by 7 and 50 ea. of 6 values marked by # (540 pcs.)	\$24.95	\$22.49
107845	ASST1227	✓	100 ea. of 27 values marked by 4 (2,700 pcs.)	39.95	36.95
107837	ASST1270	See description	5 ea. of 70 values (every other value from 10Ω - 5.6MΩ)(350 pcs.)	12.95	11.95
107879	CAB12R	See description	1/2-watt resistor component cabinet kit — 30 values (540 pcs.), see page 29	39.95	34.95

### Single Resistor Value Pricing: 1/2-Watt Carbon Film Resistors (±5%)

To order: Use part number adjacent to ohms in chart below. Values may not be combined for quantity price breaks. \*Values marked below also come in 10 packs.

Pricing Per Resistor (Please order in increments of 10* or 100)				
Specify Part No. & Resistor Value	*10	100	1000	5000
(See Standard Resistor Values Chart below)	\$ .099	\$ .05	\$ .04	\$ .03

Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms
659577 *	1.0	659868	16	661280	120	661440	560	661600 ✓ x	2.7k	661781	13k	661950	68k	662215	820k
659614	1.5	659884	20	661301 ✓ x	150	661466 ✓ x	680	661618	3.0k	661790 ✓ x	15k	661976	82k	662231 ✓ x	1.0M
659657	2.2	659892	22	661327	180	661474	750	661634 ✓ x	3.3k	661811	18k	661992 ✓ #	100k	662240	1.1M
659673	2.7	661124	27	661335	200	661482	820	661642	3.6k	661829	20k	662004	110k	662282	1.6M
659737	4.7	661141	33	661343 ✓ #	220	661503 ✓ #	1.0k	661651	3.9k	661837 ✓ x	22k	662039	150k	662291	1.8M
659788	7.5	661183 ✓ x	47	661351	240	661520	1.2k	661677 ✓ #	4.7k	661845	24k	662071	220k	662311	2.2M
659809	9.1	661191	51	661360 ✓ x	270	661538	1.3k	661685 ✓ x	5.1k	661853 x	27k	662098	270k	662320	2.4M
659817 ✓ x	10	661204	56	661378	300	661546 ✓ x	1.5k	661693 ✓ x	5.6k	661870 ✓ x	33k	662119	330k	662362	3.6M
659825	11	661221	68	661386 ✓ x	330	661554	1.6k	661714 x	6.8k	661896	39k	662127	360k	662397	4.7M
659833	12	661239	75	661407 x	390	661562	1.8k	661731	8.2k	661909	43k	662135	390k	662426	6.2M
659841	13	661247	82	661423 ✓ x	470	661571 ✓ x	2.0k	661757 ✓ #	10k	661917 ✓ x	47k	662151 ✓ x	470k	662469	9.1M
659850	15	661263 ✓ #	100	661431	510	661589 ✓ x	2.2k	661773	12k	661933	56k	662186	620k	662477 ✓ x	10M



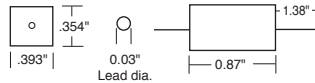
# Resistors, Chokes, Inductors & Potentiometers



## 5-Watt Wirewound Resistors (5%)

### Horizontal Mount/Axial Lead

- Temperature range: -55°C to +155°C
- Moisture resistant
- High temperature stability
- Exceptionally small, sturdy and reliable



See resistor value chart on right	1	10	100	500
Pricing	\$.45	\$.39	\$.35	\$.29

Part No.	Ohms	Part No.	Ohms	Part No.	Ohms
659956	0.10	660295	5.0	660623	100
659964	0.15	660375	10	660877	1.0k
660050	0.5	660447	20	661010	4.7k
660130	1.0	660480	27	661036	10k
660201	2.0	660551	50		
660279	4.0	*2W/5W/9W/10W Wirewound Resistors — Enter Web Code TCH			

## Dual-In-Line "DIP" Resistor Networks ±2% (G)

### 16-Pin (140mW/Resistor) ±2%

- Max. operating voltage: 100V
- Temp. coefficient: ±100ppm/°C
- Operating temperature: -55°C to +125°C
- Insulation res.: 10,000MΩ min.

\* Order in multiples of 10

	1	10	100	500
Pricing	\$.59	\$.55	\$.49	\$.45
Orange Pricing	.09	.07	.05	.04

\*Web Code: GAP

Part No.	Ohms	Part No.	Ohms
108556	100	108581	470
856095	120	108599	1.0k
108564	220	87601	*1.0k
108572	330	108610	4.7k
1158942	330	108628	10k



## 125mW SIP Bussed Conformal Coated Resistor Network



	1	10	100
Pricing	\$.29	\$.25	\$.19

\*Web Code: WRN

Part No.	Pins	Ohms	Tol. (%)
268032	6	10k	2
97826	8	10k	2
97851	10	330	2
97869	10	470	2

Part No.	Pins	Ohms	Tol. (%)
97877	10	1.0k	2
97893	10	2.2k	2
24660	10	4.7k	2
24643	10	10k	2
98095	10	100k	2

## 0805 (1/8W) Chip Resistor Assortment (±5%) \*Web Code: CKS

### 144 Values, 50 pcs. each

- 7,200 pieces total
- Max. overload volt.: 200V
- Case size (2 cases): 10.5"L x 6.7"W x 1.7"T
- Operating temp.: 70°C
- Weight: 1.9 lbs.
- Size (mm): 2.0L x 1.25W x 0.5Thick

Includes: Case with labels

Part No.	Product No.	1	5	25
172806	16-500	\$79.95	\$69.95	\$59.95

### Resistance Value Chart:

2.2	12	91	510	3.0k	16k	75k	470k	2.7M
2.4	20	100	560	3.3k	18k	82k	510k	3.0M
2.7	22	120	620	3.6k	20k	91k	560k	3.3M
3.0	24	150	680	3.9k	22k	100k	620k	3.6M
3.3	27	160	750	4.3k	24k	120k	680k	3.9M
3.9	30	180	820	4.7k	27k	150k	750k	4.3M
4.3	33	200	910	5.1k	30k	160k	820k	4.7M
4.7	39	220	1.0k	5.6k	33k	180k	910k	5.1M
5.1	43	240	1.2k	6.2k	36k	200k	1.0M	5.6M
5.6	47	270	1.5k	6.8k	39k	240k	1.2M	6.2M
6.2	51	300	1.6k	7.5k	43k	270k	1.5M	6.8M
6.8	56	330	1.8k	8.2k	47k	300k	1.6M	7.5M
7.5	62	360	2.0k	9.1k	51k	330k	1.8M	8.2M
8.2	68	390	2.2k	10k	56k	360k	2.0M	9.1M
9.1	75	430	2.4k	12k	62k	390k	2.2M	10M
10	82	470	2.7k	15k	68k	430k	2.4M	

## 1206 (1/4W) Chip Resistor Assortment (±1%) \*Web Code: CKS

### 56 Values, 200 pcs. each; 11,200 pcs. Total

- Maximum working voltage: 200V
- Operating temp.: 70°C
- Temp. coefficient: ±100 ppm/°C
- Resistor dimensions (mm): 3.10L x 1.5W x 0.55H
- Packaged 200 pc. strip



### Value Chart (Ohms)

10	121	1.5k	20k	243k
12.1	150	2k	24.3k	301k
15	200	2.43k	30.1k	392k
20	243	3.01k	39.2k	499k
24.3	301	3.92k	49.9k	619k
30.1	392	4.99k	61.9k	750k
39.2	499	6.19k	75k	909k
49.9	619	7.5k	90.9k	1M
61.9	750	9.09k	100k	
75	909	10k	121k	
90.9	1k	12.1k	150k	
100	1.21k	15k	200k	

Part No.	Cross Ref. No.	1	5	25
156882	SMR1206SB	\$99.95	\$89.95	\$74.95

\*SIP Resistor Networks — Enter Web Code WRN

\*1/4-Watt 1% Metal Film Resistors — Enter Web Code MFR

\*RC Series 1% SMD Thick Film Resistors — Enter Web Code SMF

\*RC Series 5% SMD Thick Film Resistors — Enter Web Code THF



## Chokes

### J.W. Miller Series Equivalents

208194

642741

\*Web Code: WBG

\* Order in multiples of 10

Part No.	Cross Ref. No.	Description	Inductance Value (µH) ±10%	Pricing
				1 10 100
372171	78F100J-VP	Conformal coated axial choke	10	* .19 .15
208194	CEC-101J	Conformal coated choke	100	* .19 .15
208240	CEC-102J	Conformal coated choke	1000	.35 .29 .25
642724	5800-472	High current axial RF choke	4700	.69 .55 .39
642741	5800-103	High current axial RF choke	10000	.69 .55 .39
642927	5900-103	High current axial RF choke	10000	.99 .89 .79



## High-Current Toroid Inductors

### J.W. Miller 2100/2300 Series Value Equivalents

- Low radiation
- Low core loss
- Operating temperature: -55°C to +105°C

\*Web Code: KBY



Part No.	Cross Ref.	Description	L(µH) @ 1kHz	Horizontal	Vertical
				1 10 100	1 10 100
371549	2105-H	Horizontal	22	\$1.25	\$1.09 .99
371581	2109-H	Horizontal	47	1.25	1.09 .99
371856	2112-V	Vertical	100	1.25	1.09 .99
371872	2114-V	Vertical	150	1.09	.95 .85
387268	2136-V	Vertical	220	1.95	1.75 1.49
371952	2122-V	Vertical	680	1.09	.99 .89
371979	2124-V	Vertical	1000	1.95	1.75 1.49

## Bourns® 2W 22mm 10-Turn Wirewound Precision Pots

- Insulation resistance @ 500VDC: 1000MΩ (Bourns), 100MΩ (JVP)
- Operating temp. range: +1°C to +125°C (Bourns), -55°C to +125°C (JVP)
- Solder lug panel mount
- Bushings: M-metal; P-plastic

\*Web Code: JBE

855818

2182611

Manufacturer											
Jameco ValuePro						Bourns®					
Ohms	Series	Power Rating	Part No.	M/P	1 10 100	Part No.	M/P	1 10 100	Part No.	M/P	1 10 100
1k	3540S	2W @ 70°C	2177846	M	\$9.95 \$8.95 \$7.95	—	—	—	—	—	—
1k	3590S	2W @ 40°C	2177504	M	8.95 7.95 7.25	—	—	—	—	—	—
5k	3540S	2W @ 70°C	2111880	M	14.95 13.49 11.95	183548	M	\$24.95 \$22.95 \$19.95	—	—	—
5k	3590S	2W @ 40°C	2178161	P	7.95 7.25 6.59	855818	M	13.95 12.49 10.95	—	—	—
10k	3540S	2W @ 70°C	2177854	M	9.95 8.95 7.95	183521	M	19.95 17.95 15.95	—	—	—
10k	3590S	2W @ 40°C	2177521	M	9.95 8.95 7.95	771121	P	14.95 13.49 11.95	—	—	—
10k	3590S	2W @ 40°C	—	—	—	771155	M	11.95 10.95 9.95	—	—	—
100k	3540S	2W @ 70°C	2177862	M	7.95 7.25 6.59	—	—	—	—	—	—
100k	3590S	2W @ 40°C	—	—	—	771139	P	16.95 14.95 13.49	—	—	—
			2182611	Additional panel mtg hardware (3/8" hex nuts & washer)				.69 .59 .49			

## Hi-Power Fixed Ceramic Resistors

- P/N 2160016: 2Ω
- P/N 2160024: 10Ω
- Size: 3.0"L x 1.0"W x 1.56"H

Includes: Mounting bracket, 25 watts, 5% tolerance

Part No.	Mfr. Part No.	1	10	100
2160016	25/20FC2R0-813	\$2.25	\$1.95	\$1.75
2160024	25/20FC10R0-813	2.49	2.25	1.95

## Pocket Trim Potentiometer Adjustment Tool

- Glass-filled body
- Stainless steel blade

Part No.	Description	Size	1	10	100
153315	Trimmer tool	5.2"L	\$1.95	\$1.75	\$1.49

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Potentiometers

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## Vertical Mount Trimmer

- 15mm thick • Tolerance:  $\pm 20\%$
- Power rating: 200VAC – 1/2 watt; 350VDC – 1/4 watt
- Total rotation:  $260^\circ \pm 5^\circ$  for 350VDC rated  
 $250^\circ \pm 20^\circ$  for 200VAC rated



★ Web Code: XGF

Part No.	Fig.	Ohms	Volt. Rating	1	10	100
2190611	1	100	200VAC	\$.39	\$.29	\$.19
2190629	1	1k	200VAC	.55	.45	.35
94693	2	1k	350VDC	.65	.59	.55
35503	2	2.5k	350VDC	.59	.49	.39
2190637	1	10k	200VAC	.65	.55	.45
94714	2	10k	350VDC	.65	.59	.55
94722	2	50k	350VDC	.65	.59	.55
2190645	1	100k	200VAC	.49	.39	.35
94731	2	100k	350VDC	.65	.59	.55

## 1/2-Watt, 3/8" Square, Single-Turn

- Trimmer w/ shaft • 3 positions
- Shaft length: 0.32"
- 0.1" lead spacing

★ Web Code: XGF

2118803

Part No.	Mfr. Part No.	Ohms	1	10	100
2161385	18STS500	500	\$1.25	\$1.09	\$.95
2118803	18STS1K	1k	1.25	1.09	.95
2161393	18STS5K	5k	1.25	1.09	.95
2118791	18STS10K	10k	1.25	1.09	.95
2161406	18STS100K	100k	1.25	1.09	.95
2161414	18STS500K	500k	1.25	1.09	.95
2161422	18STS1M	1M	1.25	1.09	.95

## 24mm Audio Taper ( $\pm 20\%$ )

- Terminal type: solder lugs
- Body diameter: 0.945"
- Shaft dia.: 0.25" • Shaft length: 0.335"
- Rotational angle:  $300^\circ (\pm 5^\circ)$
- Max. voltage: 250V
- Insulation resistance:  $>100M\Omega$  @ 500VDC

Use 2182602 for additional panel mounting hardware, pg 78

Qty.	Power Rating	1	10	100
Single Audio	1/4 watt	\$1.55	\$1.39	\$1.25
Dual Audio	1/2 watt	1.95	1.75	1.59

Part No.	Manufacturer Part No.	Audio Type	Ohms
255426	RV24AF-10-15R1-A14	Single	10k
2181466	RV24BF-10-15R1-A10K	Dual	10k
255434	RV24AF-10-15R1-A54	Single	50k
255442	RV24AF-10-15R1-A15	Single	100k
255451	RV24AF-10-15R1-A55	Single	500k
255469	RV24AF-10-15R1-A16	Single	1M
2181482	RV24BF-10-15R1-A1M	Dual	1M

## 2 & 5-Watt 24mm Linear Taper Wirewound ( $\pm 20\%$ )

- Temp. range:  $-10^\circ\text{C}$  to  $+70^\circ\text{C}$
- Non-rotational key
- Base length: 0.25"

Includes: Mounting hardware

123960 (Use 2182611 for additional PNL MTG hardware)

- Shaft length/diameter: 0.825"/0.25"
- Mounting hole: 0.375"

140514 (Use 2182602 for additional PNL MTG hardware)

- Shaft length/diameter: 0.67"/0.23" (6mm)
- Mounting hole: 0.32"
- Max. panel thickness: 0.1"

Part No.	Watts	Ohms	1	10	100
123960	2	1k	\$4.75	\$3.95	\$3.49
140514	5	100	3.75	3.39	2.95

## 1/8 & 1/5-Watt 16mm Linear Taper ( $\pm 20\%$ )

- Rated voltage: 200V • Body dia.: 0.63"
- Shaft diameter: 0.250"
- Insulation resistance:  $>100M\Omega$  @ 500VDC

286193

1/8-Watt (Use 2182688 for additional PNL MTG hardware)

- Rotational angle:  $300^\circ (\pm 5^\circ)$  • Rotation life: 15k cycles

Qty.	1	10	100
Pricing	\$1.39	\$1.19	\$1.05

Part No.	Manufacturer Part No.	Shaft Length	Ohms
286193	RV16AF-10-20R1-B53	0.531"	5k
286206	RV16AF-10-20R1-B14	0.531"	10k
286214	RV16AF-10-20R1-B54	0.531"	50k

1/5-Watt (Use 2182688 for additional PNL MTG hardware)

- Shaft diameter: 0.25" • Body diameter: 0.63"

Qty.	1	10	100	500
Pricing	\$1.59	\$1.35	\$1.15	\$.99

Part No.	Manufacturer Part No.	Shaft Length	Ohms
286249	RV16AF-10-15R1-B13	0.335"	1k
286265	RV16AF-10-15R1-B53	0.335"	5k
286273	RV16AF-10-15R1-B14	0.335"	10k
286282	RV16AF-10-15R1-BF4	0.335"	25k
286302	RV16AF-10-15R1-B15	0.335"	100k
286337	RV16AF-10-15R1-B16	0.335"	1M
163563	PMD401K (10 detents)	0.605"	10k

## 1/2-Watt 24mm Linear Taper ( $\pm 10\%$ )

- Temp. range:  $-55^\circ\text{C}$  to  $+125^\circ\text{C}$
- Non-rotational key, non-slotted shaft end
- Maximum panel thickness: 0.1875"
- Mounting hole: 0.3125"
- Shaft dia.: 0.25" • Shaft length: 0.355"

Includes: Mounting hardware

Use 2182602 for additional panel mounting hardware (except \* 2133675 – use 2182611), pg 78

Qty.	1	10	100	500
Pricing	\$1.25	\$1.09	\$.95	\$.85
Orange Pricing	.99	.89	.79	.65

Part No.	Cross Ref.	Ohms	Part No.	Cross Ref.	Ohms
29050	P1K	1k	29082	P10K	10k
2133675	B1K*	1k	29103	P100K	100k
29197	P5K	5k	29066	P1MEG	1M

\* Mounting hole: 0.375"; shaft length: 0.375"

## 2-Watt 22mm Linear Taper ( $\pm 10\%$ )

- 2W @  $70^\circ\text{C}$  ambient • Non-rotational key
- Temp. range:  $-55^\circ\text{C}$  to  $+120^\circ\text{C}$
- Shaft length: 0.875" • Shaft dia.: 0.25"
- Mounting hole: 0.375"
- Max. panel thickness: 0.25"

Includes: Mounting hardware

Use 2182611 for additional panel mounting hardware, pg 78

Qty.	1	10	50
Pricing	\$9.95	\$8.95	\$7.95
Orange Pricing	3.95	3.59	3.29

Part No.	Military No.	Ohms	Part No.	Military No.	Ohms
241568	RV4NAYS101A	100	13952	RV4NAYS103A	10k
13936	RV4NAYS102A	1k	2160518	R24KM-B10K*	10k
13995	RV4NAYS502A	5k	241656	RV4NAYS203A	20k
2160526	R24KM-B5K*	5k	241728	RV4NAYS105A	1M

\* Jameco ValuePro

★ Linear Taper Potentiometers — Enter Web Code JAE

## 1/2-Watt 24mm Linear Taper ( $\pm 20\%$ )

- Rotational angle:  $300^\circ (\pm 5^\circ)$
- Max. voltage: 500V • Shaft Diameter: 0.25"
- Withstanding voltage for 1 minute: 500VAC

Use 2182602 for additional panel mounting hardware



Qty.	1	10	100
Pricing	\$1.55	\$1.39	\$1.25

Part No.	Manufacturer Part No.	Shaft Length	Ohms
255477	RV24AF-10-15R1-B52	0.335"	500
255485	RV24AF-10-15R1-B13	0.335"	1k
255493	RV24AF-10-15R1-B23	0.335"	2k
255514	RV24AF-10-15R1-B53	0.335"	5k
255522	RV24AF-10-15R1-B14	0.335"	10k
255531	RV24AF-10-15R1-BF4	0.335"	25k
255549	RV24AF-10-15R1-B54	0.335"	50k
255557	RV24AF-10-15R1-B15	0.335"	100k
255565	RV24AF-10-15R1-BF5	0.335"	250k
255573	RV24AF-10-15R1-B55	0.335"	500k
255582	RV24AF-10-15R1-B16	0.335"	1M
255600	RV24AF-10-15R1-B26	0.335"	2M
264402	RV24AF-10-20K-B53	0.531"	5k
264411	RV24AF-10-20K-B14	0.531"	10k
264437	RV24AF-10-20K-B15	0.531"	100k
264462	RV24AF-10-20K-B16	0.531"	1M
255662	RV24AF-10-40R1-B14	1.32"	10k
255696	RV24AF-10-40R1-B15	1.32"	100k

## 1/2-Watt 24mm Linear Taper with SPST Switch ( $\pm 20\%$ )

- Shaft diameter: 0.25"
- Maximum voltage: 500V
- Terminal type: solder lugs
- Switch rating: 125VAC, 1A
- Rotational angle:  $300^\circ (\pm 5^\circ)$

Use 2182602 for additional panel mounting hardware, pg 78

Qty.	1	10	100
Pricing	\$1.95	\$1.75	\$1.59

Part No.	Manufacturer Part No.	Shaft Length	Ohms
263768	RV24A01F-10-15R1-B13	0.335"	1k
263792	RV24A01F-10-15R1-B14	0.335"	10k
263822	RV24A01F-10-15R1-B100K	0.335"	100k

## 2-Watt 25mm Single-Turn Linear Taper ( $\pm 10\%$ )

- Power rating: 2 watts at  $70^\circ\text{C}$
- Mechanical rotation:  $314^\circ$
- Rotational life: 25,000 cycles
- Operating temp.:  $-65^\circ\text{C}$  to  $+125^\circ\text{C}$
- Shaft size: 1.0"L x 0.25"Dia.
- Mounting hole: 0.37" • Mil style RV4

Use 2182611 for additional panel mounting hardware, pg 78

Part No.	Cross Ref.	Ohms	1	10	50
2172826	K1716	5k	\$4.95	\$4.49	\$3.95

## Slide Potentiometer

- 200mW rating
- 15,000 cycle slide life



Part No.	Length	Ohms	1	10	100
2203961	60mm	10k	\$1.95	\$1.75	\$1.59

JAMECO ValuePro

## Cermet Trimmer Potentiometers

NEW  
MARKED IN PINK

### Bourns®, Vishay/Spectrol, Bitech (Beckman) Series Equivalents

- Resistance tolerance:  $\pm 10\%$
- Insulation resistance: 1000M $\Omega$  min. (500VDC)
- Absolute min. res.: 2 $\Omega$  • Temp. range: -55°C to 125°C

#### Bourns® 3266 Series, Vishay/Spectrol 64W Series

- 1/4 watt, 1/4" square, 12-turn top adjust,  $\pm 10\%$

\*Web Code: XGT

Part No.	Series	Value ( $\Omega$ )	1	10	100
254642	3266W	1k	\$1.95	\$1.75	\$1.49
254669	3266W	5k	1.75	1.49	1.25
254677	3266W	10k	1.95	1.75	1.49
254714	3266W	100k	1.95	1.75	1.49
1156331	3266X	10k	1.75	1.49	1.35

#### Bourns® 3329 Series, Vishay/Spectrol 62-3, 62-1 Series

- 1/2 watt, 1/4" round, single-turn top adjust,  $\pm 10\%$

\*Web Code: XGZ

Part No.	Series	Value ( $\Omega$ )	1	10	100
1157907	3329H	1k	\$.59	\$.49	\$.39
854487	3329H	20k	1.19	.99	.75
770030	3329H	100k	1.19	.99	.75
95441	3329P	1k	1.19	1.09	.99
96719	3329P	10k	1.19	1.09	.99
95484	3329P	100k	1.19	1.09	.99

#### Bourns® 3362 Series, Vishay/Spectrol 76P Series

- 1/2 watt, 1/4" square, single-turn,  $\pm 10\%$

\*Web Code: XGX

Part No.	Series	Value ( $\Omega$ )	1	10	100
770371	3362H	10k	\$.89	\$.79	\$.69
182810	3362P	500	.89	.79	.69
253982	3362P	1k	.89	.79	.69
182829	3362P	5k	.89	.79	.69
182837	3362P	10k	.89	.79	.69
254002	3362P	20k	.89	.79	.69
254028	3362P	50k	.89	.79	.69
254036	3362P	100k	.89	.79	.69
254044	3362P	500k	.89	.79	.69
254115	3362P	1M	.89	.79	.69
2133771	3362U-1-102	1k	.59	.49	.39
2133780	3362U-1-105	1M	.75	.65	.49
254175	3362W	1k	.75	.65	.55
254204	3362W	10k	.75	.65	.55

\*H,P,U: top adjustment; X&W: side adjustment B Mfr.: Bourns

#### Bourns® 3386 Spectrol 63, BI Tech 72 Series

- 1/2 watt, 3/8" square, single-turn,  $\pm 10\%$

\*Web Code: XGU

Part No.	Series	Value ( $\Omega$ )	1	10	100
770646	3386B	50	\$.89	\$.79	\$.69
854920	3386F	100k	1.09	.99	.89
254297	3386P	100	1.19	1.09	.99
43123	3386P	500	1.25	1.09	.79
42964	3386P	1k	1.25	1.09	.99
43043	3386P	2k	1.25	1.09	.79
43078	3386P	5k	1.25	1.09	.99
43001	3386P	10k	1.25	1.09	.79
43051	3386P	20k	1.25	1.09	.79
43107	3386P	50k	1.25	1.09	.79
43027	3386P	100k	1.25	1.09	.99
63212	3386P	500k	1.25	1.09	.79
42981	3386P	1M	1.25	1.09	.99
105216	3386P	2M	1.25	1.09	.99
241445	3386W	5k	1.09	.99	.89
241454	3386W	10k	1.09	.99	.89
771032	3386X	5k	.99	.89	.79

\*F&P: top adjustment; B,W&X: side adjustment

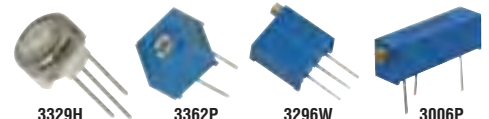
#### Bourns® 3296 Spectrol 64, BI Tech 64 Series, Weston 850

- 1/2 watt, 3/8" rectangular, 25-turn,  $\pm 10\%$

\*Web Code: XGB

Part No.	Series	Value ( $\Omega$ )	1	10	100
2037982	3296P	1k	\$1.25	\$1.09	\$.99
769354	3296P	5k	1.25	1.09	.99
853513	3296P	10k	1.25	1.09	.99
769320	3296P	1M	1.25	1.09	.99
853759	3296W	500	1.49	1.25	1.09
853556	3296W	1k	1.75	1.49	1.25
853775	3296W	5k	1.75	1.49	1.25
241146	3296W	10k	1.49	1.25	1.09
853572	3296W	10k	1.75	1.49	1.25
853679	3296W	20k	1.49	1.25	1.09
853791	3296W	50k	1.75	1.49	1.25
853599	3296W	100k	1.75	1.49	1.25
240725	3296Y	100	1.49	1.25	1.09
240750	3296Y	1k	1.49	1.25	1.09
240777	3296Y	5k	1.49	1.25	1.09
240427	3296Y	10k	1.49	1.25	1.09
240470	3296Y	100k	1.49	1.25	1.09

\*P: side adjustment; W&Y: top adjustment B Mfr.: Bourns



#### Bourns® 3299 Series, Vishay/Spectrol 68W Series

- 1/2 watt, 3/8" square, 25-turn top adjust,  $\pm 10\%$

\*Web Code: XGW

Part No.	Series	Value ( $\Omega$ )	1	10	100
241082	3299W	100	\$1.49	\$1.25	\$1.09
241104	3299W	500	1.49	1.25	1.09
241111	3299W	1k	1.49	1.25	1.09
241121	3299W	2k	1.49	1.25	1.09
241139	3299W	5k	1.49	1.25	1.09
240602	3299W	10k	1.49	1.25	1.09
238633	3299W	20k	1.49	1.25	1.09
241200	3299W	50k	1.49	1.25	1.09
241189	3299W	100k	1.49	1.25	1.09
241219	3299W	1M	1.49	1.25	1.09

#### Bourns® 3006 Spectrol 43, BI Tech 89 Series

- 3/4 watt, 3/4" rectangular, 15-turn side adjust,  $\pm 10\%$

\*Web Code: XGD

Part No.	Series	Value ( $\Omega$ )	1	10	100
695990	3006P	100	\$1.25	\$.99	\$.79
241242	3006P	200	1.25	1.09	.99
41937	3006P	500	1.25	1.09	.99
241269	3006P	1k	1.25	1.09	.99
41865	3006P	2k	1.25	1.09	.99
41890	3006P	5k	1.25	1.09	.99
41822	3006P	10k	1.25	1.09	.99
41873	3006P	20k	1.25	1.09	.99
241314	3006P	25k	1.25	1.09	.99
241323	3006P	50k	1.25	1.09	.99
41849	3006P	100k	1.25	1.09	.99
63001	3006P	200k	1.25	1.09	.89
41953	3006P	500k	1.25	1.09	.99
241374	3006P	1M	1.25	1.09	.99
2162901	3006P	2M	1.25	1.09	.89
2178380	3006W	100	.99	.89	.75
2178460	3006W	500	.99	.89	.75
2178398	3006W	100k	.99	.89	.75
2178427	3006W	200k	.99	.89	.75
2180439	3006Y	50k	.99	.89	.75
2180447	3006Y	2M	.99	.89	.75

\*P: side adjustment; W&Y: top adjustment ✓ Mfr.: Vishay

#### Membrane Sensor/Potentiometer — Enter Web Code MEM

\*Web Code: EBD

JAMECO ValuePro

## Instrumentation Knobs (1/4" & 1/8" Shaft Diameters)



Part No.	Product No.	Body	Pointer	H" x Dia."	Fig.	1	10	100
265009	JK-902B	Black	White	.60 x .95	1	\$1.09	\$.99	\$.89
264998	JK-902A	Black	White	.69 x 1.31	1	1.09	.99	.89
264990	JK-901D	Black/alum	White	.47 x .78	2	.99	.89	.79
264955	JK-901C	Black/alum	White	.61 x 1.06	2	1.09	.99	.89
264946	JK-901B	Black/alum	White	.64 x 1.29	2	1.25	1.09	.99
264912	RN-114A	Black/alum	Numeric	.58 x 1.46	3	.99	.89	.79
2158143	RN-12P0S	Black/alum	Numeric	.70 x 1.50	3	.79	.69	.59
264892	RN-113A	Black/alum	Numeric	.70 x 1.15	3	1.09	.99	.89
264883	RN-112A	Black/alum	Numeric	.90 x 1.46	3	1.09	.99	.89
102788	JK-903C	Black	White	.54 x 1.25	4	.79	.69	.59
104176	JK-902C	Black	White	.49 x .75	5	1.09	.99	.89
202287	CP-Z1-M-S	Black/alum	White	.60 x .80	6	1.09	.99	.89
136241	GKB-214	Black/alum	White	.52 x .54	7	1.25	1.09	.99
138393	41108-1	Black/alum	White	.56 x .85	7	1.49	1.25	1.09
265077	JK-905C	Black/blue	White	.58 x .57	8	.99	.89	.79
265084	JK-905D	Black/green	White	.58 x .57	8	.99	.89	.79

Part No.	Product No.	Body	Pointer	H" x Dia."	Fig.	1	10	100
265051	JK-905A	Black/red	White	.58 x .57	8	\$.99	\$.89	\$.79
265069	JK-905B	Black/yellow	White	.58 x .57	8	.99	.89	.79
265033	JK-904C	Black/blue	White	.47 x .78	9	.99	.89	.79
265041	JK-904D	Black/green	White	.47 x .78	9	.99	.89	.79
265018	JK-904A	Black/red	White	.47 x .78	9	.99	.89	.79
265025	JK-904B	Black/yellow	White	.47 x .78	9	.99	.89	.79
265122	JK-906	Black	White	.58 x .61	10	1.25	1.09	.99
265244	CR-MS-3-T18*	Gray	Blue	.68 x .51	11	.79	.69	.59
265261	CR-MS-5-T18*	Gray	Gray	.68 x .51	11	.79	.69	.59
265228	CR-MS-1-T18*	Gray	Red	.68 x .51	11	.79	.69	.59
290125	42008-1†	Aluminum	Black	.50 x .63	12	2.49	2.25	1.95
162481	K5-1/4S	Chrome	Silver	.50 x .56	13	1.75	1.49	1.25
138482	KN031	Aluminum	Black	.61 x .65	14	2.49	2.25	1.95
138502	KN032	Aluminum	Black	.87 x .70	14	2.65	2.39	2.15

\*For use with 1/4" knurled shaft †1/8" shaft diameter S Plastic flange

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

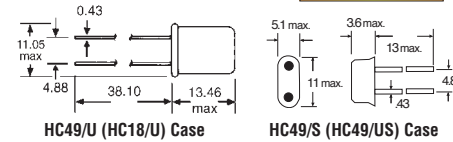
Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)



## Crystals

- Frequency calibration tolerance:  $\pm 50\text{ppm}$  @  $25^\circ\text{C}$
- Freq. stability tolerance:  $\pm 50\text{ppm}$  from  $-10^\circ\text{C}$  to  $+60^\circ\text{C}$
- Operating temperature:  $-10^\circ\text{C}$  to  $+60^\circ\text{C}$
- Shunt capacitance:  $7\text{pF}$  max.
- Drive level:  $4.0\text{mW}$  max.

\*Web Code: EAU



### HC49/U (HC18/U) Case

Part No.	Frequency (MHz)	Impedance	Pricing		
			1	10	100
102613	1.8432	18pF	.55	.49	.45
101274	2.4576	32pF	.49	.39	.35
14533	3.579545	18pF	.49	.39	.35
324364	4.0	Series	.49	.39	.35
14592	4.0	20pF	.49	.39	.35
14728	8.0	Series	.49	.39	.35
14381	10.0	Series	.49	.39	.35
2159630	12.0*	20pF	.39	.29	.19
14402	12.0	Series	.49	.39	.35
537799	14.31818	Series	.39	.29	.25
324187	14.7456	20pF	.49	.39	.35
14453	16.0	Series	.49	.39	.35
324268	20.0	20pF	.49	.39	.35
14517	20.0	Series	.49	.39	.35

\*Arndt

### HC49/US Low Profile Case

Part No.	Frequency (MHz)	Impedance	Pricing		
			1	10	100
324962	4.0	20pF	.59	.55	.49
324929	5.0	20pF	.59	.55	.49
325198	12.0†	20pF	.59	.55	.49
325139	16.0	20pF	.59	.55	.49
325068	20.0	20pF	.59	.55	.49
325024	24.0	20pF	.59	.55	.49

† Industrial temperature range is  $-40^\circ\text{C}$  to  $85^\circ\text{C}$

### HC49/S Low Profile Case

- $\pm 5\text{ppm}/\text{year}$  max.
- Drive level:  $0.5\text{mW}$  (fundamental frequency)

Part No.	Frequency (MHz)	Impedance	Pricing		
			1	10	100
137832	4.0	17pF	.49	.35	.29
137859	8.0	Series	.69	.59	.45
137875	11.0592	Series	.49	.35	.29
137891	16.0	Series	.49	.35	.29

## Crystal Oscillator Sockets

- Can be PCB-mounted without the modifications that would be needed with DIP-IC sockets
- Low profile solder tail; machine tooled on 4 pins



Part No.	Description	1	10	100
676385	8-pos. socket for half can	.55	.45	.35
133006	14-pos. socket for full can	.65	.55	.45

## Tuning Forks

- Operating temperature range:  $-10^\circ\text{C}$  to  $+60^\circ\text{C}$
- Frequency:  $32.768\text{kHz}$
- Drive level:  $1\text{mW}$
- Frequency tolerance:  $\pm 50\text{ppm}$
- Aging for first year:  $\pm 3\text{ppm}$  (max.  $+25^\circ\text{C}$ )

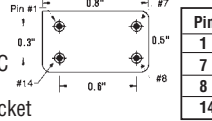
Part No.	Comparable to:	Imped.	1	10	100
14584	CY32.76	10.5pF	.49	.45	.39
325244	JVP-325243	12.5pF	.49	.45	.39

## TTL Oscillators

- Frequency stability  $\pm 100\text{ppm}$
- Operating temp.:  $0^\circ\text{C}$  to  $70^\circ\text{C}$
- Output load TTL: 10 TTL max.
- Machine tooled 4 pins

### Full Can

- Input volt.:  $+5\text{VDC} \pm 0.5\text{VDC}$
- Most fit into a 14-pos. DIP socket
- P/N 133006, below

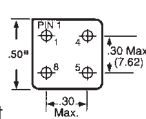


\*Web Code: XAD

Part No.	Frequency (MHz)	Max. Input Current	Rise Fall Time	Pricing		
				1	10	100
27861	1.0	7mA	15ns	\$1.95	\$1.79	\$1.59
27879	1.8432	7mA	15ns	1.95	1.79	1.59
27924	2.0	7mA	15ns	1.49	1.35	1.19
27967	4.0	7mA	10ns	1.95	1.79	1.59
27991	8.0	15mA	15ns	1.49	1.35	1.19
27887	10.0	15mA	10ns	1.49	1.35	1.19
27895	12.0	15mA	10ns	1.19	1.09	.99
27932	20.0	17mA	10ns	.75	.59	.39
2135321	24.0	30mA	8ns	.49	.39	.29
27941	32.0	18mA	7ns	.69	.55	.49
76822	33.0	18mA	6ns	1.95	1.79	1.59
153226	40.0	15mA	6ns	.99	.89	.79
2095381	60.0	65mA	5ns	.59	.49	.39

### Half Can

- Input voltage:  $+3.3\text{VDC} \pm 10\%$
- Most fit into a 8-pos. DIP socket
- P/N 676385, below



\*Web Code: MAM

Part No.	Frequency (MHz)	Max. Input Current	Rise Fall Time	Pricing		
				1	10	100
325462	1.0	15mA	10ns	\$1.19	\$1.09	\$0.99
102779	10.0	30mA	6ns	1.35	1.19	1.09
325665	20.0	30mA	10ns	.79	.69	.59
325702	32.0*	70mA	5ns	.39	.29	.22
354853	50.0*	70mA	10ns	.59	.49	.45

\*Arndt

## J-Bot v2.0: Customizable Do-It-Yourself Robot

Can detect objects in its way and drive around them all by itself. Just hook up the included ROMEO microcontroller board and you're ready to program. Romeo microcontroller is compatible with Arduino shields so you can add WiFi, bluetooth or XBee connectivity, or add music playback, data storage, or even a touch screen display. For step-by-step instructions, visit [www.jameco.com/JBot](http://www.jameco.com/JBot)

### Kit Includes:

- (1) solderless breadboard
- (1) (PING))) ultrasonic sensor
- (1) 4WD mobile platform
- (1) 3-pin extension cable
- (1) servo motor
- (1) ROMEO microcontroller
- (1) 20 piece hardware kit
- (8) AA alkaline batteries
- (2) 1/4 hex aluminum spacer
- (1) USB 2.0 cable

### Kit features:

- Arduino compatible MCU with built-in motor control
- 14 digital I/O ports for additional sensors or LCDs

Part No.	Description	Size (L"xW"xH")	1	5
2157124	J-Bot v2.0	7.9 x 6.7 x 4.1	\$159.95	\$144.95

\* ADT = Arndt Electronics | BEL = BEL Fuse | BSM = Bussmann | JVP = Jameco ValuePro | LTL = Littelfuse

## 5mm x 20mm Fast Acting Fuse Kit

- Glass cartridge, silver-end caps
- Voltage rating: 250VAC
- IEC127/BS4265/CEE4 spec.
- 100 pieces: 10 ea. of 0.1A, 0.2A, 0.5A, 1A, 1.6A, 2A, 2.5A, 3A, 4A and 5A



Part No.	Mfr. Part No.	1	10	25
645343	K/FF	\$15.95	\$14.95	\$13.95

\* Miscellaneous Fuses — Enter Web Code SVE

## Fuses

\*Web Code: QAM

### 5mm x 20mm Mini Fast Acting GMA Fuses (250V)

- Recommended for new designs \* Order in multiples of 10

Part No.	Mfr.	Cross Ref.	Amps	1	10	100
103887	JVP	GMA-250mA	.25A	.29	.25	.22
102041	JVP	GMA-500mA	.5A	.29	.25	.22
103908	JVP	GMA-1	1A	.29	.25	.22
103916	JVP	GMA-2	2A	.29	.25	.22
103924	JVP	GMA-3	3A	.29	.25	.22
103932	JVP	GMA-5	5A	.29	.25	.22
2159664	ADT	GMA-16	16A	*	.22	.17

### 1 1/4" x 1/4" Standard Fast Acting (250V) AGC/3AG Fuses



Part No.	Mfr.	Cross Ref.	Amps	1	10	100
69404	JVP	AGC-250mA	.25A	.35	.29	.25
10410	JVP	AGC-0.5	.5A	.35	.29	.25
10373	JVP	AGC-1	1A	.35	.29	.25
652949	LTL	312001.HXP	1A	.39	.35	.29
2205472	BSM	AGC-1-1/4	1.25A	.35	.29	.25
197528	JVP	AGC-1.6	1.6A	.25	.21	.17
10382	JVP	AGC-2	2A	.35	.29	.25
69439	JVP	AGC-3R	3A	.35	.29	.25
197544	JVP	AGC-4	4A	.35	.29	.25
10402	JVP	AGC-5	5A	.35	.29	.25
197552	JVP	AGC-6.3	6.3A	.35	.29	.25
69462	JVP	AGC-10	10A	.35	.29	.25
186301	JVP	AGC-16	16A	.35	.29	.25

### 5mm x 20mm Mini Slow Blow GMD Fuses (250V)



Part No.	Mfr.	Cross Ref.	Amps	1	10	100
197502	JVP	GMD-500mA	.5A	.39	.35	.29
2129836	BEL	5ST(P)630	.63A	.39	.35	.29
103827	BSM	GMC-1A*	1A	.39	.35	.29
197465	JVP	GMD-1	1A	.39	.35	.29
197472	JVP	GMD-2	2A	.39	.35	.29
197482	JVP	GMD-3.15	3.15A	.39	.35	.29
197500	JVP	GMD-5	5A	.39	.35	.29

\* Medium time delay type

### 1 1/4" x 1/4" Standard Slow Blow MDL/3AG Fuses (250V)

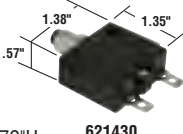


Part No.	Mfr.	Cross Ref.	Amps	1	10	100
653319	LTL	0313.125HXP	.125A	\$1.49	\$1.35	\$1.19
25655	JVP	MDL-1/4	.25A	.59	.55	.49
25689	JVP	MDL-1/2	.5A	.59	.55	.49
25639	JVP	MDL-1	1A	.59	.55	.49
25646	JVP	MDL-2	2A	.59	.55	.49
69535	JVP	MDL-3	3A	.49	.45	.39
25672	JVP	MDL-5	5A	.59	.55	.49
653589	LTL	313008HXP	8A	1.49	1.35	1.19
69570	JVP	MDL-10	10A	.59	.55	.49

# Fuses, Fuse Holders, Clips & Blocks

## GGC Circuit Breakers

- Quick connect style terminals (.25")
- Actuator: black plastic button
- Mounting hole: 0.450"
- Current rated for 125/250VAC/32VDC
- P/N 2186013: 1.1"L x .51"W x .79"H



621430

Includes: Nut, knurled nut, ID plate

\*Web Code: LCF

Part No.	Mfr. P/N	Curr. Rating (A@VAC)	1	10	100
2187868	98-05-A1B14-A0B	5 @ 125/250	\$2.95	\$2.75	\$2.49
621376	35-2105	5 @ 125/250	3.95	3.55	3.19
621413	35-2110	10 @ 125/250	3.95	3.55	3.19
2173061	W58-XB14A-10	10 @ 125/250	2.95	2.59	2.25
621430	35-2115	15 @ 125/250	3.95	3.55	3.19
2186013	SS-001*	15 @ 125	4.95	4.49	3.95
621448	35-2120	20 @ 125/250	3.95	3.55	3.19
612470	W28-XQ1A-20†	20 @ 250	2.49	2.25	1.95

\*Rocker switch style (snap-in), Reset/Off mark

†Rocker switch style (snap-in), 0.6" mounting hole

## 20A Circuit Breaker Leakage Protection Switch



- Earth leakage circuit protector
- 100-240VAC @ 50/60Hz 1000A, 20A
- Rated current: 20A
- 4 terminal line/load connection
- On-Trip-Off flip switch
- Test push button • High speed type
- Size: 2.8"L x 1.2"W x 1.6"H

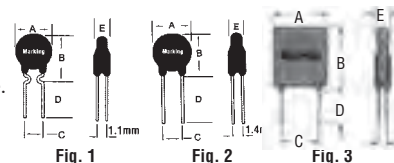
Part No.	Mfr. Part No.	1	10	100
2192798	EC2A2-020NZR	\$3.19	\$2.89	\$2.69

## EGE Resettable Fuses

Polymer Positive Temperature Coefficient (PPTC) fuses improve product quality performance and are resettable.

- Rated voltage: (V<sub>MAX</sub>): 60V • Max. current: (I<sub>MAX</sub>): 40A
- Lead length (D): 7.6mm min.
- Thickness (E): 3.1mm max.

\*Web Code: SBF



Part No.	Mfr. P/N	Hold Curr. (I <sub>H</sub> , A)	Trip Curr. (I <sub>T</sub> , A)	Fig.	Size (mm)				Pricing		
					A	B	C	E	1	10	100
199832	RA020-60	0.20	0.40	1	7.4	12.2	5.1	3.1	\$.49	\$.45	\$.39
199858	RA030-60	0.30	0.60	1	7.4	13.0	5.1	3.1	.59	.55	.49
199874	RA050-60	0.50	1.00	1	7.9	13.7	5.1	3.1	.59	.55	.49
199912	RA110-60	1.10	2.20	2	13.0	18.0	5.1	3.1	.59	.55	.49
199938	RA160-60	1.60	3.20	2	16.3	21.3	5.1	3.1	.59	.55	.49
200062	RB500-30	5.00	10.00	3	14.0	24.9	10.2	3.0	.49	.45	.39

## Bussmann Auto Fuses

### Automotive Blade Low Voltage Fuse

- Standard for battery applications
- Rated at 32VDC
- Fast acting
- SAE J1284 standard
- Common names: ATO/ATC



Fig. 1 (2135961)



Fig. 2 (1769330)

\*Web Code: ATF

Part No.	Mfr. Part No.	Fig.	Amps	1	10	100
2135890	APR-3A	1	3A	\$.59	\$.49	\$.39
2135902	APR-5A	1	5A	.49	.39	.32
2135929	APR-10A	1	10A	.59	.49	.39
1769330	ATM-15	2	15A	.49	.39	.32
2135937	APR-15A	1	15A	.49	.39	.32
2135945	APR-20A	1	20A	.59	.49	.39
2135961	APR-30A	1	30A	.49	.39	.29



## Low Profile PCB-Mount Fuse Clips

\*Web Code: UEA

†1. For GMA/GMD fuses 2. For 3AGC/MDL/AG fuses

- Low contact resistance
- Withstands shock/vibration
- Order in multiples of 10

Part No.	Description	For Use With†	Size (H" x W" x D" x P")	10	100	500
119280	5mm, side leads	1	.33 x .25 x .20 x .21	\$.15	\$.13	\$.09
102860	5mm, front leads	1	.37 x .25 x .21 x .19	.15	.13	.09
2099438	1/4", side leads	2	.42 x .25 x .20 x .21	.15	.13	.09
102842	1/4", front leads (10A)	2	.32 x .27 x .25 x .23	.15	.13	.09

## Printed Circuit Board Fuse Holder

- Current: 10A @ 250VAC

Part No.	Mfr.	Type	Size	Description	1	10	100
2178814	ValuePro	5 x 20mm	1.15"L x .48"W x .40"H	.5 lead space	\$.79	\$.69	\$.59

## 1/4" x 1/4" Standard In-Line Fuse Holders

- Built-in spring ensures good fuse connection
- Vinyl covered wire with stranded copper center

Part No.	Mfr.	AWG	Wire Lengths	Body Length	Color (Body/Wire)	1	10	100
109322	ValuePro	22	3.5/3"	2.4"	Black/Red	\$.79	\$.75	\$.69
102868	ValuePro	20	3/3"	2.2"	White/Red	.89	.79	.69
2221448	ValuePro	20	6/6"	1.6"	White/Red	.89	.79	.69
151918	ValuePro	18	6/6"	2.4"	White/Red	1.19	1.09	.95
108784	ValuePro	16	21/26"	2.2"	Black/Orange	1.79	1.55	1.29
108792	ValuePro	14	19/25"	2.5"	Black/Red	2.49	2.25	1.95



## Fuse Blocks

Part No.	Mfr. Part No.	Description (Rating)
2136243	BLC-20A	Single, snap-together block for multi-pole applications (125VAC, 15A) (250VAC, 10A)
2136251	BLC-20C	Single, snap-together block for multi-pole applications (125VAC, 8A) (250VAC, 8A)
2136294	BLR-I-30C	1-pos. w/ snap-in mount (124VDC, 30A), cover included†
2136278	BLR-I-30E	6-pos. w/ snap-in mount (30A per circuit, 100A max input), cover included†
2136286	BLR-I-310	10-pos. w/ snap-in mount (30A per circuit, 100A max input), cover included†

† LED indicator and 1/4" quick connect terminals

Compatible Fuses	1	10	100
1/4" x 1-1/4" fuses	\$1.09	\$.99	\$.89
5mm x 20mm fuses	1.25	1.09	.95
Automotive-blade fuses	3.49	3.19	2.89
Automotive-blade fuses	15.95	13.95	12.95
Automotive-blade fuses	21.95	19.95	17.95

\*Web Code: OFB



## EGE Fuse Holders

\*Web Code: UEA

### Omni-Blok® Molded Base Fuse Block

- Dielectric strength: 1500V min.
- Clip/terminals: tin plated spring brass
- Solder terminal \*1 3AG 2.5x20mm

Part No.	Mfr. Part No.	Curr. Rating	Size*	1	10	100
1711947	354800-GY	20A, 300V	1 ...	\$.99	\$.89	\$.79
2178700	5X20ST#	10A, 300V	2 ...	.75	.59	.59
1712608	520101†	10A, 300V	2 ...	.99	.89	.79

† PCB mount # Mfr.: Jameco ValuePro

### Panel Mount for 3AG Fuse

- Dielectric strength: 2400V min.
- Black thermoplastic, UL94V-0
- Terminals: copper & copper alloy, tin plated

Part No.	Mfr. Part No.	Curr. Rating	1	10	100
1711681	03420012H	20A, 250V	\$2.29	\$2.19	\$2.09

## Screw Driver Slot Fuse Holders

- Terminal • D-style • UL/CSA
- Mounting hole: .5"Dia. x .46" Flat

Part No.	Cross Ref.	Type	Current	Size (L" x Dia.)	1	10	100
102832	EF5609	5 x 20mm	10A @ 250VAC	1.4 x 0.6	\$1.95	\$1.75	\$1.59
2178742	5X20LFH	5 x 20mm	20A @ 300VAC	1.7 x 0.6	.99	.89	.79
2178777	FH032	1 1/4" x 1/4"	10A @ 250VAC	1.7 x 0.7	.75	.65	.55

## 5mm x 20mm Mini Thumbscrew Panel Mount Fuse Holders

- Straight solder terminal • Size: 1.5"L x 0.6"Dia.

Part No.	Mfr.	Curr. (A @ VAC)	Mounting Hole	1	10	100
150464	ValuePro	6 @ 250	.50"Dia. x .43"Flat	\$1.09	\$.99	\$.89
102825	ValuePro	10 @ 250	.50"Dia.	1.25	1.09	.95

## 1/4" x 1/4" Standard Thumbscrew Panel Mount Fuse Holders

- Straight solder terminal
- Current: 10A @ 250VAC

Part No.	Mfr.	Size (L x Dia.)	Mounting Hole	1	10	100
120994	ValuePro	1.95" x .71"	.58"Dia. (Double D-style)	\$.95	\$.85	\$.69
18703	ValuePro	2.05" x .71"	.58"Dia. x .52"Flat (D-style)	1.95	1.75	1.59
2179649	Bussman	2.64" x .79"	.505"Dia. x .473"Flat (D-style)	2.29	1.95	1.75
2215582	Bussman*	3.28" x .81"	.63"Dia. x .573" (Octagon)	5.95	5.49	4.95

\*Illuminates when fuse fails

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Hook-Up Wire & Telephone Cable

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

JAMECO ValuePro

## UL1007 & UL1569 Rated Stranded Hook-Up Wire

\*Web Code: JAS

- Applications: Interconnection circuits, wiring of computer and data processing equipment, automotive and applications
  - Additional colors available online • 300V peak • PVC insulation • Stranded • Sold in 100' & 1000' rolls • VW-1
  - Temp. range: -40°C to 80°C (UL1007); -40°C to 105°C (UL1569) • Tin-plated copper • Additional lengths available online
- Appliance Wiring Material (AWM) is a UL recognized covering of insulated wire & cable intended for internal wiring of appliances & equipment.



AWG	Stranding	UL1007	UL1569	Length	Black P/N	Red P/N	White P/N	Green P/N	Yellow P/N	Blue P/N	Brown P/N	Orange P/N	Violet P/N	Gray P/N	1	5
28	7 x 36	x	x	100	734611	734603	734610	734606	734605	734614	2184878	2184886	2184894	2184907	\$5.95	\$5.49
26	7 x 34	x	x	100	734511	734503	734510	734506	734505	734514	2184798	2184801	2184819	2184827	6.75	5.95
24	7 x 32	x	x	100	734411	734403	734410	734406	734405	734414	2171831	2171840	2171858	2171866	7.49	6.75
22	7 x 30	x		100	126085	126034	126077	310852	310878	310886	2184991	2185002	2185011	2185029	8.49	7.49
22	7 x 30	x	x	100	734311	734303	734310	734306	734305	734314	2138071	2138089	2138097	2138100	8.49	7.49
20	10 x 30	x		100	125840	125795	125831	310894	310915	310922	2185037	2185045	2185053	2185061	11.49	10.49
20	10 x 30	x	x	100	734211	734203	734210	734206	734205	734214	2171874	2171882	2171891	2171903	11.49	10.49
18	16 x 30	x		100	125787	125736	125752	310932	310949	310958	2185070	2185088	2185096	2185109	14.49	12.95
18	16 x 30	x	x	100	734111	734103	734110	734106	734105	734114	2171911	2171920	2171938	2171946	14.49	12.95
16	26 x 30	x	x	100	734011	734003	734010	734006	734005	734014	2184835	2184843	2184851	2184860	16.95	15.25

JAMECO ValuePro

## Solid Hook-Up Wire – 22 AWG

\*Web Code: PAF

- Temperature range: -55°C to +105°C
- Passes UL VW-1 flame test • MIL-W-16878/1, type B PVC
- For use with breadboards such as the JE20 series, pg 131
- Additional colors available online

Length	Black P/N	Blue P/N	Green P/N	Red P/N	White P/N	Yellow P/N	1	5	10
25'	2152876	2152884	2152892	2152905	2153553	2152921	\$3.95	\$3.59	\$3.29
100'	36792	36768	36822	36856	36881	36920	7.95	6.95	5.95
1000'	36805	36776	36840	36864	36899	36928	59.95	54.95	49.95

## 1/4-Lb. Nichrome Resistance Wire

- 60% nickel, 16% chromium, 24% iron
- Excellent resistance characteristics
- Temperature: to 1800°F (982°C)
- 24 AWG
- Nominal O.D.: 0.0201"

JAMECO ValuePro

\*Web Code: ZOR

Part No.	Length (ft.)	Ω/Ft. @ 68°F	1	5
2119419	205	1.671	\$14.95	\$13.95

JAMECO ValuePro

## Bus Bar Hook-Up Wire

\*Web Code: QCS

### Tinned Copper

- Solid soft drawn annealed tinned copper • Single conductor
- Approvals: ASTM-B-3, QQ-W-343-Type-S • No insulation
- Sold in 100' reels

Part No.	Gauge	O.D. (in.)	Amps	1	5	25
2098478	24 AWG	0.020	5	\$7.95	\$7.25	\$6.49
2098486	22 AWG	0.025	7	8.95	7.95	7.25
2098494	20 AWG	0.032	8.5	10.95	9.95	8.95
2098507	18 AWG	0.040	16	15.95	14.49	12.95
2098515	16 AWG	0.061	19	18.95	16.95	15.49

JAMECO ValuePro

## Stranded & Solid Hook-Up Wire Kits

- Solid: 105°C, tinned copper, MIL-W-16878/1, type B
- Stranded: 80°C, tin plated, UL1007
- Passes UL VW-1 flame test

\*Web Code: PAF

Part No.	AWG	Strands	Voltage	Wire Length	Colors	1	5
2130917	24#	7x32	60V	0-1=32', 2-9=16'	0-9	\$12.95	\$11.95
2207751	24#	Solid	60V	0-1=32', 2-9=16'	0-9	12.95	11.95
2187876	24	7x32	300V	0-1=32', 2-9=16'	0-9	11.95	10.95
2206264	22*	7x30	300V	25'	0-5	17.95	15.95
2206272	22*	7x30	300V	100'	0-5	36.95	32.95
2153705	22*	Solid	600V	25'	0-5	16.95	14.95
2159189	22	Solid	600V	100'	0-5	36.95	33.95
2183752	22*	Solid	600V	100'	0-5	39.95	35.95
2206281	18*	16x30	300V	25'	0-5	24.95	21.95

↑0=Black, 1=Red, 2=White, 3=Green, 4=Yellow, 5=Blue, 6=Brown, 7=Orange, 8=Violet, 9=Gray

\*Includes dispenser box # Mfr.: Velleman

## Modular Telephone Cable – 28 AWG

- Color coded conductors
- Flat modular cable • PVC jacket
- 7 x 43 stranded • Gray

\*Web Code: LCG

Part No.	Cross Ref. No.	Conductors	Length (ft.)	1	5	10
644674	300-840SL-1000	4	1000	\$54.95	\$49.95	\$44.95
644691	300-860SL-100	6	100	9.95	9.49	8.95
644703	300-860SL-1000	6	1000	74.95	69.95	66.95

For modular plugs, jacks and adapters, see page 45

## Kynar™ Wire-Wrap Wire – 30 AWG

\*Web Code: NAC

- Polyvinylidene fluoride insulation • Used for prototyping
- Silver plated copper (solid conductor) • UL 1423
- Temperature: -40°C to +125°C • Passes UL VW-1 flame test
- Wire wrap tools, pg 122 • See pg 12 for sockets

100 Foot Reel		Pricing		1000 Foot Reel		Pricing	
Part No.	Color	1	5	Part No.	Color	1	5
22542	Blue	\$11.95	\$10.95	22551	Blue	\$64.95	\$59.95
22577	Black	11.95	10.95	22585	Black	64.95	59.95
22631	Red	11.95	10.95	22649	Red	64.95	59.95
22665	White	11.95	10.95	22673	White	64.95	59.95
22606	Green	11.95	10.95	22614	Green	64.95	59.95
22700	Yellow	11.95	10.95	22702	Yellow	64.95	59.95

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## 1/4-Lb. Magnet Wire

\*Web Code: MGT

- Solid bare copper conductor
- Polyurethane/polyamide (nylon) insulation
- Solderable @ 806°F/430°C (14-24 AWG), 680°F/360°C (25-40 AWG)

Excellent Windability!

Part No.	Gauge	Nom. O.D	Length (ft.)	Temp. Range	1	5	25
2119363	30 AWG	.0109"	825	-30° - 155°C	\$9.95	\$8.95	\$7.95
2119355	28 AWG	.0136"	520	-30° - 155°C	9.49	8.49	7.59
2119347	26 AWG	.0169"	328	-30° - 155°C	8.95	7.95	7.25
2098419	24 AWG	.0213"	205	-30° - 130°C	8.49	7.49	6.79
2098401	22 AWG	.0265"	129	-30° - 130°C	7.95	6.95	6.25
2098398	20 AWG	.0334"	81	-30° - 130°C	7.49	6.75	5.95
2098380	18 AWG	.0418"	51	-30° - 130°C	7.25	6.49	5.79
2098371	16 AWG	.0524"	32	-30° - 130°C	6.95	6.25	5.49

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## Twisted Paired Cable – 24 AWG

- PVC insulation
- Use for hook-up wire
- Stranded tinned wire (7 x 32)
- Reduced EMI
- 80°C
- 300 V

\*Web Code: EBC

100 Foot Reel		Pricing		1000 Foot Reel		Pricing	
Part No.	Color	1	5	Part No.	Color	1	5
173164	Black/white	\$9.95	\$9.49	173172	Black/white	\$84.95	\$79.95
105912	Green/white	9.95	9.49	105807	Green/white	79.95	74.95
173148	Red/white	9.95	9.49	173156	Red/white	99.95	94.95



# Coaxial, Multi-Conductor, Paired & Speaker Cable

**BELDEN**

**JAMECO ValuePro**

## Coaxial Cable

**\* Web Code: CLC**

**Common Coax Cables:** RG-#/U (RG = Radio Grade; U = Universal)  
RG-59: Baseband video in CCTV, low shielding, 75Ω

RG-58: Radio communication, amateur radio, 50Ω

RG-174: Wi-Fi pigtails, more flexible but higher loss than RG-58, 50Ω

- Color: black
- PVC jacket
- A = Polyethylene insulated

Part No.	Mfr.	Product No.	Fig.	Length	AWG	Type	Nom. Imp (Ω)	Insul.	Bare Copper	Braid Shield	Pricing	
											1	5
2124146	JVP	4449-100	1	100' Reel	19 Stranded	RG58A/U	50	A	0.036"	95	\$39.95	\$35.95
644754	JVP	RG58/U-100	2	100' Reel	20 Solid	RG58/U	50	A	0.015"	38	29.95	26.95
232653	BDN	9259 010100	3	100' Reel	22 Stranded	RG59/U	75	A	0.030"	95	49.95	44.95
644818	JVP	RG174/U-100	1	100' Reel	26 Stranded	RG174/U	50	A	0.020"	98	21.95	19.95
644826	JVP	RG174/U-1000	1	1000' Reel	26 Stranded	RG174/U	50	A	0.020"	98	179.95	169.95



Fig. 1



Fig. 2



Fig. 3

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## Multi-Conductor Cable

**\* Web Code: MCC**

Part No.	Mfr.	Product No.	Fig.	AWG (stranded)	# of Cond.	Length	Jacket	Wire Color	Insul.	Nom. O.D.	Pricing	
											1	5
732996	BDN	8442 060100	1	22 <sup>1</sup>	2	100' Reel	Chrome/PVC	Black, Red	A	0.170"	\$41.95	\$37.95
733008	BDN	8442 060500	1	22 <sup>1</sup>	2	500' Reel	Chrome/PVC	Black, Red	A	0.170"	189.95	169.95
734054	BDN	8442 060U1000	1	22 <sup>1</sup>	2	1000' Unreel	Chrome/PVC	Black, Red	A	0.170"	349.95	319.95
733024	BDN	8443 060100	2	22 <sup>1</sup>	3	100' Reel	Chrome/PVC	Black, Red, Green	A	0.172"	59.95	53.95
733032	BDN	8443 060500	2	22 <sup>1</sup>	3	500' Reel	Chrome/PVC	Black, Red, Green	A	0.172"	249.95	224.95
733059	BDN	8444 060100	3	22 <sup>1</sup>	4	100' Reel	Chrome/PVC	Black, Red, White, Green	A	0.185"	69.95	62.95
733067	BDN	8444 060500	3	22 <sup>1</sup>	4	500' Reel	Chrome/PVC	Black, Red, White, Green	A	0.185"	299.95	269.95
2119494	JVP	5411-100	4	22 <sup>1</sup>	5	100' Reel	Gray/PVC	Blk, Red, Wh, Grn, Brn	A	0.190"	44.95	42.95
2119558	JVP	5578-100	5	18/20 drain wire <sup>2</sup>	3	100' Reel	Chrome/PVC	Black, Red, White	B	0.230"	49.95	44.95
2119531	JVP	5576-100	5	22/22 drain wire <sup>2</sup>	3	100' Reel	Gray/PVC	Black, Red, White	B	0.190"	29.95	28.49
644383	JVP	SC4-25	6	24 drain wire <sup>2</sup>	4	25' Reel	Gray/PVC	Multi-Colored	A	0.200"	9.95	8.95
644391	JVP	SC4-100	6	24 drain wire <sup>2</sup>	4	100' Reel	Gray/PVC	Multi-Colored	A	0.200"	29.95	26.95
644404	JVP	SC4-1000	6	24 drain wire <sup>2</sup>	4	1000' Reel	Gray/PVC	Multi-Colored	A	0.200"	219.95	199.95
644412	JVP	SC-925	6	24 drain wire <sup>2</sup>	9	25' Unreel	Gray/PVC	Multi-Colored	A	0.230"	15.95	14.49
644421	JVP	SC9-100	6	24 drain wire <sup>2</sup>	9	100' Reel	Gray/PVC	Multi-Colored	A	0.230"	44.95	39.95
644439	JVP	SC9-1000	6	24 drain wire <sup>2</sup>	9	1000' Reel	Gray/PVC	Multi-Colored	A	0.230"	349.95	329.95
644447	JVP	SC15-25	6	24 drain wire <sup>2</sup>	15	25' Unreel	Gray/PVC	Multi-Colored	A	0.280"	19.95	17.95
644455	JVP	SC15-100	6	24 drain wire <sup>2</sup>	15	100' Reel	Gray/PVC	Multi-Colored	A	0.280"	59.95	53.95
644463	JVP	SC15-1000	6	24 drain wire <sup>2</sup>	15	1000' Reel	Gray/PVC	Multi-Colored	A	0.280"	449.95	399.95
644471	JVP	SC25-25	6	24 drain wire <sup>2</sup>	25	25' Unreel	Gray/PVC	Multi-Colored	A	0.370"	29.95	26.95
644480	JVP	SC25-100	6	24 drain wire <sup>2</sup>	25	100' Reel	Gray/PVC	Multi-Colored	A	0.370"	99.95	89.95
2006377	JVP	SC25-500	6	24 drain wire <sup>2</sup>	25	500' Unreel	Gray/PVC	Multi-Colored	A	0.370"	499.95	449.95



Fig. 1



Fig. 2



Fig. 3

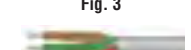


Fig. 4

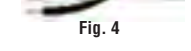


Fig. 5

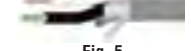


Fig. 6

1 = Unshielded  
2 = 100 Aluminum/  
Mylar Shield 100%  
A = PVC B = Polyethylene  
Blk = Black Brn = Brown  
Grn = Green Wh = White

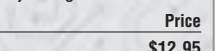
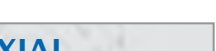
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## Paired Cable

**\* Web Code: HCS**

Part No.	Mfr.	Product No.	Fig.	AWG/Drain Wire	# of Pairs	Length	Jacket	Wire Color	Insul.	Pricing	
										1	5
2119515	JVP	5574-100	1	18 / 24	1	100' Reel	Chrome/PVC	Black/White	A	\$39.95	\$35.95
733112	BDN	8451 010100	2	22 / 22	1	100' Reel	Black/PVC	Black/Red	B	32.95	29.95
734063	BDN	8451 010U500	2	22 / 22	1	500' Unreel	Black/PVC	Black/Red	B	149.95	139.95
734180	BDN	8723 060100	3	22 / 24	2	100' Reel	Chrome/PVC	Black/Red, Green/White	B	59.95	53.95
734184	BDN	8723 060U500	3	22 / 24	2	500' Unreel	Chrome/PVC	Black/Red, Green/White	B	274.95	254.95



## Zip Automotive Speaker Cable

- Good for automotive or language labs
- High definition, low loss
- Red/black color coded PVC
- Voltage: 300VAC, 60VDC
- Annealed stranded bare copper wire (16 x 30)



2173845

Part No.	AWG	Strands	Length	1	5
2173845	18	16 x 30	100' ...	\$34.95	\$31.95
2206299	18	16 x 30	25' .....	10.95	9.95

\* BDN = Belden | JVP = Jameco ValuePro

**JAMECO ValuePro**

## 2-Conductor Power/Speaker Cable

**\* Web Code: VAL**

- Black wire has white polarity stripe
- Temp. rating: 20°C to 60°C
- Stranded copper wire (7 x 32)
- Operating voltage: 300V • 24 AWG
- White wire has textured jacket for polarity



Part No.	Cross Ref. No.	Color	Length	1	5	10
100280	CAR45B-100	Black	100'	\$9.95	\$8.95	\$7.95
100299	CAR45B-1K	Black	1000'	69.95	62.95	56.95
2208391	CAR45W-1K	White	1000'	59.95	54.95	49.95

## ROTARY COAXIAL CABLE STRIPPER

- 2-blade type
- Strip RG cable (RG-58/59/62/174)
- Strip cable sizes 4-12mm diameter
- Adjustable stripping distance
- Includes hex wrench for adjusting blade



Part No.	Description	Price
159185	3.9"L x 0.7"W	\$12.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
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Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Flat Ribbon & Ethernet Network Cable

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

JAMECO ValuePro

## 28 AWG (7 x 36) Gray and Multicolor Flat Ribbon Cable

See page 56 for IDC Connectors

### Gray Cable

- Insulation: polyvinyl chloride (PVC)
- Single edge red stripe for pin 1 orientation
- Center spacing: 0.05"

\*Web Code: WBX



Part No.	Cross Ref. No.	Conductors	Length	1	5	25
643794	171-10-10	10	10'	\$3.49	\$3.25	\$2.95
643807	171-10-25	10	25'	7.95	6.95	5.95
643815	171-10-100	10	100' reel	21.95	19.95	17.95
643831	171-16-10	16	10'	4.95	4.49	3.95
643840	171-16-25	16	25'	11.95	10.95	9.95
643858	171-16-100	16	100' reel	34.95	31.49	27.95
643874	171-20-10	20	10'	5.95	5.49	4.95
643891	171-20-100	20	100' reel	44.95	39.95	35.95
643911	171-25-10	25	10'	6.95	6.49	5.95
643938	171-25-100	25	100' reel	49.95	46.95	43.95
643962	171-26-10	26	10'	8.49	7.49	6.75
643989	171-26-100	26	100' reel	59.95	53.95	48.95
644033	171-34-10	34	10'	9.95	8.95	7.95
644050	171-34-100	34	100' reel	64.95	59.95	53.95
644076	171-37-10	37	10'	11.95	10.95	9.95
644092	171-37-100	37	100' reel	69.95	66.95	63.95
644121	171-40-25	40	25'	29.95	26.95	23.95
644130	171-40-100	40	100' reel	79.95	69.95	62.95
644164	171-50-25	50	25'	34.95	31.49	28.49
644172	171-50-100	50	100' reel	89.95	79.95	74.95
644199	171-60-10	60	10'	10.95	9.95	8.95
644201	171-60-25	60	25'	21.95	19.95	17.95
644210	171-60-100	60	100' reel	79.95	74.95	69.95

### Multicolor Cable

- Standard 10-color repeat sequence
- Voltage rating: 300V
- Center spacing: 0.05"
- Stranded copper wire
- Temperature rating: -20°C to +80°C



\*Web Code: WCF

Part No.	Cross Ref. No.	Conductors	Length	1	5	25
639672	28RC10-10	10	10'	\$5.95	\$5.49	\$4.95
643508	28RC10-25	10	25'	12.95	11.49	10.49
643516	28RC10-100	10	100' reel	39.95	35.95	32.49
643532	28RC16-10	16	10'	7.95	6.95	6.25
643541	28RC16-25	16	25'	19.95	17.95	15.95
643559	28RC16-100	16	100' reel	59.95	53.95	48.95
643575	28RC20-10	20	10'	10.95	9.95	8.95
643583	28RC20-25	20	25'	23.95	21.95	19.95
643639	28RC25-100	25	100' reel	89.95	79.95	69.95
643698	28RC40-10	40	10'	26.95	23.95	21.95

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## 10-Conductor Flat Ribbon Cable – Gray

.100" (2.54mm) — 24AWG

- Capacitance: 31pF/m
- Insulation resis.: 100MΩ
- Temperature rating: 105°C
- Insulation material: 7mm polyvinyl chloride (PVC) gray

\*Web Code: WBX



Part No.	Cross Ref. No.	Conductor	Length	1	5	25
363813	H24G-10-10	10	10'	\$9.95	\$8.95	\$7.95

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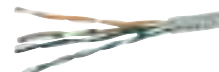
## Bulk Category 5e Network Cable



\*Web Code: KCG



Blue



Gray

### 24 AWG UTP Category 5e Enhanced - 350MHz (Non-Plenum)

Part No.	Cross Ref. No.	Length	Color	Description	1	5
645722	10X5-704TH-100VP	100'	Blue	Solid	\$16.95	\$15.95
645731	10X5-704TH-1000VP	1000'	Blue	Solid	129.95	119.95
644615	10X5-804TH-100	100'	Blue	Stranded	16.95	15.95
644623	10X5-804TH-1000	1000'	Blue	Stranded	129.95	119.95
644594	10X5-801TH-1000	1000'	Gray	Stranded	139.95	129.95



## WiFi Modules and Adapters

Add wireless connectivity to your computer or electronics project.

- 2.4GHz 802.11 b/g/n
- WEP/WPA security
- FCC approved

2189610



2189636

Part No.	Manufacturer	Description	Price
2223953	EDUP	USB WiFi adapter, plug-n-play, RTL8188CU	\$14.95
2189610	Electric Imp	ImpCard WiFi module in SD card form factor	29.95
2189636	Electric Imp	April breakout board (SD socket) required for impCard	13.95

JAMECO ValuePro

## Ethernet Network Cable Assemblies

### Category 5e

- 8P8C • 4 pair • Unshielded Twisted Pair (UTP) • 350 MHz • "Snagless" boot
- 24 AWG (7 x 43) stranded • T568B color coded for easy wire tracing

Part No.	Length	Color	1	10	100	Part No.	Length	Color	1	10	100
168292	3 ft.	Gray	\$1.75	\$1.59	\$1.39	1945381	5 ft.	Blue	\$1.95	\$1.75	\$1.65
201697	3 ft.	Black	1.75	1.59	1.39	2138708	7 ft.*	Blue	1.95	1.75	1.49
201700	7 ft.	Black	2.75	2.49	2.25	201742	7 ft.	Blue	2.75	2.49	2.25
201718	15 ft.	Black	3.95	3.55	2.95	201751	15 ft.	Blue	3.95	3.55	2.95
201726	25 ft.	Black	6.49	5.95	5.49	201814	3 ft.	Yellow	1.75	1.59	1.39
201734	3 ft.	Blue	1.75	1.59	1.39	201822	7 ft.	Yellow	2.49	2.25	1.95

\*Without "Snagless" boot

### Category 6

- Gold over nickel contacts • With RJ45 plugs and molded strain reliefs
- Assembled using ETL verified 24AWG stranded cable • 550 MHz
- Exceeds performance levels as specified in TIA/EIA 568B.2-1 category 6

Part No.	Length	Color	1	10	100	Part No.	Length	Color	1	10	100
219707	3 ft.	Gray	\$2.25	\$1.95	\$1.75	219918	7 ft.	Red	\$3.25	\$2.95	\$2.49
219871	14 ft.	Blue	3.95	3.59	3.25	219791	50 ft.	Black	14.95	13.49	11.95

\*Web Code: CAE



\*Web Code: BBK



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## Cat 5e Network Crossover Cable

\*Web Code: CAE

### Category 5e – 350MHz

- Connect 2 PCs without a hub
- 24AWG (7 x 43) stranded
- Strain relief RJ45 connectors
- 4-pair • 8P8C • UTP

Part No.	Length	Color	1	10	100
302041	7 ft.	Gray	\$3.75	\$3.35	\$2.95



## 5-Port Industrial Ethernet Switch

- Auto MDI/MDI-X crossover for plug-and-play
- Supports 10/100Mbps auto negotiation
- IEEE 802.3, 802.3u, 802.3x
- LED indicators for power, 10/100M, Link/Act
- DIN rail mountable

\*Web Code: CAK

Part No.	Mfr. Part No.	1	5
2129019	NS-205	\$98.95	\$93.95

# Modular Plugs, Jacks, Cable & Accessories

JAMECO ValuePro

## Modular Plugs

P = No. of positions  
C = No. of contacts



★ Web Code: FBB

• Unshield except P/N 116602 & 116611

\* Order in multiples of 10

Part No.	Mfr.	Description	Size (L" x W" x H")	UL	1	10	100	500
103491	ValuePro	4P4C (N/A) for flat or oval handset wire	.49 x .30 x .26	None	★	\$ .19	\$ .15	\$ .12
525085	AMP	4P4C (N/A) for flat oval stranded wire	.53 x .46 x .26	None	.35	.25	.19	.18
79290	ValuePro	6P4C (RJ14) for round stranded wire	.49 x .38 x .26	UL94V-0	★	.19	.15	.13
79273	ValuePro	6P6C (RJ12) for flat stranded wire	.49 x .38 x .26	None	.29	.25	.22	.19
79281	ValuePro	8P8C (RJ45) for flat stranded wire	.85 x .46 x .31	None	.45	.39	.35	.29
119343	Steren	8P8C (RJ45) for round solid wire	.85 x .46 x .31	None	.45	.39	.35	.29
524525	AMP	8P8C (RJ45) for round stranded wire	.84 x .46 x .31	UL94V-2	.89	.85	.79	.75
116602	ValuePro	8P8C (RJ45) for round stranded wire*	.85 x .46 x .31	UL94V-2	.95	.89	.79	.69
116611	ValuePro	8P8C (RJ45) for round stranded wire*	.87 x .46 x .33	UL94V-0	1.09	.99	.89	.79
180646	ValuePro	10P10C (RJ50) for round stranded wire	.85 x .46 x .31	None	.49	.45	.39	.35

\* Shielded

JAMECO ValuePro

## Modular Jacks

★ Web Code: NEL



Part No.	Mfr.	Description	Panel Mnt.	Size (L" x W" x H")	1	10	100
115128	JVP	4P4C (N/A) side entry, std. latch, no panel stops, for handset	No	.51 x .40 x .57	★	\$ .39	\$ .35
2211151	JVP	6P4C (N/A) top entry, std. latch, no panel stops, for handset, 14" leads	No	.54 x .59 x .72	.79	.69	.59
151766	JVP	6P4C (RJ14) side entry, standard latch, panel stops	Yes	.80 x .52 x .59	.65	.59	.55
2209692	ADM	6P4C (RJ14) side entry, center latch, panel stops	Yes	.54 x .59 x .72	1.09	.99	.89
124039	JVP	6P6C (RJ25) top entry, standard latch, panel stops, 6" leads	Yes	.54 x .59 x .72	1.25	1.09	.99
524277	AMP	6P6C (RJ25) top entry, standard latch, panel stops	Yes	.53 x .64 x .63	.95	.89	.79
2209721	ADM	6P6C (RJ25) top entry, standard latch, panel stops	Yes	.63 x .63 x .65	.39	.29	.19
2178216	ADM	6P6C (RJ25) side entry, standard latch, panel stops	Yes	.59 x .56 x .57	.29	.25	.19
115837	JVP	6P6C (RJ25) side entry, standard latch, panel stops	Yes	.51 x .48 x .57	.85	.75	.65
524488	AMP	8P8C (RJ45) side entry, standard latch, no panel stops	Yes	.66 x .62 x .63	.95	.85	.75
115844	ADM	8P8C (RJ45) side entry, standard latch, no panel stops	No	.52 x .62 x .58	.79	.69	.59
524461	AMP	8P8C (RJ45) side entry, standard latch, no panel stops, LP	Yes	.72 x .61 x .50	.79	.75	.69
2278258	JVP	8P8C (RJ45) side entry, standard latch, no panel stops, LP	No	.71 x .60 x .46	.49	.39	.29
203449	JVP	8P8C (RJ45) side entry, standard latch, no panel stops, shielded	No	.84 x .63 x .53	.89	.79	.75
2210183	ADM	8P8C (RJ45) side entry, standard latch, shield	Yes	.84 x .63 x .52	.89	.79	.75
2209713	ADM	8P8C (RJ45) side entry, center latch, panel stops	Yes	.70 x .63 x .50	.59	.49	.39

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## RS-232-to-Registered Modular Datacom Adapters

Simplify networking applications when changing your RS-232 port to an RJ11, RJ12 or RJ45 modular jack.

Includes: All necessary hardware and wiring

★ Web Code: RDR

Part No.	Mfr.	Description	1	10	100
66181	JVP	DB9 M to RJ12 (6P6C)	★	\$1.75	\$1.49
66191	JVP	DB9 M to RJ45 (8P8C)	2.25	1.95	1.75
614977	GCE	DB9 M to RJ45 (8P8C)	2.49	2.25	1.95
2129596	SIG	DB9 M to RJ45 (8P8C)†	5.95	5.49	4.95
614985	GCE	DB9 F to RJ11 (6P4C)	1.95	1.75	1.49
114738	JVP	DB9 F to RJ11 (6P4C)	1.95	1.75	1.59
66203	JVP	DB9 F to RJ12 (6P6C)	2.49	2.25	1.95

Part No.	Mfr.	Description	1	10	100
66212	JVP	DB9 F to RJ45 (8P8C)	★	\$2.49	\$2.25
615005	GCE	DB9 F to RJ45 (8P8C)	2.75	2.49	2.25
66229	JVP	DB25 M to RJ12 (6P6C)	1.95	1.75	1.59
66237	JVP	DB25 M to RJ45 (8P8C)	1.85	1.69	1.49
2179420	SPC	DB25 M to RJ45 (8P8C)*	1.49	1.25	1.09
66254	JVP	DB25 F to RJ45 (8P8C)	1.85	1.69	1.49

\* Black

† 1 ft. cable

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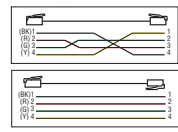
## Modular Telephone/Printer Sharing Cable (Gray)

★ Web Code: EBF

- RJ11 – 4P4C for telephone or network
- RJ11 – 6P6C for telephone or printer sharing
- RJ45 – 8P8C for telephone or modem dial-up use

Style 1 – Reverse wiring for telephone systems

Style 2 – Straight wiring for networking/printer sharing

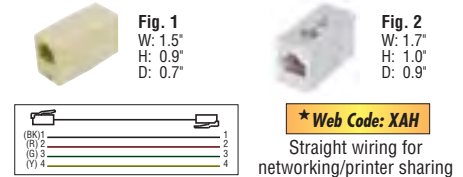


Part No.	Conn. Style	Type	Length	Pricing		
				1	10	100
2211143	1	RJ11-4P4C	7ft.	★	\$1.15	\$ .95
2125851	1	RJ11-6P4C	6ft.	.49	.45	.39
196227	1	RJ11-6P4C	7ft.	1.75	1.59	1.39
115554	2	RJ11-6P4C	7ft.	1.75	1.59	1.39
115588	1	RJ12-6P6C	7ft.	1.49	1.35	1.19
115617	2	RJ12-6P6C	7ft.	1.95	1.75	1.59
201232	2	RJ11-6P4C†	35ft.	.99	.85	.69

† Beige

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## Modular Couplers



★ Web Code: XAH

Straight wiring for networking/printer sharing

Part No.	Description	Fig.	Pricing		
			1	10	100
135087	6P6C modular coupler, RJ12	1	★	\$1.09	\$ .99
135079	8P8C modular coupler, (for CAT5) RJ45	1	1.39	1.25	1.15
2217043	8P8C modular coupler, (for CAT5e) RJ45	2	2.95	2.65	2.39

## AMP 8P8C In-Line Couplers

- Panel mount thickness: 0.062" nominal
- Housing: black polyphenylene oxide
- Terminals: 0.018" diameter phosphor bronze with 50µ" gold over nickel
- Snaps into 0.595" x 0.765" rectangular wall plate cut-outs

Part No.	Mfr.	Mfr. Part No.	1	10	100
524445	AMP	555052-1	\$6.95	\$6.25	\$5.59
2160649	JVP	MCJ-88	2.49	2.25	1.95

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## RJ45-Plug Color Caps (Boots)

- Round strain relief
- Order in multiples of 10

★ Web Code: JBG

Part No.	Color	10	100	500	1000
204410	Black	★	\$ .17	\$ .15	\$ .12
204353	Gray	.17	.15	.12	.10
204362	Blue	.19	.17	.15	.12



## ALL YOUR POWER CORD NEEDS

★ Web Code: UBF

2 & 3 Conductor Fan, Pigtail, Detachable & Hospital Grade Power Cords at Industry Low Prices! See Page 100 for Complete Selection.



\* ADM = Adam Tech | AMP = AMP | GCE = GC Electronics | JVP = Jameco ValuePro | SIG = SIG, Inc. | SPC = SPC Technology

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# Modular Jacks, Plugs, Cable Ties & Accessories

3 LEVELS OF SAVINGS		
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## STEREN Modular Jack Boxes

W: 2.0"  
H: 2.2"  
D: 0.9"



\*Web Code: UAM

Part No.	Description	Pricing		
		1	10	100
71984	6P6C adhesive jack RJ12 (beige)	\$1.19	\$1.05	\$ .89
71651	8P8C adhesive jack RJ45 (beige)	1.29	1.15	.99

## JAMECO ValuePro Keystone-Type RJ45 Jacks

### Modular Punchdown Type

- CAT 5e classification
- Punchdown type wiring connections with color coding
- Size: 0.57"W x 1.23"D x 0.63"H



212944

\*Web Code: MBV

Part No.	Description	Color	1	10	100
212951	8P8C (RJ45)	Blue	\$2.95	\$2.65	\$2.39
212944	8P8C (RJ45)	White	2.49	2.25	1.95

## EZ-RJ45 Category 5 Modular Plug

Strip the wire and insert into the plug & pull out the wire on the other side. This ensures correct conductor order and uniformity in crimping. No wire bar and no wasted cable.



\*Web Code: FBB

Part No.	Mfr. Part No.	Description	1	10	100
158115	300568EZ	8P8C, CAT5	\$1.75	\$1.59	\$1.45

Network Bulk Cable, see page 44

## Professional Modular Connector Crimping Tool

- 6mm and 12mm stripping guide
- Spring return action
- Crimp modular plugs without changing dies
- Crimps 10P10C, RJ45: 8P8C, RJ11 and RJ12: 6P6C and 4P4C
- Insulated handles
- Size: 8.2"L • Weight: 1.2 lbs.
- Comes with a small flathead screwdriver



Part No.	Mfr. Part No.	1	5	25
181148	HT200A	\$54.95	\$49.95	\$44.95

## ARDUINO YUN

The perfect Arduino competitor to the Raspberry Pi for the Internet-of-things.

- Full Arduino IDE support
- Embedded Linux MPU; Atheros AR9331 running OpenWRT Linux OS
- On board WiFi, Ethernet & USB host
- Built-in microSD card slot
- Program over-the-air while on same WiFi
- 20 digital I/O, 12 analog input, 7 PWM, 802.11b/g/n, 802.3 10/100Mbps



Part No.	Mfr. Part No.	1	5
2193441	A000008	\$84.95	\$76.95

## JAMECO ValuePro 3" to 13" Nylon Cable Ties

### Standard

- Cable ties made from UL approved Nylon 66
- Temp. range: -40°C to +85°C
- Flammability rating: UL 94V-2
- Color: natural

70561

\*Web Code: QAV

Part No.	Size (L" x W")	Tensile Strength	100	1000
70561	3.0 x 0.10	18 lbs.	\$ .03	\$ .02
126544	4.0 x 0.10	18 lbs.	.04	.03
139150	8.0 x 0.10	18 lbs.	.05	.04
182669	8.0 x 0.13	18 lbs.	.06	.05
182685	8.0 x 0.18	18 lbs.	.07	.06
70907	6.0 x 0.14	40 lbs.	.08	.06
190756	10.0 x 0.14	40 lbs.	.09	.07
190772	11.0 x 0.19	40 lbs.	.10	.08
190764	13.0 x 0.14	40 lbs.	.11	.09

### Weather Resistant (black)

- Contains Carbonate A for greater resistance to ultraviolet rays in outdoor use
- UL94V-2

104142

UV Resistant

Part No.	Size (L" x W")	Tensile Strength	100	1000
139125	3.0 x 0.10	18 lbs.	\$ .04	\$ .03
104142	4.0 x 0.10	18 lbs.	.05	.03
104134	6.0 x 0.10	40 lbs.	.08	.05
190782	8.0 x 0.13	40 lbs.	.11	.08
190800	10.0 x 0.14	40 lbs.	.15	.12
190802	13.0 x 0.14	40 lbs.	.19	.17

### Cable Tie Assortment Kits

- Tensile strength: 18-50 lbs.
- UL94V-2

145701: 4"L x 0.1"W

150412: 500 pcs. (4"L x 0.1"W); 300 pcs. (8"L x 0.13"W); 50 pcs. (11"L x 0.18"W)

Part No.	# of Pieces	# of Colors	1	5	25
145701	1000	10	\$14.95	\$13.49	\$11.95
150412	850	5	22.95	20.95	18.95

## JAMECO ValuePro Cable Tie Mounts & Cable Clamps

- Tie mount and screw tab cable clamps
- Material: UL approved nylon 66, 94V-2

\*Web Code: FBE



Fig. 1

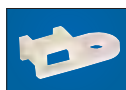


Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Part No.	Cross Ref. No.	Fig.	Description	Order in multiples of 10		
				10	100	1000
171214	HC-100	1	4-way cable tie mount, self-adhesive, use w/ 0.1"W max., 0.5" square	\$ .16	\$ .14	\$ .13
182942	0505HC-101S	1	4-way cable tie mount, self-adhesive, use w/ 0.2"W max. ties, 0.75" square	.18	.16	.14
71408	HC-101	1	4-way cable tie mount, self-adhesive, use w/ 0.1"W max. ties, 0.9" square	.19	.17	.15
71395	HC-102	1	4-way cable tie mount, self-adhesive, use w/ 0.2"W max. ties, 1.1" square	.23	.20	.18
71386	HC-103	1	2-way cable tie mount, self-adhesive, use w/ 0.2"W max. ties, 1.1" square	.29	.27	.25
70595	HC-0	2	4-way cable tie, screw type, use w/ 0.2"W max., 0.8"L x 0.4"W	.19	.17	.15
173761	HC-1	3	Cable tie mount, saddle type, 0.14" screw hole, 0.6"L x 0.4"W, use w/ 0.2"W max. ties	.12	.11	.10
182301	0510HC-2	3	Cable tie mount, saddle type, 0.14" screw hole, 0.9"L x 0.6"W, use w/ 0.35"W max. ties	.17	.15	.14
182334	0520FC-1	4	Cable tie mount, self-adhesive, 0.5"L x 0.4"W, use w/ 0.3"W max. ties	.21	.19	.16
173729	UC0.5	5	Cable clamp for 3/16" cable, white nylon	.13	.11	.09
173737	UC1	5	Cable clamp for 1/4" cable, white nylon	.13	.11	.09
2222256	8101*	5	Cable clamp for 1/4" cable, steel	.19	.15	.12
173753	UC716	5	Cable clamp for 7/16" cable, white nylon	.15	.13	.11
71062	MCV-100R	6	Cable ID tie (4"L x 0.1"W) with tab (.98"W x .31"H)	.19	.17	.15

\*Keystone

## JAMECO BenchPro Universal Cable Tie Tool

- 0.1" - 0.19" width cable ties
- Tension adjustable
- Spring return action
- Metal



Part No.	Cross Ref. No.	1	5	10
182298	0302TG-7	\$19.95	\$18.49	\$16.95

## Round-Type Strain Relief Bushings

- UL approved nylon 66, 94V-2
- Used extensively for protecting cords and to prolong cord life
- Order in multiples of 10



182369

Part No.	Cable Type	Length (in.)	10	100	1000
182351	SVI/SVT, 18 AWG	.43	\$ .14	\$ .12	\$ .10
182369	SJ/SJT, 16 AWG	.58	.19	.13	.10

## 17" Self-Grip/Wrap Velcro Straps

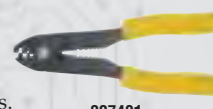
- Wrap around anything and sticks to itself for fast, easy bundling
- Bundle cords, cables, wires, pipes, tubing and trees (landscaping)
- Grip on one side, loop on back
- Eliminates plastic tie wraps and hardware
- Reusable
- Size: 17"L x 1/2"W (cut to your length)
- Color: black
- 12 pieces in pack



Part No.	Description	1	10	20
2125325	Self-grip/wrap velcro	\$5.95	\$5.39	\$4.95

## TOP TOOLS

Designed to crimp terminals, strip and cut wires and cut bolts.



Part No.	Description	Price
227491	Molex 0.062/0.093" crimper	\$14.95
159266	D-Sub pin/socket crimper	15.95
177608	4.5" half-round long nose plier	5.49
2123320	4.5" diagonal cutters	4.95

# Braid, Heat Shrink Tubing & Heat Guns

## FLEXO® Braided Sleeve

- Color: black
- Length: 25 feet
- Cut and abrasion resistant
- Maintains properties across wide temperature range
- UV resistant

### Flexo® Clean-Cut Braided

- Dense braid structure provides fuller coverage
- Fray resistant when cut w/ scissors

Part No.	Mfr. Part No.	Min/Max Flex (in.)	Inside Dia. (in.)	Outside Dia. (in.)	1	5
162157	CCPO.25BK25	5/32 - 7/16	0.250	0.440	\$15.95	\$14.49
162165	CCPO.50BK25	1/4 - 3/4	0.500	0.750	17.95	15.95

### Flexo® Pet Braided

- Braided from 10 mil polyethylene terephthalate monofilament yarns
- UL recognized component
- Conforms to FMVSS 302
- High tensile strength

Part No.	Mfr. Part No.	Min/Max Flex (in.)	Inside Dia. (in.)	Outside Dia. (in.)	1	5
693679	PTN0.25BK25	1/8 - 7/16	0.250	0.440	\$8.95	\$7.95
695383	PTN0.50BK25	1/4 - 3/4	0.500	0.550	13.95	11.95

## SUMITOMO ELECTRIC Heat Shrink Solder Termination Sleeve

- High performance transparent heat-shrinkable outer sleeve
- Fluxed solder preform with thermochromics indicator paint
- Pre-installed 6", 20 AWG ground lead/braid

Part No.	Mfr. Part No.	Description	1	10	100
2217887	H-ML-4-94	Heat shrink solder sleeve	\$1.49	\$1.35	\$1.09

## JAMECO ValuePro Flat & Tubular Tinned Copper Braid

These braids are used for shielding cables and ground straps, and as a protective braid covering for hoses and tubes.

- Woven wire construction
- 100 ft. spools
- 95% minimum shield coverage
- QQ-W-343 & ASTM B-33 compliant

Part No.	Description	1	5	25
2124189	1/4" nominal width x .03" flat, 168 x 36 strand, approx. 14 AWG	\$49.95	\$47.49	\$44.95
2124154	Tubular 1/4" nominal ID, 384 x 36 strand, approx. 10 AWG	79.95	74.95	69.95
2124162	Tubular 3/8" nominal ID, 384 x 36 strand, approx. 10 AWG	89.95	79.95	74.95

## 3M JAMECO ValuePro Heat Shrink Tubing Kits

A selection of heat shrinkable flexible polyolefin tubing that offers an outstanding balance of electrical, physical and chemical properties for a wide variety of industrial and military applications. Rated for 275°F (135°C).

2095963		2095971		2095947		2204411		285481		645976	
Size	Pcs.	Size	Pcs.	Size	Pcs.	Size	Pcs.	Size	Pcs.	Size	Pcs.
1/16"	56	1/8"	12	1/16"	56	3/64"	130	3/16"	30	3/32"	35
3/32"	35	1/4"	10	3/32"	35	1/16"	130	1/4"	28	1/8"	28
1/8"	28	3/8"	6	1/8"	28	3/32"	125	3/8"	20	3/16"	21
3/16"	18	1/2"	4	3/16"	18	1/8"	85	1/2"	14	1/4"	21
1/4"	9	3/4"	3	1/4"	9	1/4"	25	3/4"	6	3/8"	14
3/8"	8	1"	2	3/8"	8	1/2"	9	1"	4	1/2"	14

Part No.	Mfr.	Description	Pieces	Length	1	5
2095963	ValuePro	Black, assorted diameters	154	4" ...	\$19.95	\$17.95
2095971	ValuePro	Black, dual wall, moisture resistant	37	4" ...	22.95	19.95
2095947	ValuePro	Black/red/white/yellow/blue/green/clear	154	4" ...	22.95	19.95
2204411	RC Logger	Black/red/white/yellow/blue	564	↑ see below	34.95	29.95
285481	3M	Black, assorted diameters	102	6" ...	69.95	64.95
645976	3M	Black/red/white/yellow/blue/green/clear	133	6" ...	69.95	64.95

↑ 40mm/1.57" (515 pcs.), 125mm/4.92" (21 pcs.), 250mm/9.84" (28 pcs.)

## NTE HEATER Heat Guns and Strippers

- 191943: 3-pos. switch (hot/off/cool)
- 2117413: Fast and easy use
- Built-in bracket
- Weight: 1.1 lbs.
- 2076501: No-slip adjustable stand
- Weight: 4.0 lbs.

Part No.	Mfr.	Product No.	Description	Watts	Heat Setting (°F)	Temp. (°F max.)	1	5
191943	Weller	6996C	Industrial heat gun	250	750-800	800	\$149.95	\$134.95
2117413	NTE	HG300-D	Mini heat gun	350	482-662	662	24.95	22.49
254925	BenchPro	1001A	Economical heat gun	1200	600 & 1000	1000	44.95	39.95
76865	BenchPro	G1HG1	Heat gun/stripper	1500	600 & 1100	1100	44.95	40.95
2076501	Master	HG-501A	Industrial heat gun (23 CFM)	1680	750	750	134.95	124.95
2007062	BenchPro	1004	Accessory kit for 254925	—	—	—	10.95	9.95

\*Web Code: ECQ



NEW MARKED IN PINK



\*Web Code: HST

2:1 Shrink Ratio



2204411



645976

Weller®

JAMECO BenchPro

\*Web Code: QAJ



## Polyolefin Round Heat Shrink Tubing

### FIT221/FIT221B Series

Insulation from environment and resistance from water, fungus and UV light. Use for cable insulation and repair, wire and cable harnessing/ bundling, cable and connector protection, and wire and tubing splicing and connecting.

- Operating temp: -55°C to 135°C
- Approx. shrink ratio: 2:1 @ 121°C
- Dielectric strength: 500V/mil (197kV/cm)
- Volume resistivity: 10<sup>14</sup>Ω-cm



### Clear (4-foot pieces) – Round

\*Web Code: HST

Part No.	Mfr. Part No.	Before/After ID (in.)	1	10	100
419119	FIT221-3/64	.046/.023	\$.99	\$.89	\$.79
419135	FIT221-1/16	.063/.031	1.19	1.09	.99
419231	FIT221-3/8	.375/.187	2.49	2.25	1.95
419258	FIT221-1/2	.500/.250	2.95	2.75	2.49
419274	FIT221-3/4	.750/.375	3.49	2.95	2.65
2113682	TT-72801	1.00/.500	3.95	3.55	3.19

### Black (4-foot pieces) – Round

419101	FIT221B-3/64	.046/.023	\$1.09	\$.99	\$.89
419127	FIT221B-1/16	.063/.031	1.19	1.09	.99
419143	FIT221B-3/32	.093/.046	1.29	1.15	.99
2220251	FIT221B-3/32-100*	.093/.046	29.95	26.95	23.95
419160	FIT221B-1/8	.125/.062	1.39	1.25	1.09
419186	FIT221B-3/16	.187/.093	1.69	1.49	1.35
419207	FIT221B-1/4	.250/.125	1.89	1.69	1.49
419223	FIT221B-3/8	.375/.187	2.25	1.95	1.75
419240	FIT221B-1/2	.500/.250	2.69	2.39	2.09
2202319	FIT221B-1/2-150*	.500/.250	79.95	74.95	59.95
2192721	ESP200-3/4	.750/.375	2.95	2.59	2.29

\*100' and 150' rolls

## Flat Black Heat Shrink Tubing

- 2:1 uniform shrink ratio (approx.)
- Shrink temp.: 125°C
- VW-1 rated
- UL/CSA



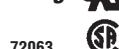
### Polyolefin Tubing – Flat

- Only sold in 10' & 100' lengths

Part No.	Dia. Before (mm)	Length (ft.)	1	10
644834	0.12" (3)	10	\$2.79	\$2.49
644851	0.12" (3)	100	15.95	13.95
644869	0.16" (4)	10	2.95	2.65
644877	0.16" (4)	100	17.95	15.95
644906	0.20" (5)	10	3.49	3.15
644914	0.20" (5)	100	21.95	19.95
644931	0.24" (6)	10	3.79	3.39
644949	0.24" (6)	100	24.95	21.95
2158371	0.29" (7.3)	164	29.95	26.95
644957	0.31" (8)	10	4.25	3.79
644965	0.31" (8)	100	31.95	27.95
644990	0.59" (15)	10	6.95	6.25
2220277	0.75" (19)	10	7.95	6.95
2179796	0.75" (19)	100	34.95	31.49

### Round Black Polyolefin Flexible Tubing

- Dielectric strength: 1300V
- Temp. range: -45°C to +125°C
- Flame retardant VW-1
- Precut 39" length (1 meter)



Part No.	Dia. Before (mm)	1	10	100
71871	.079" (2.0)	\$.79	\$.69	\$.59
71280	.098" (2.5)	.89	.79	.69
72063	.197" (5.0)	.89	.79	.69

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

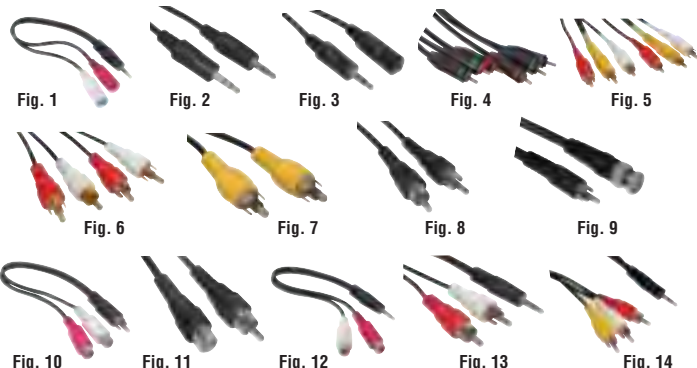
Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

JAMECO ValuePro

## Audio/Video Cables and Adapters



\*Web Code: QAP



### RCA Audio/Video Patch Cables

Part No.	Fig.	Description	1	10	100
2081852	4	6' RCA component video (3) M to (3) M, HD-RGB ..	\$2.95	\$2.59	\$2.25
228443	6	3' RCA stereo (2) M to (2) M plugs, gold plated .....	1.95	1.49	.99
206974	7	4' RCA M to M plug (yellow) .....	.99	.89	.79
1949470	8	6' RCA M to M plug, gold plated .....	1.25	1.09	.99
106375	8	6' RCA M to M plug (black) .....	1.75	1.59	1.25
2082417	7	6' RCA M to M plug (yellow) .....	.99	.89	.75
683059	9	6' RCA M BNC to M RCA cable (black) .....	3.95	3.49	2.95
29349	7	10' RCA mono M to M plug (yellow) .....	2.25	1.95	1.75
225980	5	12' RCA (3) M to (3) M plugs, gold plated .....	3.49	3.15	2.95
228478	6	25' RCA stereo (2) M to (2) M plugs, gold plated .....	2.95	2.65	2.39

### RCA Audio/Video Extension Cables

228355	10	6' RCA M plug to RCA (2) F jacks .....	\$ .95	\$ .89	\$ .85
228419	11	6' RCA mono M plug to F jack .....	1.25	1.09	.99

### RCA to 3.5mm Audio Cables

2209051	12	4' RCA stereo (2) F jacks to 3.5mm stereo M plug ..	\$ .99	\$ .89	\$ .79
228380	12	6' RCA stereo (2) F jacks to 3.5mm stereo M plug ....	1.75	1.49	1.25
228401	13	6' RCA stereo (2) M plugs to 3.5mm stereo M plug ..	1.95	1.75	1.59
2158274	14	6' RCA A/V (3) M plugs to 3.5mm M (4 pole) .....	1.75	1.49	1.25

### 3.5mm Audio Splitter and Extension/Patch Cables

\*Web Code: JAU

Part No.	Fig.	Description	1	10	100
228398	1	6" 3.5mm stereo Y-cable F jacks (2) to M plug .....	\$2.35	\$2.09	\$1.89
2174637	2	2' 3.5mm stereo M to M plug (black) .....	.95	.85	.75
228494	2	6' 3.5mm stereo M to M plug (black) .....	1.45	1.29	1.15
228515	3	6' 3.5mm stereo M plug to F jack (black) .....	2.35	2.09	1.89
228507	2	12' 3.5mm stereo M to M plug (black) .....	1.95	1.75	1.59
228523	3	12' 3.5mm stereo M plug to F jack (black) .....	1.95	1.75	1.59

Interconnects

JAMECO ValuePro

## DVI & High Definition Multimedia Interface (HDMI) Cables & Adapters

\*Web Code: DEM

HDMI provides an interface between any audio / video source, such as set-top box, DVD players, A / V receivers, audio / video monitors, DTV, HDTV and plasma monitors.



Part No.	Fig.	Product No.	Description	1	5	25
1944142	1	10HM-01128-01	HDMI male to male, 1 meter .....	\$5.95	\$4.95	\$4.49
2205421	1	E057319000	HDMI male to male, 1.5 meters .....	3.95	3.59	3.29
1944151	1	10HM-01128-02	HDMI male to male, 2 meters .....	7.95	6.95	5.95
2145131	1	PCM-2295-03M	HDMI male to male, 3 meters .....	4.95	4.49	3.95
1944169	1	10HM-01128-05	HDMI male to male, 5 meters .....	10.95	9.95	8.95
2209220	1	CB-000022-A1	HDMI male to male, 5 meters, 24K gold .....	10.95	9.95	8.95
2187833	2	HDMI-3-MICRO	HDMI male to micro HDMI male, 3 ft. ....	7.95	6.95	5.95
2187841	2	HDMI-6-MICRO	HDMI male to micro HDMI male, 6 ft. ....	9.95	8.95	7.95
1944185	3	10HM-15128-02	HDMI male to DVI-D single link, 2 meters .....	4.95	4.49	3.95
2145140	3	PCM-2296-03M	HDMI male to DVI-D single link, 3 meters .....	6.95	5.95	4.95
2192536	4	E27334-001	VGA-F to DVI-A male adapter .....	4.95	4.49	3.95
1944214	5	30HM-15328-M	HDMI female to DVI-D dual link .....	6.95	5.95	4.95
320346	6	5313118067F0	DVI single link cable, 2 meters, black .....	4.95	3.95	2.95



## RCA Audio Adapters & Couplers

\*Web Code: KBQ

Part No.	Manufacturer	Product No.	Description	1	10	100
228283	Steren	251-120	RCA F jack to mono 1/4" M plug .....	\$ .69	\$ .59	\$ .55
228267	Steren	251-116	RCA F to F jack coupler, gold plated .....	.59	.55	.49



## Switchcraft® Microphone (XLR) Connectors

\*Web Code: ABV

Part No.	Manufacturer	Product No.	Fig.	Description	Dimensions (mm)	1	10	25
277026	Switchcraft	A3F	1	3-pin female, straight cord plug w/ latchlock	81.8 x 19 Dia. ....	\$5.95	\$5.49	\$4.95
319003	Steren	250-720	1	3-pin female, straight cord plug w/ latchlock	81.5L x 7.43D .....	2.25	1.95	1.75
281560	Switchcraft	A3M	2	3-pin male, straight cord plug, latch holder	70.6 x 19 Dia. ....	4.95	4.49	3.95
319011	Steren	250-710	2	3-pin male, straight cord plug, latch holder	70.6L x 7.31D .....	2.95	2.65	2.39
281640	Switchcraft	D3F	3	3-pin female, metal, panel mount, latchlock	27.0W x 36.3H X 30.6D ..	4.49	3.95	3.49
281658	Switchcraft	D3M	4	3-pin male, metal, panel mount, latch holder	22.1W x 36.3H x 22.9D ..	4.95	4.49	3.95
1774711	Switchcraft	POG3M5T111	5	3-pin male, plastic panel mount, PCB term.	27.1W x 30.0H x 19D .....	4.95	4.49	3.95
281594	Switchcraft	A4M	6	4-pin male, straight cord plug, latch holder	70.6L x 19Dia. ....	7.49	6.95	6.49



## ANALOG GUITAR OVERDRIVE PEDAL KIT

JAMECO KitPro

Build a solid-state overdrive / distortion effects pedal for guitars and other musical instruments.

Part No.	Difficulty	Price
2176106	Intermediate	\$44.95

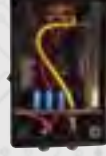


## GUITAR TO AV RECEIVER KIT

JAMECO KitPro

Build a filtered adapter so you can plug your guitar right into your home stereo receiver!

Part No.	Difficulty	Price
2208702	Intermediate	\$19.95



## POCKET SIZED GUITAR AMP KIT

JAMECO KitPro

Build the milli-AMP to produce around 2W output power using an included rechargeable 9V battery

Part No.	Difficulty	Price
2170521	Intermediate	\$59.95





**Switchcraft**

**JAMECO ValuePro**

## Stereo, Phone, Audio Plugs & Jacks

**\* Web Code: AJS**

Part No.	Mfr.	Product No.	Fig.	Description	Dimensions (mm)	* Order in multiples of 10		
						1	10	100
101152	ValuePro	PJ1035	1	3.5mm mono audio plug, plastic	53L x 3.9 ID	<b>\$.69</b>	<b>\$.59</b>	<b>\$.49</b>
2200954	ValuePro	JR1037	1A	3.5mm audio plug, 4-position, plastic	47.8L x 4.5 ID	<b>1.95</b>	<b>1.75</b>	<b>1.49</b>
231176	ValuePro	AP340	1B	3.5mm stereo audio plug, plastic	53L x 4.12 ID	<b>.79</b>	<b>.69</b>	<b>.55</b>
231160	ValuePro	PJ1035	2	3.5mm mono audio plug, metal	43.7L x 4.27 ID	<b>1.49</b>	<b>1.25</b>	<b>.99</b>
231167	ValuePro	AP343	2	3.5mm stereo audio plug, metal	52.4L x 4.25 ID	<b>1.49</b>	<b>1.25</b>	<b>.99</b>
281869	Switchcraft	750	3	3.5mm mono audio plug, plastic	41.5L x 5.7 ID	<b>3.95</b>	<b>3.59</b>	<b>3.19</b>
281754	Switchcraft	250	4	1/4" mono phone audio plug, plastic	73.7L x 7.6 ID	<b>3.95</b>	<b>3.59</b>	<b>3.19</b>
281789	Switchcraft	297	5	1/4" stereo phone audio plug, metal	73.7L x 7.6 ID	<b>4.95</b>	<b>4.49</b>	<b>3.95</b>
281771	Switchcraft	280	6	1/4" mono phone audio plug, metal	73.7L x 7.6 ID	<b>4.49</b>	<b>3.95</b>	<b>3.69</b>
229921	ValuePro	JR1625BLK	7	RCA plug, plastic, black (5 pk)	51.5L x 5.0 ID	<b>1.65</b>	<b>1.49</b>	<b>1.35</b>
229930	ValuePro	JR1625	8	RCA plug, plastic, red (5 pk)	51.5L x 5.0 ID	<b>1.65</b>	<b>1.49</b>	<b>1.35</b>
281800	Switchcraft	3502	9	RCA phone audio plug, metal	33.8L x 5.0 ID	<b>2.95</b>	<b>2.59</b>	<b>2.39</b>
2202933	ValuePro	M1001	10	3.5mm mono (F) to 3.5mm stereo (M) adapter	37.3L x 3.5ID	<b>.99</b>	<b>.89</b>	<b>.79</b>
2095437	ValuePro	J355W 1	11	3.5mm stereo audio jack, panel mt., terminal	10.1H x 8.4W x 17.6L	<b>1.49</b>	<b>1.15</b>	<b>.99</b>
281834	Switchcraft	41	12	3.5mm audio jack, panel mount, terminal	7.8L x 5.9 Dia.	<b>2.95</b>	<b>2.59</b>	<b>2.29</b>
568392	Switchcraft	35RAPC4BH3 1	13	3.5mm stereo jack, rt. angle horz., threaded†	6.0H x 11.0W x 8.0L	<b>1.95</b>	<b>1.75</b>	<b>1.49</b>
1766180	Switchcraft	35RAPC4BHN2	13	3.5mm stereo jack, rt. angle horz., non-threaded	5.0H x 12.0W x 15.0L	<b>1.49</b>	<b>1.29</b>	<b>1.09</b>
2081334	Shogyo	354-3PY 4	13	3.5mm mono jack, rt. angle horz., non-threaded	6.1H x 11.9W x 12.0L	<b>.99</b>	<b>.79</b>	<b>.59</b>
2100291	ValuePro	354-PY (CT) 1	14	3.5mm mono jack, rt. angle horz., threaded	6.45H x 11.7W x 14.3L	<b>1.09</b>	<b>.89</b>	<b>.69</b>
2168131	Adam Tech	ASJ	15	3.5mm stereo jack, rt. angle horizontal mount	6.0H x 12.0W x 14.0D	<b>.59</b>	<b>.55</b>	<b>.49</b>
2177740	ValuePro	DTJ-0366	16	3.5mm stereo jack, rt. angle horz., non-threaded	10.45H x 12.0W x 6.8L	<b>.89</b>	<b>.75</b>	<b>.65</b>
2168149	ValuePro	ASJ-5-3	17	3.5mm stereo jack, rt. angle ver., non-threaded, PCB	12.3H x 8.1W x 14.0L	*	<b>.22</b>	<b>.17</b>
2161537	ValuePro	PJ-3066AM 1	17	3.5mm mono jack, rt. angle ver., threaded	11.6H x 7.7W x 14.0L	<b>.89</b>	<b>.75</b>	<b>.65</b>
1766121	Switchcraft	35RAPC2AV 1	17	3.5mm mono jack, rt. angle ver., threaded	11.6H x 7.7W x 14.0L	<b>1.25</b>	<b>1.19</b>	<b>1.09</b>
2161553	ValuePro	PJ-3064AM 1	17	3.5mm stereo jack, rt. angle ver., threaded	12.3H x 8.1W x 14.0L	<b>1.19</b>	<b>1.09</b>	<b>.99</b>
1766198	Switchcraft	35RAPC4BV 4 1	17	3.5mm stereo jack, rt. angle ver., threaded	12.3H x 8.1W x 14.0L	<b>2.25</b>	<b>1.95</b>	<b>1.75</b>
2095373	ValuePro	HTJ-035-22D	18	3.5mm mono jack, rt. angle horz., non-threaded, blk.	10.45H x 10.0W x 14.0L	<b>.89</b>	<b>.79</b>	<b>.69</b>
2201607	ValuePro	PJ31640	29	3.5mm audio jack, 4-pos., panel mount	16.35L x 8.0D	<b>2.25</b>	<b>1.95</b>	<b>1.59</b>
2180842	Switchcraft	838	19	1/4" mono phone jack, in-line	54.4L x 18.7D	<b>4.95</b>	<b>4.49</b>	<b>3.95</b>
2161490	ValuePro	JR-1804 2	20	1/4" mono phone audio jack, 2-pos., single open	12.8L x 9.1" Dia.	<b>1.09</b>	<b>.99</b>	<b>.89</b>
281738	Switchcraft	11 3	20	1/4" mono phone audio jack, 2-pos., single open	12.8L x 9.1 Dia.	<b>2.25</b>	<b>2.09</b>	<b>1.95</b>
2161502	ValuePro	JR-1803 2	21	1/4" mono phone audio jack, 2-pos., single closed	31.7L x 9.4 Dia.	<b>1.95</b>	<b>1.75</b>	<b>1.59</b>
281746	Switchcraft	12B 4	21	1/4" stereo phone audio jack, 3-pos., double open	14.7L x 9.1 Dia.	<b>2.95</b>	<b>2.59</b>	<b>2.29</b>
1774016	Switchcraft	MN12B	22	1/4" mono phone jack, 3 cond. plastic bushing	19.9L x 15.7W x 15.7H	<b>2.95</b>	<b>2.59</b>	<b>2.39</b>
2178646	Switchcraft	MNS112B	22	1/4" mono phone jack, 3 cond. plastic bushing	19.9L x 15.7W x 15.7H	<b>2.59</b>	<b>2.39</b>	<b>2.09</b>
297537	Switchcraft	N111	22	1/4" mono phone jack, 2 Conn.	19.8L x 15.6W x 15.6H	<b>2.49</b>	<b>2.25</b>	<b>1.95</b>
1775254	Switchcraft	SN37A12B	23	1/4" mono phone jack, right angle, PCB	27.6L x 15.6W x 15.0H	<b>.99</b>	<b>.89</b>	<b>.79</b>
220581	ValuePro	KY-006-1(W)	24	RCA jack, PCB mount, white, metal	11.2H x 14.2W x 12.2L	<b>.85</b>	<b>.75</b>	<b>.69</b>
220556	ValuePro	KY-006-1(R)	24	RCA jack, PCB mount, red, metal	11.2H x 14.2W x 12.2L	<b>.85</b>	<b>.75</b>	<b>.69</b>
220572	ValuePro	KY-006-1(B)	24	RCA jack, PCB mount, black, metal	11.2H x 14.2W x 12.2L	<b>.85</b>	<b>.75</b>	<b>.69</b>
220564	ValuePro	KY-006-1(Y)	24	RCA jack, PCB mount, yellow, metal	11.2H x 14.2W x 12.2L	<b>.85</b>	<b>.75</b>	<b>.69</b>
2076359	ValuePro	AJ842G3	25	RCA jack, PCB mount, rt. angle, red/white/yellow (3)	40.6H x 22.9W x 21.6L	<b>.59</b>	<b>.55</b>	<b>.49</b>
319249	Velleman	CA066	26	RCA jack, 2 pair stereo, panel mount, red/white	73.7H x 12.2W x 24.9L	<b>.95</b>	<b>.85</b>	<b>.75</b>
159485	ValuePro	CS7021-DN-BLK-R 4	27	RCA jack, panel mount, black	21.3W x 9.7H	<b>.95</b>	<b>.85</b>	<b>.75</b>
172340	ValuePro	CS7021-DN-RD-R 4	27	RCA jack, panel mount, red	21.3W x 9.7H	<b>.85</b>	<b>.75</b>	<b>.69</b>
2187884	ValuePro	RJ2606	28	Speaker terminal board, 4-pos., pushbutton	76.2H x 25.4W x 31.8D	<b>1.95</b>	<b>1.69</b>	<b>1.29</b>
2123469	GC/Waldom	33-1404	28	Speaker terminal board, 4-pos., pushbutton	76.2H x 25.4W x 31.8D	<b>2.25</b>	<b>1.95</b>	<b>1.75</b>

Additional panel mounting hardware – **1 2183218, 2 2182709, 3 2182611, 4 2183349** (includes washer & nuts), see module below

† Closed circuit



Interconnects

**JAMECO ValuePro**

## Panel Mounting Hardware for Plugs and Jacks

**\* Web Code: PAM**

Part No.	Ref. #	Description	1	10
2183218	<b>1</b>	M6 x 0.50"; (1) flat washer, (2) hex nuts	<b>\$.69</b>	<b>\$.59</b>
2182709	<b>2</b>	M9 x 0.75"; (1) flat washer, (2) hex nuts	<b>.69</b>	<b>.59</b>
2182611	<b>3</b>	3/8-32 NEF thread; (1) internal tooth washer, (2) hex nuts	<b>.69</b>	<b>.59</b>
2183349	<b>4</b>	1/4-32 thread; (1) internal tooth washer, (2) hex nuts	<b>.69</b>	<b>.59</b>



\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS  
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# D-Subminiature Connectors

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**AMP** Amphenol Connex

## D-Subminiature Connectors

JAMECO ValuePro

### Right Angle PCB Mount

Metal .318" Setback – Tin plated short style



\*Web Code: ESO

Part No.	Manufacturer	Product No.	Contacts	Gender	1	10	100
1952839	Foxconn	D-SUB-9M†	9	M	\$.55	\$.45	\$.35
104943	ValuePro	DB9P318	9	M	.85	.75	.65
104952	ValuePro	DB9S318	9	F	.85	.75	.65
71124	ValuePro	DA15P318†	15	M	.85	.75	.65
71125	ValuePro	DA15S318	15	M	.95	.85	.75
77956	ValuePro	DA15S318	15	F	.95	.85	.75
2145001	ValuePro	PT285805-15††	15	F	.59	.49	.39
1952273	Kycon	HDDSUB-15S†	15	F	.59	.49	.39
71466	ValuePro	HDDB15S318*	15	F	.99	.89	.79
15150	ValuePro	DB25P318	25	M	1.09	.99	.89
15182	ValuePro	DB25S318	25	F	1.09	.99	.89
71706	ValuePro	1008-37P†	37	M	1.49	1.25	1.09

\*High Density † Without female jack screws †† Non-removable jack screws

### Right Angle PCB Mount

Metal .590" Set Back – Tin plated long style

• Current rating: 1A



\*Web Code: HAN

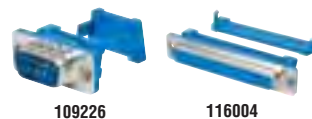
Part No.	Manufacturer	Product No.	Contacts	Gender	1	10	100
104970	ValuePro	DB9P590	9	M	\$1.09	\$.99	\$.89
2180981	JST	JKEY9S3D13	9	F	.79	.69	.59
104978	ValuePro	DB9S590	9	F	1.09	.99	.89
104985	Astron	DA15P590†	15	M	.49	.45	.39
104993	ValuePro	DA15S590†	15	F	.89	.79	.69
105013	ValuePro	DB25S590†	25	F	1.49	1.25	1.09
2135056	ValuePro	1011-25A-R	25	F	.89	.79	.69

† Without female jack screws

### IDC Ribbon Cable

\*Web Code: MAP

- Contact material: phosphor bronze
- Terminates with standard D-type connectors



Part No.	Manufacturer	Product No.	Shell	Cont.	Gender	1	10	100
109226	ValuePro	MDB9P	Metal	9	M	\$1.95	\$1.75	\$1.49
12504	ValuePro	CDB9P	Plastic	9	M	1.75	1.49	1.25
109218	ValuePro	MDB9S	Metal	9	F	1.95	1.75	1.49
12521	ValuePro	CDB9S	Plastic	9	F	1.75	1.49	1.25
117382	ValuePro	MDA15P	Metal	15	M	2.25	1.95	1.75
12319	ValuePro	CDA15S	Plastic	15	F	.79	.69	.59
116012	ValuePro	MDA15S	Metal	15	F	1.95	1.75	1.49
115984	ValuePro	MDB25P	Metal	25	M	2.49	2.25	1.95
2168034	Adam Tech	DB25-PF-M2	Metal	25	M	2.49	2.25	1.99
12335	ValuePro	CDB25P	Plastic	25	M	2.09	1.85	1.65
115976	ValuePro	MDB25S	Metal	25	F	2.49	2.25	1.95
2162708	CWI	CMP37TW#	Metal	37	M	.99	.89	.79
115992	ValuePro	MDC37P	Metal	37	M	2.95	2.65	2.39
116004	ValuePro	MDC37S	Metal	37	F	2.95	2.65	2.39

# Without strain relief

JAMECO ValuePro

### Panel Bracket Cable Assembly

- Standard back panel bracket
- Length: 12"
- Ribbon cable with header connector

\*Web Code: RAX



Part No.	Description	Port	1	10	100
355688	DB9M to 10-pin header F	1 serial	\$1.49	\$1.35	\$1.19

### Metal Solder-Cup

\*Web Code: EAB

203799



Part No.	Manufacturer	Product No.	Contacts	Gender	1	10	100
15748	ValuePro	1001-9P-R	9	M	\$.85	\$.75	\$.65
15771	Steren	500-109	9	F	.79	.65	.49
2125510	Amphenol	DB9S-SFJ**	9	F	.75	.65	.55
223052	AMP	747905-2	9	F	2.49	2.25	1.95
15035	ValuePro	1001-15P-R	15	M	.95	.85	.75
15078	ValuePro	1002-15P-R*	15	M	1.09	.89	.75
15052	ValuePro	1001-15S-R	15	F	.95	.85	.75
164823	ValuePro	1002-15S-R*	15	F	1.09	.89	.75
15115	ValuePro	1001-25P-R	25	M	1.25	.99	.89
223010	AMP	747912-2	25	M	3.95	3.59	3.25
15157	Steren	500-125	25	F	1.25	.99	.89
223079	AMP	747913-2	25	F	2.25	1.99	1.89
203799	ValuePro	1002-26P*	26	M	.49	.39	.29
15473	ValuePro	1002-37P	37	M	1.35	1.09	.99
15500	ValuePro	1001-37S	37	F	1.35	1.09	.99
2185758	Amphenol-RF	17-20370-11	37	M	1.75	1.49	1.25
482732	Amphenol	EDD50P	50	M	2.49	2.25	1.95
482741	Amphenol	EDD50S	50	F	2.95	2.59	2.25

\*High Density \*\*With female jack screws

### Metal Straight PCB Mount

\*Web Code: SBK

2133510



Part No.	Manufacturer	Product No.	Contacts	Gender	1	10	100
111692	ValuePro	DB9PPCB	9	M	\$.59	\$.49	\$.39
15781	ValuePro	DB9SPCB	9	F	.59	.49	.39
176760	ValuePro	DA15PPCB	15	M	.65	.55	.45
176752	ValuePro	DA15SPCB	15	F	.49	.39	.29
2133510	AMP	749798-1*	15	M	.39	.29	.25
15123	ValuePro	DB25PPCB	25	M	.85	.75	.65
15165	ValuePro	DB25SPCB	25	F	.85	.75	.65
180021	ValuePro	DC37SPCB	37	F	1.25	1.09	.99

\*High Density

### Crimp-Type

\*Web Code: UBR

73189



38771



Part No.	Manufacturer	Product No.	Contacts	Gender	1	10	100
73189	Steren	500-010	9	M	\$.65	\$.55	\$.45
222640	AMP	205204-9 (Tin)	9	M	.79	.69	.65
73197	Steren	500-110	9	F	.65	.55	.45
222842	AMP	205203-3 (Tin)	9	F	.89	.79	.69
222691	AMP	205203-1 (Zinc)	9	F	.99	.89	.79
38789	ValuePro	500-027	25	M	.89	.75	.65
38771	Steren	500-1N27	25	F	.89	.75	.65

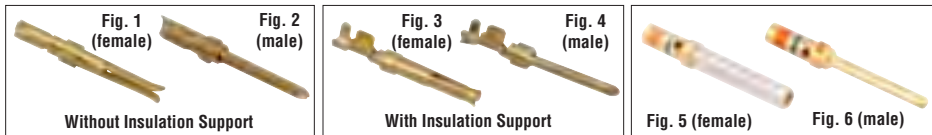
\*Additional D-Sub Connectors — Enter Web Code DSB

## BEST SELLING AC & DC FANS

Part No.	Voltage	Size	CFM	Page	Price
139602	12 VDC	52x52x15	12	86	\$8.95
2150766	12 VDC	60x60x25	23.2	86	7.95
688597	12 VDC	80x80x25	27.7	86	5.95
2155065	24 VDC	92x92x38	51.2	88	8.95
213867	115 VAC	60x60x30	10.2	89	17.95
106586	115 VAC	120x120x38	105	89	12.95
102884	115 VAC	120x120x38	117	89	17.95
2151072	120/220 VAC	120x120x38	95/115	89	12.95
2125931	120 VAC	120x120x38	112	89	13.95

## AMP D-Sub Solder & Crimp Contacts

\* Web Code: JDC



### Female Solder Contact – Fig. 1

Part No.	Mfr.	Product No.	AWG	1	10	100
223319	AMP	66569-3	18 ...	\$.25	\$.19	\$.15

### Male Solder Contact – Fig. 2

Part No.	Mfr.	Product No.	AWG	1	10	100
234982	AMP	66570-3	28-24	\$.35	\$.29	\$.25

### Female Crimp Contacts – Fig. 3

Order in multiples of 10

Part No.	Mfr.	Product No.	AWG	10	100	1000
43369	ValuePro	500-155	28-24	\$.15	\$.12	\$.09
185412	ValuePro	1006-PS	28-24	\$.07	\$.05	\$.04
223247	AMP	745253-6	26-22	\$.15	\$.12	\$.09
223298	AMP	66504-9	24-20	\$.19	\$.15	\$.12
223255	AMP	1-66504-0	24-20	\$.19	\$.15	\$.12

\* Terminal Blocks — Enter Web Code XBD

### Male Crimp Contacts— Fig. 4

\* Order in multiples of 10

Part No.	Mfr.	Product No.	AWG	1	10	100
185421	ValuePro	1006-PP	28-24	\$.07	\$.05	\$.04
43377	ValuePro	500-055	28-24	\$.15	\$.12	\$.09
223108	AMP	66507-9	28-24	\$.29	\$.25	\$.19
223132	AMP	745254-7	26-22	\$.25	\$.19	\$.15
223191	AMP	66506-9	24-20	\$.19	\$.15	\$.12
223167	AMP	1-66506-0	24-20	\$.15	\$.12	\$.09

### Female Crimp Contact (M39029/63-368) – Fig. 5

\* Machined

Part No.	Mfr.	Product No.	1	10	100
449351	AMP	205090-1	\$.49	\$.45	\$.39

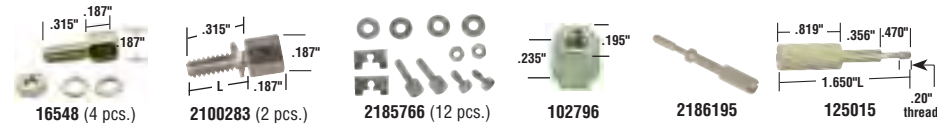
### Male Crimp Contact (M39029/64-369) – Fig. 6

\* Machined

Part No.	Mfr.	Product No.	1	10	100
449342	AMP	205089-1	\$.49	\$.45	\$.39

## AMP Hardware for D-Sub Connector Hoods

\* Web Code: PAM



### 4-40 Hex Jack Screw Sets

16548: 4-40 Hex (.187"W x .187"H x .315"L thread)

jack screw, nut & washer set – plating B

2100283: 4-40 Hex (.187"W x .187"H x .315"L thread)

jack screw with lock washer – plating D

444912: 4-40 Hex (.187"W x .187"H x .630"L thread)

jack screw, nut & washers set – plating C

2185766: 4-40 Hex (.187"W x .187"H x .356"L thread)

jack screw, nut & washers screws & clip – plating A

\* Order in multiples of 10

Part No.	Mfr.	Prod. No.	Plating*	1	10	100
16548	ValuePro	14-522	B	\$.69	\$.55	\$.49
2100283	ValuePro	JS4403LW	D	\$.19	\$.15	\$.12
444912	Cinch	D20418-39	C	1.75	1.59	1.45
2185766	Amphenol	17-768	A	1.25	1.09	.95

### 4-40 Slotted D-Sub Plastic Thumbscrew

125015	ValuePro	1.65"	A	\$.25	\$.19	\$.15
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### 4-40 x .187" Jack Screws

Part No.	Mfr.	Length	Plating*	1	10	100
169931	ValuePro	.275"	A	\$.29	\$.25	\$.19
102816	ValuePro	.437"	B	\$.39	\$.35	\$.29
2183390	ValuePro	.467"	A	\$.29	\$.25	\$.19
108987	ValuePro	.515"	A	\$.45	\$.39	\$.35

### 4-40 x .187"/.195" Standoffs

175636	ValuePro	.187"	B	\$.25	\$.19	\$.15
102796	ValuePro	.235"	A	\$.29	\$.25	\$.19

### 4-40 Slotted D-Sub Knurled Thumbscrews

\* Order in multiples of 10

2186195	SPC	1.45"	B	\$.15	\$.12	\$.09
2186216	SPC	1.54"	B	\$.25	\$.19	\$.15
2179438	SPC (2pk)	2.83"	B	\$.29	\$.25	\$.19

\* Plating – A: Zinc, clear chromate  
C: Zinc, yellow chromate  
B: Chrome  
D: Chrome with lock washer

## JAMECO ValuePro Slim-Line D-Sub Gender Changers/Coupler

\* Web Code: YAB



### For Confined Applications!

- Captive locking screw (male)
- Captive locking nut (female)
- Grounding tangs (male)
- Tin plated shells
- Width: 0.69"

Part No.	Description	1	10	100
18498	9-pin male to male	1.95	1.75	1.49
18489	9-pin female to female	1.95	1.75	1.49
119320	15-pin female to female HD	9.95	8.95	7.95
119301	15-pin male to male HD	1.95	1.75	1.49
18447	25-pin male to male	2.25	1.95	1.75
18420	25-pin female to female	2.49	2.25	1.95
170085	25-pin male to female (pass thru)	1.95	1.75	1.59

## JAMECO ValuePro D-Sub Connector Hoods

\* Web Code: DAB



- Use with D-sub solder cup and housing style connectors (hardware included)

D Series: Plastic hood with strain relief (gray)

MD Series: Metal coated plastic hood w/ strain relief

MH Series: Die-cast metal hood with strain relief

Part No.	Mfr.	Product No.	Pins	1	10	100
15722	ValuePro	DB9H	9	\$.69	\$.59	\$.49
25620	Stern	MD9H	9	\$.75	\$.69	\$.59
147741	ValuePro	MHDB9	9	1.75	1.49	1.25
230893	AMP	205729-1†	9	2.49	2.25	1.95
15019	ValuePro	DA15H	15	\$.89	\$.75	\$.65
25567	ValuePro	MDA15H	15	1.09	.95	.75
15086	ValuePro	DB25H	25	\$.69	\$.59	\$.49
25604	ValuePro	MDB25H	25	\$.99	\$.85	\$.69
15107	ValuePro	MHDB25	25	2.49	2.25	1.95
25612	ValuePro	MDC37H	37	\$.69	\$.59	\$.49

† Plastic clam shell hood (black)

## JAMECO ValuePro 25-Pin Dual Plastic Hood

Designed for custom applications requiring two D-sub connectors.

Kit includes: Backshell and hardware

Part No.	Description	1	10	100
34091	25-pin hood	\$.99	\$.89	\$.79

\* Junction Shells — Enter Web Code DAB

## H D-Sub Crimping Tool

- Heavy-duty metal tool with cutter and insulated handles
- For computer pins & sockets, D-sub 26-28 AWG wire; butt-insulated connectors, 22-26 AWG wire; telephone spade lugs, 22-26 AWG wire and non-insulated connectors, 20-22 AWG & 14-18 AWG
- Coiled spring return • Size: 7.3"L x 1.5"W

\* Web Code: GBU

Part No.	Mfr.	Part No.	1	5	25
99443	HT202A		\$10.95	\$9.95	\$8.95

More Tools on pages 118-123

## JAMECO ValuePro D-Sub 9-Pin to 25-Pin Serial Adapters

- For use in AT or other computer systems that have 9-pin D-sub serial ports

\* Web Code: AAA

Part No.	Description	1	10	100
10305	DB9 F to DB25 M	1.59	1.45	1.25
189633	DB9 M to DB25 M	1.75	1.49	1.25

**BEST SELLING CABLE**

Part No.	Mfr.	Mfr. Part No.	Description	Price
644421	ValuePro	SC9-100	24 AWG 5 conductor cable, 100' shielded, 0.23" OD, 24 AWG drain wire	\$44.95
644818	ValuePro	RG174/U-100	26 AWG 1 conductor coax cable, 100' stranded, RG174/U, 50Ω	21.95
2119494	ValuePro	5411-100	22 AWG 5 conductor cable, 100' unshielded, 0.19" OD, no drain wire	44.95
734180	Belden	8723 060100	22 AWG 4 conductor cable, 100' shielded, 0.16" OD, 24 AWG drain wire	59.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS
NAME BRANDS
HOUSE BRANDS
SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

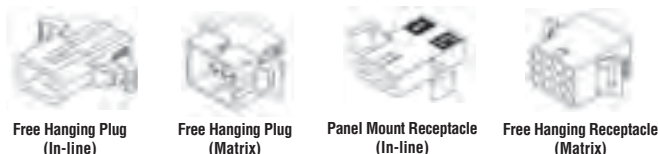


# Power Connectors & Contacts

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## molex Power Connectors

- 5.03mm (.198") pitch
- Housing: nylon; UL94V-2
- Contact retention to housing: 20 lbs. min.
- Passive friction lock
- Temperature range: -40°C to +105°C



### .062" (1.57mm) Plugs (Contacts to the right)

\* Web Code: HBL

- Current: 5.0A

\* Order in multiples of 10

Part No.	Mfr. Part No.	Circuits	Type	Pattern	Mating Conn.	1	10	100
224485	03-06-2023	2	Free hanging	In-line	224400	.....	* \$1.19	\$1.15
224506	03-06-2042	4	Free hanging	In-line	224426	.....	.35 .29	.25
224514	03-06-2044	4	Free hanging	Matrix	224434	.....	.39 .35	.29

### .062" (1.57mm) Receptacles (Contacts to the right)

\* Web Code: HBL

Part No.	Mfr. Part No.	Circuits	Type	Pattern	Mating Conn.	1	10	100
224400	03-06-1023	2	Free hanging	In-line	224485	.....	* \$1.19	\$1.15
224426	03-06-1042	4	Free hanging	In-line	224506	.....	.39 .35	.29
224434	03-06-1044	4	Free hanging	Matrix	224514	.....	.39 .35	.25

### .093" (2.36mm) Plugs (Contacts to the right)

\* Web Code: CBL

- Current: 12A/circuit

Part No.	Mfr. Part No.	Circuits	Type	Pattern	Mating Conn.	1	10	100
224071	03-09-2022	2	Free hanging	In-line	224143	...	\$2.25 \$2.22	\$1.15
224080	03-09-2032	3	Free hanging	In-line	224151	.....	.29 .25	.19
224098	03-09-2042	4	Free hanging	In-line	224160	.....	.35 .29	.25

### .093" (2.36mm) Receptacles (Contacts to the right)

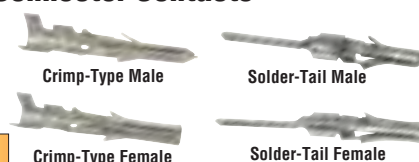
\* Web Code: CBL

Part No.	Mfr. Part No.	Circuits	Type	Pattern	Mating Conn.	1	10	100
224143	03-09-1022	2	Free hanging	In-line	224071	...	\$2.25 \$2.22	\$1.15
224151	03-09-1032	3	Free hanging	In-line	224080	.....	.29 .25	.19
224160	03-09-1042	4	Free hanging	In-line	224098	.....	.55 .49	.45
230156	03-09-1041	4	Panel mount	In-line	224098	.....	* .19	.15

## molex Power Connector Contacts

- Contact: brass or phosphor bronze
- Temp. range: -40°C to +105°C
- Tin plating

\* Web Code: JBL



### .062" (1.57mm) Bulk Contacts for Plugs & Receptacles

Part No.	Mfr.	Mfr. Part No.	Description	Gender	AWG	10	100	1000
224581	Molex	02-06-2132	Crimp type	M	24-30	.....	\$0.09 \$0.07	\$0.05
224573	Molex	02-06-1132	Crimp type	F	24-30	.....	.09 .07	.05
224565	Molex	02-06-2103	Crimp type	M	18-24	.....	.09 .07	.05
224557	Molex	02-06-1110	Crimp type	F	18-24	.....	.12 .09	.07
227379	Molex	02-06-8103	Solder tail	M	—	.....	.12 .09	.07
227387	Molex	02-06-7103	Solder tail	F	—	.....	.17 .15	.12

### .093" (2.36mm) Bulk Contacts for Plugs & Receptacles

Part No.	Mfr.	Mfr. Part No.	Description	Gender	AWG	10	100	1000
224207	Molex	02-09-2118	Crimp type	M	18-22	.....	\$1.12 \$0.09	\$0.07
224215	Molex	02-09-1119	Crimp type	F	18-22	.....	.15 .12	.09
224223	Molex	02-09-2103	Crimp type	M	14-20	.....	.12 .09	.07
224231	Molex	02-09-1104	Crimp type	F	14-20	.....	.12 .09	.07
224240	Molex	02-09-2133	Solder tail	M	—	.....	.15 .12	.09

## Hand Crimp Tools

Designed to crimp terminals, strip and cut wires, and cut bolts. For Molex .062" & .093" (above) and KK® series (pg 55) crimp terminals.



\* Web Code: GBU

Part No.	Mfr. Part No.	Description	Length	Color	1	5
308030	W-HT-1919	For 14-24 AWG wires	8.3"L	Red	.....	\$14.95 \$13.95
227491	W-HT-1921	For 18-30 AWG wires	8.3"L	Yellow	.....	14.95 13.95

\* Power Connectors — Enter Web Code BAM

\* Rectangular Connectors — Enter Web Code RCC

\* Networking Connectors — Enter Web Code NCS

## AMP D-Sub Pin Insertion/Extraction Tools

19094/527582/223335:

Plastic body; metal tips

\* Web Code: LSS

223327:

Handle with .050" hex wrench and exchangeable tips

Part No.	Mfr.	Product No.	Contact Size	1	10
19094	ValuePro	500-200	—	.....	\$3.95 \$3.49
527582	AMP	91067-1	22	.....	14.95 13.49
223335	AMP	91067-2	20DM/DF	.....	14.95 13.49
223327	AMP	91285-1	HD-20	.....	24.95 22.49

## AMP Extraction Tool

- Works with general contacts of CPC, multimate and MATE-N-LOCK II contacts

Part No.	Mfr. Part No.	1	5
841838	305183	.....	\$17.95 \$15.95

## molex .093" Power Connector Kits

Kit contains mating sets of housings and pins.

- Voltage: 250VAC
- Temp. range: -40°C to +105°C

142181:

- 3 ea. 2-pin plugs & receptacles, 8 ea. female & male contacts
- Current: 12A

142201:

- 2 ea. 4-pin plugs & receptacles, 10 ea. female & male contacts

- Current: 9A

\* Web Code: CAV



Includes: Male and female tin-plated standard brass .010" pins; 18-22 AWG crimp size wire

Part No.	Mfr. Part No.	Description	1	10	100
142181	1545	2-pin kit	.....	\$5.95 \$5.49	\$4.95
142201	1490	4-pin kit	.....	5.95 5.49	4.95

## SPECIAL BUY CONNECTORS

Part No.	Description	2192667	2205528	Price
2192667	5-pin R/A DIN socket	.....	.....	\$1.75
2144796	6-pin R/A DIN dual socket	.....	.....	.29
2201973	2.1mm DC power plug to pigtail	.....	.....	1.15
859683	18-16 AWG socket connectors	.....	.....	.59
2200701	36 position dual row male header	.....	.....	.79
2205528	10 position dual row gold header	.....	.....	2.75
2178611	3 position male XLR audio connector	.....	.....	.49
2178620	4-pin DIN male connector	.....	.....	.49
2182400	3 position R/A connector	.....	.....	.99
2179729	3 position male AC receptacle	.....	.....	.29
2218134	26 position IDC connector receptacle	.....	.....	1.49
2100347	12-pin machine tooled SIP socket	.....	.....	.49
1775166	4 position SL female audio connector	.....	.....	.79

## TOP SELLING AC-TO-AC WALL ADAPTERS

Part No.	Description	Price
2202773	9 VAC @ 0.78A, 2.1 x 5.5mm female plug	..... \$8.95
2167576	12 VAC @ 1.2A, 2.1 x 5.5mm female plug	..... 7.95
100108	16 VAC @ 1.0A, 2.1 x 5.5mm female plug	..... 11.95
2217916	18 VAC @ 0.5A, 2.1 x 5.5mm female plug	..... 9.95
10102	24 VAC @ 1.0A, 3.5mm male plug	..... 11.95



## AC-TO-DC UNREGULATED LINEAR WALL ADAPTERS

Part No.	Description	Price
147707	6 VDC @ 0.8A, 2.1 x 5.5mm female plug	..... \$8.95
100853	9 VDC @ 0.5A, 2.1 x 5.5mm female plug	..... 7.95
100870	12 VDC @ 1.0A, 2.1 x 5.5mm female plug	..... 9.95
101291	12 VDC @ 1.5A, 2.5 x 5.5mm female plug	..... 12.95
191556	24 VDC @ 1.5A, 2.5 x 5.5mm female plug	..... 9.95



# Power Connectors & Crimp Terminals



## .118" Pitch ATX Power Connector & Pin

### For Motherboards and Power Supplies

- Current rating: 7A AC/DC • Temperature range: -25°C to 85°C
- 147379:** Material: nylon 66, UL-94V0
- Material of post: tin-plated brass • Diameter of post: 0.045"
- 147395:** Material: tin-plated brass
- Use crimping tool P/N 338678, pg 55

147379

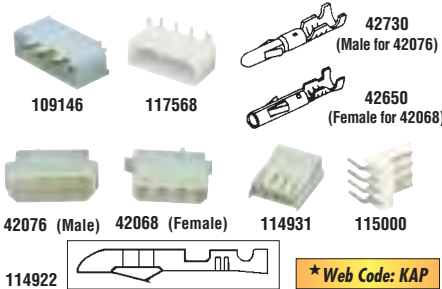
147395

\* Order in multiples of 10

Part No.	Description	L	W	H	Dia.	1	10	100
147379	20-pin male connector	1.7"	0.4"	0.6"	—	\$ .35	\$ .25	\$ .19
147395	Power terminal pin, female	0.59"	—	—	0.068"	*	.12	.09



## Power Connectors & Pins



\* Web Code: KAP

### Connector & Housing Specifications:

- Voltage rating: 250VAC (Mate-N-Lock 600VAC)
- Operating temperature: -55°C to +105°C

### Crimp Pin Specifications:

- Material: tin plated brass • Current rating: 1.5A
- Wire size range: 18-24 AWG
- Use crimp tool P/N 99443, pg 120

### .100" – For 3.5" Disk Drives & Power Supplies

- Voltage rating: 250V AC, DC
- Insulation resistance: 1000MΩ min.
- Wire gauge: 22-26 AWG

Part No.	Description	1	10	100
114931	4-pin female housing	\$ .39	\$ .35	\$ .29
114922	Female crimp pin for 114931	.29	.25	.19
115000	4-pin male rt. angle PCB mounting	.49	.45	.39

### .200" – For 5.25" Disk Drives & Power Supplies

#### 42076 & 42068 Connector Housings:

- External key bar indicates pin 1
- Extraction tools, P/Ns 131887 & 131879 (see right)
- Keyed mating connectors

\* Order in multiples of 10

Part No.	Description	1	10	100
109146	4-pin male vert. PCB mntg	\$ .75	\$ .65	\$ .59
117568	4-pin male PCB mntg, horiz. edge mnt	.95	.85	.75
42076	4-pin male housing	.29	.25	.19
42068	4-pin female housing	*	.19	.15
42730	Male crimp pin for 42076	*	.19	.15
42650	Female crimp pin for 42068	*	.15	.12

## Deluxe Electronic Components Bundle

109 commonly used electronic components including voltage regulators, relays, diodes, switches, pots, logic chips, sockets, inverter, counters, timers, headers, 3-digit display, numeric keypad, DC power jacks, binding posts, various tools and more in a customizable



Part No.	Product No.	Price
2129123	Deluxe 2	\$99.95



## Connector Extraction Tools



Part No.	Mfr. Part No.	AWG	Conn. Size	1	5
142156	W-HT-2285	18-30	.062" ...	\$14.95	\$12.95
227467	W-HT-2023	18-30	.062" ...	12.95	11.95
142236	W-HT-2038	14-30	.093" ...	14.95	12.95
227395	W-HT-2054	18-30	.093" ...	11.95	10.95
236128	W-HT-1884	22-30	.100" ...	10.95	9.49

\* Extraction Tools — Enter Web Code BAV

\* IDC Connectors — Enter Web Code DCD



## Extraction Tools for Crimp Terminals

- Quickly and easily extract .093" locking pins from interlocking connectors
- Length: 5"

Part No.	Description	1	5
131887	Male tool for 42730, left	\$10.95	\$9.95
131879	Male tool for 42650, left	8.95	7.95

## 16-Pcs. Tool Kit for Apple Products

Professional, portable and complete tool kit for use on iPhones, iPads and iPods.

- 12 bits made of Cr-Mo-V steel
- Plastic pry/opening levers
- Mini suction cup for screens

Part No.	Product No.	Price
2196887	SD-9314	\$17.95

## Surprise Electronic Component Grab Bag

Axial and radial electrolytics, monolithic, dipped silver mica and mylar capacitors, ICs, connectors, sockets, headers, thermistors, LEDs, resistor networks, diodes, standoffs, transistors, oscillators/resonators, inductors, crystals, resistors, pots and switches (hundreds).

Part No.	Product No.	Description	1	10
135263	GB191LB	Hundreds of assorted electronic components	\$19.95	\$17.95

## 1/4 POUND MAGNET WIRE WITH POLYURETHANE INSULATION

Part No.	Gauge (AWG)	Nom. O.D.	Length (ft.)	1	5
2098371	16	.0524"	32	\$6.95	\$6.25
2098380	18	.0418"	51	7.25	6.49
2098398	20	.0334"	81	7.49	6.75
2098401	22	.0265"	129	7.95	6.95
2098419	24	.0213"	205	8.49	7.49
2119347	26	.0169"	328	8.95	7.95
2119355	28	.0136"	520	9.49	8.49
2119363	30	.0109"	825	9.95	8.95



2098371



2119363



## Milli-Grid™ Female Crimp Terminal

### For 51110 Series Housings

- Lead free
- Contact material: phosphor bronze
- Plating contact: 0.38µm (15µ") gold
- Under plating: nickel

Order in multiples of 10

Part No.	Mfr. Part No.	AWG	10	100	500
668465	50394-8100	24-30 ..	\$ .15	\$ .12	\$ .09



## .100" & 2mm Shorting Blocks



- Mates to .025" square posts on .100" centers
- Shorts headers/jumper blocks or color code strip line plugs
- Mate with male header (P/N 109576, pg 54)
- Pin material: phosphor bronze

\* Web Code: MAC

**Open:** Open on top to allow for a test point  
**Closed:** Closed top

Part No.	Description	10	100	500
119264	2mm (for disk drives)			
22024	Top open, black (.100")	\$ .15	\$ .12	\$ .09
119264	Top open, black (2mm)	.15	.12	.09
112425	Top open, blue (.100")	.15	.12	.09
112417	Top open, red (.100")	.15	.12	.09
19141	Top closed, black (.100")	.15	.12	.09
112442	Top closed, blue (.100")	.15	.12	.09
112432	Top closed, red (.100")	.15	.12	.09
152671	Top closed, black tab (.100")	.15	.12	.09



## Soldering Aid Tool Kit

Excellent for soldering works to hold, remove, clean or replace components

- 6-pieces, each tool is double ended
- Knife, brush, scraper, hook, fork & spike

Part No.	Cross Ref. No.	1	5
2096000	GSR-107	\$6.95	\$6.25



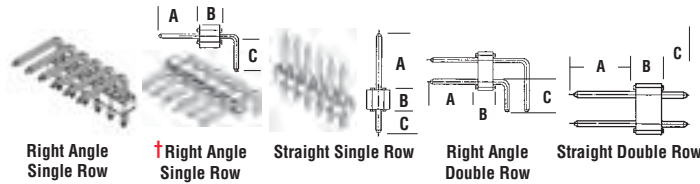
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Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)



## .100" (2.54mm) Straight and Right Angle Male Headers



### .100" (2.54mm) Right Angle Single Row Male Headers

\* Web Code: DAH

Part No.	Mfr.	Product No.	Pins	Size (A"xB"xC")	Plating	1	10	100
2076842	ValuePro	RMH5	5	.27 x .10 x .12	Gold	.....	* \$1.12	\$0.09
2076851	ValuePro	RMH6	6	.27 x .10 x .12	Gold	.....	.29	.25 .19
153728	ValuePro	RMH8	8	.27 x .10 x .12	Gold	.....	.45	.39 .35
2076869	ValuePro	RMH26	26	.27 x .10 x .12	Gold	.....	.59	.49 .39
103271	ValuePro	RMH36 (LP)†	36	.23 x .10 x .12	Gold	.....	.95	.79 .65
1946041	ValuePro	RMH36AR (type A)	36	.27 x .10 x .22	Gold	.....	.95	.79 .65

† Low profile

### .100" (2.54mm) Straight Single Row Male Headers

\* Web Code: TAM

Part No.	Mfr.	Product No.	Pins	Size (A"xB"xC")	Plating	1	10	100
2076797	ValuePro	SMH01	1	.23 x .10 x .12	Gold	.....	* \$0.07	\$0.06
2144884	ValuePro	SMH02	2	.23 x .10 x .12	Tin	.....	.25	.19 .15
108338	ValuePro	SMH02	2	.23 x .10 x .12	Gold	.....	.29	.25 .19
421489	AMP	103185-3	3	.23 x .09 x .12	Gold/Tin	.....	.35	.29 .25
109576	ValuePro	SMH03	3	.23 x .10 x .12	Gold	.....	.35	.29 .25
117560	ValuePro	SMH04	4	.23 x .10 x .12	Gold	.....	.35	.29 .25
2120276	OST	PHI-787/120-041	4	.78 x .10 x .12	Gold	.....	.29	.25 .19
2076789	ValuePro	SMH05	5	.23 x .10 x .12	Gold	.....	.29	.25 .19
153700	ValuePro	SMH06	6	.23 x .10 x .12	Gold	.....	.29	.25 .19
153702	ValuePro	SMH08	8	.23 x .10 x .12	Gold	.....	.35	.29 .25
103393	ValuePro	SMH10	10	.23 x .10 x .12	Gold	.....	.39	.35 .29
103377	ValuePro	SMH17	17	.23 x .10 x .12	Gold	.....	.39	.35 .29
103369	ValuePro	SMH20	20	.23 x .10 x .12	Gold	.....	.39	.35 .29
202825	ValuePro	SMH22	22	.23 x .10 x .12	Gold	.....	.39	.35 .29
103351	ValuePro	SMH25	25	.23 x .10 x .12	Gold	.....	.35	.29 .25
103342	ValuePro	SMH30	30	.23 x .10 x .12	Gold	.....	.45	.39 .35
2207849	ValuePro	SMH32	32	.23 x .10 x .12	Gold	.....	.45	.39 .35
2076826	ValuePro	SMH34	34	.23 x .10 x .12	Gold	.....	.45	.39 .35
68339	ValuePro	SMH36	36	.23 x .10 x .12	Gold	.....	.49	.45 .39
2168211	Adam Tech	PH1-40-UA	40	.23 x .10 x .12	Gold/Tin	.....	.35	.29 .25
160882	ValuePro	SMH40	40	.23 x .10 x .12	Gold	.....	.75	.65 .59

\* Dimension "A" has gold plating; dimension "C" has tin plating

### .079" (2mm)/.100" (2.54mm) Male Headers Grab Bag

\* Web Code: GBS



Part No.	Cross Ref.	Description	Wt. (lbs.)	1	10
2095138	GB204	100 assorted .100" male headers (breakway) Straight, right angle, single and double row	0.3	.....	\$9.95 \$8.95

### .100" (2.54mm) Right Angle Double Row Male Headers

\* 10 pins are 2 rows of 5 pins (example)

\* Web Code: DAP

Part No.	Mfr.	Cross Ref. No.	Pins	Size (A"xB"xC")	Plating	1	10	100
203932	ValuePro	923810DR	10	.23 x .10 x .12	Gold	.....	\$.35	\$.29 \$.25
203959	ValuePro	923814DR	14	.23 x .10 x .12	Gold	.....	.29	.25 .19
203967	ValuePro	923816DR	16	.23 x .10 x .12	Gold	.....	.39	.29 .25
53576	ValuePro	923820DR	20	.23 x .10 x .12	Gold	.....	.59	.55 .45
53583	ValuePro	9238260DR	26	.23 x .10 x .12	Gold	.....	.65	.59 .49
53605	ValuePro	923840DR	40	.23 x .10 x .12	Gold	.....	.89	.79 .69
53612	ValuePro	923850DR	50	.23 x .10 x .12	Gold	.....	.95	.85 .75
103413	ValuePro	923872DR	72	.23 x .10 x .12	Gold	.....	.95	.85 .75
139564	ValuePro	923880DR	80	.23 x .10 x .12	Gold	.....	1.39	1.25 1.09

### .100" (2.54mm) Straight Double Row Male Headers

\* Web Code: QCM

\* 10 pins are 2 rows of 5 pins (example)

\* Order in multiples of 10

Part No.	Mfr.	Product No.	Pins	Size (A"xB"xC")	Plating	1	10	100
115027	ValuePro	923804DS	4	.23 x .10 x .12	Gold	.....	* \$1.15	\$0.09
115035	ValuePro	923806DS	6	.23 x .10 x .12	Gold	.....	.29	.25 .19
15747	ValuePro	DMH06-30	6	.30 x .10 x .12	Gold	.....	* .12	.09
2135312	ValuePro	FCN-724P008-AU/W	8	.23 x .10 x .12	Gold/Tin	.....	* .19	.15
109517	ValuePro	7000-2x4SG	8	.23 x .10 x .12	Gold	.....	.39	.35 .29
67821	ValuePro	923810DS	10	.23 x .10 x .12	Gold/Tin	.....	.39	.35 .29
203810	ValuePro	923812DS	12	.23 x .10 x .12	Gold	.....	.29	.25 .19
118456	ValuePro	923814DS	14	.23 x .10 x .12	Gold	.....	.55	.49 .45
109568	ValuePro	923816DS	16	.23 x .10 x .12	Gold	.....	.59	.55 .49
53480	ValuePro	923820DS	20	.23 x .10 x .12	Gold	.....	.65	.59 .55
203844	ValuePro	923824DS	24	.23 x .10 x .12	Gold	.....	.59	.49 .39
53495	ValuePro	923826DS	26	.23 x .10 x .12	Gold	.....	.69	.65 .55
2120292	OST	PH2-320/110-261	26	.30 x .10 x .12	Gold	.....	.49	.45 .39
203852	ValuePro	923828DS	28	.23 x .10 x .12	Gold	.....	.55	.45 .35
203861	ValuePro	923832DS	32	.23 x .10 x .12	Gold	.....	.69	.65 .55
53517	ValuePro	923834DS	34	.23 x .10 x .12	Gold	.....	.69	.65 .55
203888	ValuePro	923836DS	36	.23 x .10 x .12	Gold	.....	.95	.85 .75
203895	ValuePro	923838DS	38	.23 x .10 x .12	Gold	.....	.55	.45 .35
53532	ValuePro	923840DS	40	.23 x .10 x .12	Gold	.....	.95	.85 .75
53560	ValuePro	923850DS	50	.23 x .10 x .12	Gold	.....	.95	.85 .75
68574	ValuePro	923860DS	60	.23 x .10 x .12	Gold	.....	.95	.85 .75
2200701	Berg	67997-472	72	.23 x .10 x .12	Tin	.....	.79	.69 .59
103406	ValuePro	70002X36SG	72	.23 x .10 x .12	Gold	.....	1.09	.95 .85
2120284	Adam Tech	PH2-230/135-805	80	.23 x .10 x .12	Tin	.....	.85	.69 .55
117197	ValuePro	923880DS	80	.23 x .10 x .12	Gold	.....	1.25	1.09 .95

\* Dimension "A" has gold plating; dimension "C" has tin plating

### .100" (2.54mm) Straight Triple Row Male Headers

\* Web Code: FCC

\* 24 pins are 3 rows of 8 pins (example)

Order in multiples of 10

Part No.	Mfr.	Cross Ref. No.	Pins	Size (A"xB"xC")	Plating	10	100
2178478	Arndt	3131-30T	10	.16 x .06 x .12	Tin	.....	\$.12 \$0.09
2076893	ValuePro	933824TS	24	.23 x .10 x .12	Gold	.....	.12 .09

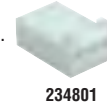
## molex® KK® Series .100" (2.54mm) Female Housings with Locking Ramp

\* Web Code: LBN

- Contact resistance: 20mΩ max.
- Dielectric withstanding voltage: 1500VAC
- Insulation resistance: 50kMΩ
- Voltage: 250V

### Housing Material:

- Contact retention to housing: 8 lbs. min.
- Contact insertion force: 1.5 lbs. max.
- Housing: nylon, UL94V-0
- Operating temperature: 0 to 75°C



### Housing with Locking Ramp

\* Order in multiples of 10

Part No.	Mfr. Part No.	Pos.	1	10	100
234704	22-01-2027	2	.....	* \$0.09	\$0.07
234712	22-01-2037	3	.....	* .17	.11
234721	22-01-2047	4	.....	.25	.22 .19
234739	22-01-2057	5	.....	.35	.29 .19
234747	22-01-2067	6	.....	.39	.35 .25
234771	22-01-2107	10	.....	.65	.55 .39

### Housing w/ Locking Ramp & Polarizing Ribs

\* Order in multiples of 10

Part No.	Mfr. Part No.	Pos.	1	10	100
234798	22-01-3027	2	.....	* \$1.15	\$0.09
234801	22-01-3037	3	.....	.25	.22 .15
234819	22-01-3047	4	.....	.35	.25 .19
234827	22-01-3057	5	.....	.35	.25 .19
234835	22-01-3067	6	.....	.49	.39 .29
234851	22-01-3087	8	.....	.59	.55 .35
234878	22-01-3107	10	.....	.65	.59 .45



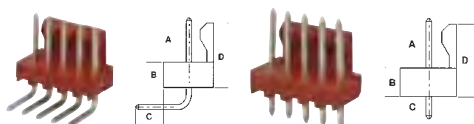
# Headers, Housings & Crimp Terminals

molex

AMP

JAMECO ValuePro

## .100" (2.54mm) Straight and Right Angle Friction Lock Headers



Right Angle Friction Lock

Straight Friction Lock

879588

\* Web Code: GBN

### .100" (2.54mm) Straight Friction Lock Headers

\* Order in multiples of 10

Part No.	Mfr.	Product No.	Pos.	Size (A"xB"xC"xD")	Plating	1	10	100
232266	Molex	22-23-2021	2	.30 x .13 x .14 x .32	Tin	.....	.....	.....
613931	AMP	640456-2	2	.30 x .10 x .14 x .31	Tin	.....	.....	.....
233584	Molex	22-11-2022	2	.30 x .13 x .14 x .32	Gold	.....	.....	.....
879588	Molex	22-29-2021	2	.30 x .13 x .14 x .46	Gold	.....	.....	.....
232274	Molex	22-23-2031	3	.30 x .13 x .14 x .32	Tin	.....	.....	.....
879271	Molex	22-27-2031	3	.30 x .13 x .14 x .46	Tin	.....	.....	.....
233592	Molex	22-11-2032	3	.30 x .13 x .14 x .32	Gold	.....	.....	.....
232282	Molex	22-23-2041	4	.30 x .13 x .14 x .32	Tin	.....	.....	.....
232291	Molex	22-23-2051	5	.30 x .13 x .14 x .32	Tin	.....	.....	.....
348082	ValuePro	641215-5	5	.30 x .10 x .14 x .31	Gold	.....	.....	.....
232303	Molex	22-23-2061	6	.30 x .13 x .14 x .32	Tin	.....	.....	.....
232320	Molex	22-23-2081	8	.30 x .13 x .14 x .32	Tin	.....	.....	.....
232346	Molex	22-23-2101	10	.30 x .13 x .14 x .32	Tin	.....	.....	.....

### .100" (2.54mm) Right Angle Friction Lock Headers

\* Order in multiples of 10

Part No.	Mfr.	Product No.	Pos.	Size (A"xB"xC"xD")	Plating	1	10	100
233437	Molex	22-05-3021	2	.26 x .13 x .14 x .32	Tin	.....	.....	.....
233445	Molex	22-05-3031	3	.26 x .13 x .14 x .32	Tin	.....	.....	.....
233453	Molex	22-05-3041	4	.26 x .13 x .14 x .32	Tin	.....	.....	.....
233461	Molex	22-05-3051	5	.26 x .13 x .14 x .32	Tin	.....	.....	.....
233470	Molex	22-05-3061	6	.26 x .13 x .14 x .32	Tin	.....	.....	.....

## molex KK® Series .100" (2.54mm) Crimp Terminals

\* Web Code: JCT

- Current: phosphor bronze – 4.0A max.; brass – 2.5A max.
- Insulation range: 0.062" (1.58mm) diameter max.
- Accommodates 22 to 30 AWG
- Material: 736501/234923/234931: brass; 736595/462969/463005: phosphor bronze



### Bulk Packaged

Order in multiples of 10

Part No.	Mfr.	Part No.	Plating	10	100	1000
736501	08-50-0113	Tin*	.....	.....	.....	.....
234923	08-50-0114	Tin	.....	.....	.....	.....
234931	08-55-0102	15µ" gold	.....	.....	.....	.....
736595	08-52-0123	Tin	.....	.....	.....	.....
462969	08-65-0805	Tin (cat ear)	.....	.....	.....	.....
463005	08-65-0816	15µ" gold	.....	.....	.....	.....

\* Cut tape packaging

## molex .100" (2.54mm) Pitch SL™ Wire-to-Board Crimp Housings

### Single Row

- Housing: black glass filled polyester, UL94V-0



### Version A, Non-polarized

\* Web Code: VDD

Part No.	Mfr.	Part No.	Pos.	1	10	100
884301	50-57-9002	2	.....	.....	.....	.....

### Version G, Positive Latch

Order in multiples of 10

Part No.	Mfr.	Part No.	Pos.	10	100
884328	50-57-9402	2	.....	.....	.....

### Female Crimp Terminals



Part No.	Mfr.	Part No.	AWG	Plating	10	100
741685	16-02-0103	22-24	15µ" gold	.....	.....	.....
741677	16-02-0086	22-24	Tin	.....	.....	.....

\* Wire Cutters, Strippers & Crimpers — Enter Web Code GBU

## JAMECO ValuePro .118" (3.00mm) Micro-Fit Crimp Terminals

Female (Fig. 1) Male (Fig. 2)

- Material: phosphor bronze, tin

\* Web Code: UBW

Order in multiples of 10

Part No.	Mfr.	Product No.	Fig.	AWG	10	100
337720	ValuePro	43030-0007	1	20-24	.....	.....
883093	Molex	43030-0007	1	20-24	.....	.....
337746	ValuePro	43030-0010	1	20-24	.....	.....
337762	ValuePro	43031-0007	2	20-24	.....	.....

## Hand Tools for Mini-Fit Jr.™

\* Web Code: GBU



- 304928: Crimp tool wire range from 14-24 AWG, 8.5"L
- 304936: Extraction tool, 3.5"L
- 308030: Cuts & strips 14-24 AWG, 8.3"L
- 227491: Cuts & strips 18-30 AWG, 8.3"L

Part No.	Mfr.	Mfr.	Part No.	1	5
304928	Molex	63811-1000	.....	.....	.....
304936	Molex	11-03-0044	.....	.....	.....
308030	GC/Waldom	W-HT-1919	.....	.....	.....
227491	GC/Waldom	W-HT-1921	.....	.....	.....

## Tools for Micro-Fit Connectors



Part No.	Cross Ref. No.	Description	Length	1	5
338678	HT-225D	Crimp	8.25"	.....	.....
338669	11-03-0043	Extraction	3.0"	.....	.....

\* Hook Up Wire — Enter Web Code JAS

## JAMECO ValuePro .156" (3.96mm) JST Type Crimp Terminal and Tool

Crimp Terminal \* Web Code: HHT

- 18-22 AWG • Female
- Tin-plated brass

Order in multiples of 10

Part No.	Mfr.	Cross Ref. No.	10	100
2124630	ValuePro	96T	.....	.....

### JST Crimp Tool

Part No.	Mfr.	Mfr.	Part No.	1	5
227491	GC/Waldom	W-HT-1921	.....	.....	.....

## .165" (4.19mm) Mini-Fit Jr.™ Type Terminals

- A: Tin over nickel over brass
- B: 15µ" gold over nickel over brass

\* Web Code: CBX

Order in multiples of 10

Part No.	*Mfr.	Product No.	Type	AWG	10	100	1000
401824	JVP	4257T2-LP	1A	18-24	.....	.....	.....
401701	JVP	4256T2-LP	2A	18-24	.....	.....	.....
401736	ADM	4256T2-15GC	2B	18-24	.....	.....	.....
304725	MOL	39-00-0041	1A	18-24	.....	.....	.....
304733	MOL	39-00-0039	2A	18-24	.....	.....	.....
304872	MOL	39-00-0047	2A	22-28	.....	.....	.....

### 4000-Piece Reel

Part No.	*Mfr.	Product No.	Type	AWG	Price/each
307993	MOL	39-00-0038	2A	18-24	.....

\* ADM = Adam Tech; JVP = Jameco ValuePro; MOL = Molex

\* .165" Mini-Fit Jr. Connectors — Web Code MTC

## BEST SELLING TEST LEADS

Part No.	Description	Price
10444	Alligator to alligator (2) each of 5 colors, 21" ..	\$5.95
256832	BNC female to pigtail (2), 7" ..	5.95
2097555	BNC male to pigtail (2), 9" ..	5.95
11464	BNC male RG174 to mini clips (2), 39" ..	5.49
135299	Minigrabber to minigrabber (2) each of 5 colors, 14" ..	10.95
77842	Stackable banana to banana (2) each of 5 colors, 9.8" ..	27.95
21865	Stackable banana to minigrabber (1), 36" ..	4.95
159899	Stackable banana to minigrabber (2), 36" ..	15.95
2189601	Stackable banana to minigrabber (2), 39" ..	7.95
77746	Standard banana to multimeter test leads (2), 42" ..	6.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Headers, Crimp Terminals & IDC Connectors

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## .156" (3.96mm) Headers, Housings and Crimp Terminals



Fig. 1



Fig. 2

- Wire-to-board applications
- End-to-end stackable styles
- Insulator: polyester, UL 94V-0
- Housing: nylon, UL 94V-0

\*Web Code: HHT

### Headers

\* Order in multiples of 10

#### Straight Friction Lock – Brass/Tin (Fig. 1)

Part No.	Mfr.	Product No.	Pos.	1	10	100
231546	AMP	640445-2	2	...	...	...
879887	Molex	26-60-4030	3	...	...	...
104792	ValuePro	LMH4	4	...	...	...

### Housings

#### With Locking Ramp (Fig. 2)

Order in multiples of 10

Part No.	Mfr.	Product No.	Pos.	10	100
104433	ValuePro	7900F-3	3	...	...
463435	Molex	09-50-3031	3	...	...
236161	AMP	640250-4	4	...	...
463443	Molex	09-50-3041	4	...	...
104716	ValuePro	7900F-4#	4	...	...
104732	ValuePro	7900F-6	6	...	...

# Use with crimp pin (P/N 78319)

### Crimp Terminals

- Plating: A: brass/tin;  
B: phosphor bronze/tin

Order in multiples of 10

Part No.	Mfr.	Product No.	Plating	AWG	10	100
736544	Molex	08-50-0189	A	18-20	...	...
736561	Molex	08-52-0072	B	18-20	...	...
736587	Molex	08-52-0113†	A	18-20	...	...
736481	Molex	08-50-0106	A	18-24	...	...
248866	AMP	640706-1	A	18-24	...	...
248874	AMP	640706-2	A	18-24	...	...
248903	AMP	770522-1	B	18-24	...	...

†Trifurcon, cat ear, cut tape

## .100" (2.54mm) Straight Male Headers

\*Web Code: VAQ

### Double Row with Standard Latch

- 0.1" contact center
- Mount vertical
- Keying slot
- Use w/ IDC socket connectors, above right



Fig. 1



Fig. 2

Part No.	Description	1	10	100
117664	10-pin male header	...	...	...
71830	20-pin male header	...	...	...
72216	50-pin male header	...	...	...

## ARDUINO MOTOR SHIELD, REV. 3

- L289P drive 2 DC motors or 1 stepper motor
- Dual full-bridge drives inductive loads like relays, solenoids, DC and stepper motors
- 2A per channel or 4A maximum (with extension power supply)
- Measure motor current absorption of each motor
- Free running stop and brake function
- Current sensing: 1.65V/A
- Operating voltage: 5V to 12V



Part No.	Product No.	Price
2152403	A00009	\$37.95

## .100" (2.54mm) Keyed Shrouded Headers & Connectors

### CD-ROM 4-Pin

\*Web Code: XAW

- Low profile
- Voltage rating: 250VAC/DC
- Current rating: 3A AC/DC
- Insulation res.: 1000MΩ min.
- Pin material: tin-plated brass
- Connector material: PBT, 30% glass
- Header material: PBT + 30% glass
- Withstanding voltage: 1000VAC/ 1 min.
- Recommend crimp tool P/N 99443, pg 120



152741



152726

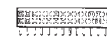


152734

Part No.	Description	1	10	100
152741	Straight header	...	...	...
152726	Rt. angle header	...	...	...
152734	Single with latch†	...	...	...
181673	Female pins	...	...	...

† P/N 152734 requires 4 pins (P/N 181673)

## .100" (2.54mm) Female Header Receptacles



Right Angle



Straight

- Gold-plated contacts

\*Web Code: RAH

### Single Row Right Angle (Side Entry)

Part No.	Mfr.	Contacts	1	10	100
2100321	ValuePro	8	...	...	...

### Double Row Right Angle (Side Entry)

Part No.	Mfr.	Contacts	1	10	100
71159	ValuePro	20	...	...	...

### Single Row Straight (Top Entry)

Part No.	Mfr.	Contacts	1	10	100
2169758	Adam Tech	4	...	...	...
2144614	Adam Tech*	6	...	...	...
70755	ValuePro	8	...	...	...
2144631	Adam Tech*	8	...	...	...
2172560	ValuePro	10	...	...	...
2177627	Adam Tech*	10	...	...	...
200783	ValuePro	12	...	...	...
2213641	Adam Tech	12	...	...	...
308592	ValuePro	16	...	...	...
2213659	Adam Tech	16	...	...	...
308567	ValuePro	20	...	...	...
2213667	Adam Tech	20	...	...	...
2168173	Adam Tech	40	...	...	...

\* 15mm long square leads

### Double Row Straight (Top Entry)

Part No.	Mfr.	Contacts	1	10	100
70721	ValuePro	16	...	...	...
70827	ValuePro	20	...	...	...
105057	ValuePro	30	...	...	...
163862	ValuePro†	34	...	...	...
111705	Arndt	40	...	...	...
2134395	Arndt#	40	...	...	...

† Tin-plated # Wire wrap leads (.475" long)

## .100" (2.54mm) Low Profile Male Shrouded Headers

### Straight & Right Angle Double Row

- Rating: 1A (max.) @ 250VDC
- Contact resistance: 15mΩ max.
- Contact: phosphor bronze, gold plated
- Features: UL recognized CSA certified; 0.025" square post mates with sockets on 0.100" x 0.100" grid
- Use with IDC socket connectors, below



68180

\*Web Code: JAH

Part No.	Cross Ref. No.	Pos.	1	10	100
67812	7110-10SG	10	...	...	...
2100304	7110-14SG	14	...	...	...
2167947	BHR-16-HUA	16	...	...	...
68180	7110-16SG	16	...	...	...
68292	7110-20SG	20	...	...	...
68372	7110-26SG	26	...	...	...
68583	7110-34SG	34	...	...	...
2167971	BHR-40-HUA	40	...	...	...
181105	7110-40SG	40	...	...	...
2100312	7110-50SG	50	...	...	...

## .100" (2.54mm) IDC Socket Connectors

### Double Row

- Current rating: 1A
- Mates with 2 rows of .025" sq. or dia. posts on patterns of .100" centers (male headers, pg 54)
- Contact material: phosphor bronze w/ 1μ" gold flash on mating area, tin plated on termination area
- Industry standard IDC socket (plastic)
- Temperature rating: -55°C to +105°C
- Use crimper P/N 73252, below
- Include strain relief



32564

### Polarized

\*Web Code: QAE

Part No.	Cross Ref. No.	Contacts	1	10	100
2203910	8000-6R	6	...	...	...
2203928	8000-8R	8	...	...	...
32492	8000-10	10	...	...	...
153948	8000-14	14	...	...	...
119467	8000-16	16	...	...	...
32522	8000-20	20	...	...	...
32564	8000-26	26	...	...	...
32644	8000-34	34	...	...	...
32679	8000-40	40	...	...	...
32708	8000-50	50	...	...	...

### Non-Polarized

\* Order in multiples of 10

Part No.	Cross Ref. No.	Contacts	1	10	100
138376	8000-10NE	10	...	...	...
138325	8000-20NE	20	...	...	...
138333	8000-26NE	26	...	...	...
138341	8000-34NE	34	...	...	...
138350	8000-40NE	40	...	...	...

## IDC Connector Crimping Tools

- Use for IDC socket connectors
- Crimping distance: 27.5mm to 6mm (with attachment)
- Size: 9.2"L x 3.0"W
- Weight: 1.1 lbs.



2156033: Dual slot attachment included

Part No.	Mfr.	Part No.	1	10	25
73252	HT-214		...	...	...
2156033	HT-214D		...	...	...



## AMP .100" (2.54mm) IDC Ribbon Connectors 3M

### Center and Military Polarized Receptacles

- Accepts 28-26AWG solid or stranded cables
- Contact current rating: 1A continuous
- Housing, cover: 94V-0 rated thermoplastic, black
- Contacts: phosphor bronze, duplex plating

#### Contact Plating:

- A: 30µ" gold, 50µ" min. tin  
 B: 15µ" gold, 100µ"-200µ" tin  
 C: 15µ" gold, 100-200µ" tin lead, all over 50µ" min. nickel  
 D: 30µ" gold, 100-200µ" bright tin lead, all over 50µ" nickel



\* Web Code: RDM

Part No.	Mfr.	Mfr. Part No.	Pos.	Plating	1	10	100
901642	AMP	1658622-1	10	A	\$1.25	\$1.09	\$.99
525309	AMP	746285-1	10	C	1.25	1.09	.99
742215	AMP	1658621-1	10	B	1.09	.95	.85
1578082	3M	89110-0101	10	A	.89	.79	.69
525317	AMP	746285-2	14	C	1.65	1.49	1.25
525325	AMP	746285-3	16	C	1.59	1.39	1.15
1578111	3M	89116-0101	16	A	.95	.85	.75
525333	AMP	746285-4	20	C	1.65	1.55	1.39
2218134	AMP	622-2630*	26	D	1.49	1.25	1.15
525413	AMP	746288-6	26	D	1.75	1.59	1.35
525350	AMP	746285-8	34	C	1.95	1.75	1.49
525368	AMP	746285-9	40	C	1.75	1.59	1.45
525376	AMP	1-746288-0	50	D	3.95	3.59	3.25

\*Color: blue

### Strain Relief for NOVO Receptacles

Order in multiples of 10

Part No.	Mfr.	Mfr. Part No.	Pos.	10	100
526045	AMP	499252-5	10	\$.19	\$1.15

## AMP .100" DIP Headers \* Web Code: XBS

### Series 600 Headers w/ Coined Contacts

- Standard body material is red UL 94-HB glass filled nylon
- High temperature cover/body material is black UL 94V-0 4/6 nylon
- Contact plating: 100µ" min., tin
- Contact rating: 2A
- Operating temperature: 221°F (105°C) max.
- Fork contacts: accept up to .025" (.64mm) dia. leads

Part No.	Mfr.	Part No.	Pos.	Width*	1	10	100
291120		08-600-10	8	0.3"	\$1.19	\$ .99	\$.89
291312		14-600-10	14	0.3"	1.75	1.49	1.25
291574		16-600-10	16	0.3"	1.95	1.75	1.49
291996		24-600-10	24	0.6"	1.49	1.25	1.09

\*Center to center pin width

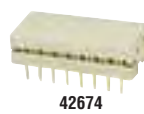
## CA .100" DIP Header Plugs

- Gold-plated leads
- Header plugs: keyed corner to indicate pin 1
- U-shaped pin termination for easy component attachment
- Lead length: 0.188" • 0.1" spacing between leads

Part No.	Mfr.	Part No.	Pins	Width	1	10	100
37130		14P-2	14	0.3"	\$.99	\$.89	\$.79

## JAMECO ValuePro .100" (2.54mm) IDC DIP Flat Cable Plugs

- Mates with standard 14, 16, 20, 24, 26, 28 & 40-pin DIP sockets with 0.1" spacing
- Uses 28 AWG flat ribbon cable, pg 44
- Plastic with gold-plated contacts
- Current rating: 1A



42674

\* Web Code: KEF

Part No.	Cross Ref.	Width	Contacts	1	10	100
42658	8200-14	0.3"	14	\$.45	\$.39	\$.35
42674	8200-16	0.3"	16	.59	.55	.49
104097	8200-20	0.3"	20	.69	.59	.55
42691	8200-24	0.6"	24	.75	.65	.49
99670	8200-28	0.6"	28	.79	.69	.55
42712	8200-40	0.6"	40	.99	.89	.79

\* PCB Connectors — Enter Web Code EEN

## CINCH Card Edge Connectors

### .100" (2.54mm) Density Solder Tab/DIP Terminals

- Fits all PC boards
- Gold plated contacts

\* Web Code: XEE

Part No.	Positions	Terminal	1	10	100
2203021	36/72	DIP solder*	\$6.95	\$5.95	\$4.95
2203039	40/80	DIP solder*	7.95	6.95	5.95
2203012	43/86	Solder tab	7.95	6.95	5.95
2133536	60/120	DIP solder*#	.39	.29	.25

\*Without mounting ears #AMP/Tyco

### .156" (3.96mm) Density Wire-Wrap Terminals

Part No.	Positions	Terminal	1	10	100
2203047	30/60	Wire wrap	\$6.95	\$5.95	\$4.95

## AMP AMPMODU™ .100" (2.54mm) Receptacle Housing & Contacts

### Single Row, Non-Polarized, Crimp Snap-In Housing (MOD IV)

- No PC with UMN
- Black thermoplastic, flame retardant

Part No.	Mfr.	Part No.	Pos.	Width	1	10	100
526871		87499-3	2	0.205"	\$1.09	\$.99	\$.89

### Standard Pressure Receptacle Contacts (MOD IV)

- Material: phosphor bronze
- No PC with UMN
- Plating:

- 527419: 50µ" gold flash over nickel, 30µ" gold in contact area  
 527486: 15µ" gold in contact area, 100µ" - 200µ" bright tin lead, all over 50µ" nickel  
 895844: Short point; 22-26 AWG; 50µ" nickel entire area; 15µ" gold in contact area



527419



527486

\* Order in multiples of 10

Part No.	Mfr.	Part No.	1	10	100
527419		1-87523-6	\$.29	\$.25	\$.19
527486		87523-6	*	.22	.19
895844		104480-3	*	.09	.07

\* Gray Ribbon Cables — Enter Web Code WBX

\* Multicolor Ribbon Cables — Enter Web Code WCF

## .100" (2.54mm) Non-Polarized Connector Housings & Crimp Pins

JAMECO ValuePro



- Mates with 0.025" square post on pattern of 0.100" centers (male headers, pg 54)
- Current rating: 1A • Housing material: plastic
- Pin material: brass/tin plated • 26-22 AWG
- Temp. rating: -55°C to +105°C
- Use crimping P/N 159266, pg 120

\* Web Code: YAL

### Single Row

\* Order in multiples of 10

Part No.	Cross Ref. No.	Contacts	1	10	100
100812	SCH2	2	* .19	\$.15	\$.15
157383	SCH3	3	.35	.29	.25
100803	SCH4	4	.35	.29	.25
163686	SCH5	5	.39	.35	.29
103212	SCH6	6	.45	.39	.35
103203	SCH8	8	.49	.45	.39
103191	SCH10	10	.55	.49	.45
103182	SCH20	20	.59	.55	.49
103158	SCH36	36	.65	.55	.49

### Double Row

\* Web Code: ZBQ

Part No.	Cross Ref. No.	Contacts	10	100	299
103254	DCH8	8	\$.39	\$.35	\$.29
157421	DCH10	10	.45	.39	.35
103238	DCH16	16	.49	.45	.39
103230	DCH20	20	.55	.49	.45

### Crimp Pins for Single/Double Row Housings

\* Order in multiples of 10

\* Web Code: XAL

Part No.	Cross Ref. No.	Description	10	100	500
100766	FCH1	Female pin	\$.19	\$.15	\$.12
145358	MCH1	Male pin	.19	.15	.12

## CINCH Jones Plugs and Sockets

### Series 300 Multiple-Density Solder-Eyelet Connectors

- Insulation material: molded monoblock, black phenolic
- Contact material: plug - brass; socket - phosphor bronze
- Contact plating: cadmium
- Operating voltage: 250VAC max.
- Contact resistance: 16mΩ max.
- Current rating: 10 amps • 2 position is round
- Hood material: UL 94V-0 rated thermoplastic



\* Web Code: WBP

### Sockets with Hood and 180° Clamp

Part No.	Mfr.	Part No.	Contacts	1	10
248807		S-302H-CCT	2	\$3.95	\$3.75
248823		S-304H-CCT	4	4.49	3.95
248831		S-306H-CCT	6	4.95	4.49

### Plugs with Hood and 180° Clamp

Part No.	Mfr.	Part No.	Contacts	1	10
248760		P-302H-CCT	2	\$3.95	\$3.59
248786		P-304H-CCT	4	4.49	4.25
248794		P-306H-CCT	6	4.49	4.25

## PowerFilm. FLEXIBLE THIN FILM SOLAR MODULES

171061: 4.5"L x 1.5"W x .01"H

228030: 3.3"L x 1.5"W x .01"H

228030

Part No.	Operating Voltage @ Current	1	5	25
171061	3V @ 50mA	\$5.95	\$5.39	\$4.79
228030	4.2V @ 22mA	5.95	5.39	4.79

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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## Mini DIN & DIN Panel Mount Female Sockets

- With solder lugs
- Metal body

**\* Web Code: FAB**

Part No.	Cross Ref.	Description	1	10	100
2076762		4-pin mini DIN	\$ .95	\$ .85	\$ .75
2205510	MDPM4	6-pin mini DIN	1.39	1.25	.99
2076762	MDPM6	5-pin DIN	3.49	2.95	2.59
2205501	57HB5F*	5-pin DIN	.99	.89	.69
15844	DINJ5	6-pin DIN	1.15	.95	.85
15852	DINJ6	8-pin DIN	1.29	.99	.89
15861	DINJ8				

\* Manufacturer: Switchcraft

## Mini-DIN & DIN PC Mount Female Sockets

**\* Web Code: DMS**

- Set back: 0.5"
- 29399: Plastic body
- 119475: Plastic/metal body

### Unshielded (DIN) – Right Angle

Part No.	Product No.	Description	1	10	100
29399	RD5	5-pin DIN	\$ .75	\$ .65	\$ .49

### Shielded (Mini DIN) – Right Angle

Part No.	Product No.	Description	1	10	100
140791	MDR4S	4-pin mini DIN	\$ .29	\$ .19	\$ .15
2211004	MPJ-4P-S	4-pin mini DIN	1.75	1.49	1.25
119475	MDR6S	6-pin mini DIN	.89	.79	.69
207722	MDR8S	8-pin mini DIN	.29	.19	.15

For complete selection of Computer Cables, see page 138

## PROGRAMMABLE 555 TIMERS

Micro-power versions of the popular 555 timer operate on current under 5μA and a minimum supply voltage of 1.2V make them perfect for battery powered applications.

- Six-decade programmable counter
- Configuration data stored in EEPROM
- Temperature compensated



2146468

Part No.	Description	Price
2146425	SOIC-8	\$1.55
2146433	DIP-8	1.95
2146450	DIP-8, internal timing capacitor	2.35
2146468	Evaluation kit	79.95

## ADAM TECH Displayport Receptacles

Displayport receptacles are royalty free products that can be used in any application where an HDMI connection was previously required.

- 15μ gold plating

**\* Web Code: DPP**

Part No.	Mfr. Part No.	Description	Type	Mounting Style	1	10	100
2114212	DPC-F-S-RA-SMT-P-15	Displayport, receptacle, right angle	SMT	Surface mount	\$1.29	\$1.15	\$ .99
2114247	MDPC-S-RA	Mini displayport, receptacle, right angle	DIP	Through hole	2.25	1.95	1.75

## ADAM TECH USB-A & B 1.0 & 2.0 Female Connectors

**\* Web Code: DAZ**

Part No.	Mfr.	Product No.	Description	1	10	100
2096181	Adamtech	USB-A-S-RA	USB-A, right angle	\$ .49	\$ .45	\$ .39
2097011	Adamtech	USB-A-S-VT	USB-A, vertical	.49	.45	.39
161024	ValuePro	1040	USB-A 1.0	.89	.79	.69
2076551	KobiConn	UAR64-8W2100	USB-A 2.0, dual port	.69	.59	.29
2096261	Adamtech	MUSB-B5-S-RA-SMT	Mini USB-B, right angle, surface mount	.89	.79	.69
2096245	Adamtech	USB-B-S-RA	USB-B, right angle	.39	.35	.29
230958	ValuePro	USB-B-S-RA-WT	USB-A 2.0, right angle, white insulator	.99	.89	.79

## Mini-DIN & DIN Plugs and Receptacles



- Solder barrels w/ strain relief
- See pg 43 for cable

**\* Web Code: DAV**

Part No.	Pins	Type	1	10	100
142280	4	Mini DIN plug	\$ .79	\$ .69	\$ .59
142262	6	Mini DIN plug	.85	.75	.65
111878	8	Mini DIN plug	.89	.79	.69
2205616	5	DIN plug†	12.95	11.95	10.95
15879	5	DIN plug	.59	.49	.39
180873	5	DIN receptacle	.79	.69	.59
15887	6	DIN plug	.79	.65	.59
2178638	6	DIN plug*	3.25	2.95	2.75
15895	8	DIN plug	.75	.55	.45

\* Nickel plated diecast handle (Switchcraft) † Locking

## AMP Circular Cable Clamps

Provides strain relief and can be used in all series receptacles and plugs.

- Material: thermoplastic black, UL94V-0 rated (plastic); zinc alloy (metal)

**\* Web Code: OLI**

Part No.	Mfr. P/N	Material	Shell Size	Cable O.D.(max.)	1	10
494039	206062-1	Plastic	11	.329"	\$3.95	\$3.49
494055	206966-1	Plastic	13	.453"	3.95	3.49
494063	206070-1	Plastic	17	.453"	3.95	3.49

## AMP CPC Contacts

Type III+ Snap-In Crimp Pins with Retention Spring

**\* Web Code: LEF**

- Finish:  
A: 30μ" gold over nickel  
B: 15μ" gold over nickel  
C: Tin-lead
- Crimp type except
- Contact body – brass or phosphor bronze

Part No.	Mfr. P/N	AWG	Finish	Type	1	10
526441	1-66361-1	18-14	A	Pin	\$ .85	\$ .75
526424	66180-1	18-16	A	Pin*	.99	.89
526432	66181-1	18-16	A	Socket	1.25	1.09
526459	66103-3	24-20	B	Pin	.59	.49
526563	1-66103-5	24-20	C	Pin	.39	.35
526361	1-66103-7	24-20	A	Pin	.69	.49
526379	66105-3	24-20	B	Socket	.59	.55
526504	1-66105-6	24-20	C	Socket	.55	.49

\* P/N 526424 (solder type)

## Size 20DF Contacts

- A: 30μ" gold over nickel B: gold flash over nickel

- Contact body: brass

Order in multiples of 10

Part No.	Mfr. P/N	AWG	Finish	Type	1	10	100
223298	66504-9	24-20	A	Socket	\$ .19	\$ .15	
223255	1-66504-0	24-20	B	Socket	.19	.15	

## AMP CPC Circular Plastic Connectors

Series 1 — Standard density, signal and low-current applications

- Accepts type III+, high-current type II and subminiature coax contacts
- Voltage rating: 600V (UL)

### Receptacles – Panel Mount

**\* Web Code: WBK**

Part No.	Mfr. P/N	Size/Pos.	Gender	Mating Connector	1	10
495218	206430-1	11-4	Reverse	495091	\$3.19	\$2.89
495162	206061-1	11-4	Standard	495082	2.95	2.75
495293	211401-1	13-7	Standard	421374	5.95	5.49
495234	206705-1	13-9	Standard	495103	3.19	2.89
495146	206043-1	17-14	Reverse	495031	3.19	2.89
421382	206036-1	17-16	Standard	495322	3.19	2.89

### Plugs – Free Hanging

Part No.	Mfr. P/N	Size/Pos.	Gender	Mating Connector	1	10
495091	206429-1	11-4	Reverse	495218, 839501, 495226	\$3.49	\$3.25
495082	206060-1	11-4	Standard	495162, 839324, 495197	3.49	3.25
421374	211399-1	13-7	Standard	495293	4.95	4.49
495103	206708-1	13-9	Standard	919447, 495234, 495242	3.95	3.59
495031	206044-1	17-14	Reverse	750311, 495146, 495154	3.95	3.59
495322	206037-1	17-16	Standard	421382, 495314	3.95	3.59
495066	206150-1	23-37	Standard	495189, 495171	4.95	4.49

Additional Amphenol 31 Series Plugs, Jacks and Adapters visit [Jameco.com](http://Jameco.com) and use Web Code

NEW  
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\*Web Code: BCP

### Plugs

Part No.	Manufacturer	Product No.	Fig.	Description	1	10	50
223394	Amphenol RF	31-12	1	50Ω plug, clamp, for RG-59/62/71/140/210 (UG-260/U) .....	\$1.49	\$1.25	\$1.09
71482	Steren	200-145	2	50Ω plug, 3 pcs, crimp, for RG-58 .....	1.75	1.55	1.39
188306	Amphenol RF	31-320-RFX	2	50Ω plug, 3 pcs, crimp, for RG-58/58C/141/B7806A .....	1.49	1.39	1.29
2185694	Amphenol RF	31-321-1002	2	50Ω plug, 3 pcs, crimp .....	.79	.69	.59
2161246	ValuePro	B-111L-R-NGD	2	50Ω plug, 3 pcs, crimp, for RG-174/U; 188A/U; 316/U .....	1.25	1.09	.95
2183664	Amphenol RF	31-325	2	50Ω plug, 3 pcs, crimp .....	2.29	1.95	1.75
71271	Steren	200-143	2	75Ω plug, 3 pcs, crimp, for RG-59 .....	1.25	1.09	.99
2205448	Amphenol RF	31-71032	2	75Ω plug, 3 pcs, crimp, for RG-59, double braided .....	2.95	2.75	2.49
2185803	Amphenol RF	31-70068	2	75Ω plug, right angle, 3 pcs, crimp, for RG-179 .....	.79	.69	.59
2085052	Amphenol RF	31-71013	3	75Ω plug, 4 pcs, crimp, for RG-179/187 .....	2.49	2.25	1.95
744712	Amphenol RF	31-70013-1000	3	75Ω plug, 4 pcs, crimp .....	.99	.89	.79
112110	ValuePro	G7409	3	50Ω male with pin and ferrule, for RG-174, 4 pcs. ....	1.75	1.49	1.25
188357	Amphenol RF	31-242-RFX	3	50Ω plug, 4 pcs, crimp, for RG-179/187 .....	1.25	1.09	.99
2084990	Amphenol RF	31-242	3	50Ω plug, 5 pcs, crimp, for RG-179/187 .....	2.49	2.25	1.95
71781	Steren	200-142	4	75Ω plug, twist-on, for RG-59 .....	.99	.89	.79
2185678	Amphenol RF	9350	5	50Ω plug, 6 pcs, crimp, for RG-6 .....	2.49	2.25	1.95

### Jacks

Part No.	Manufacturer	Product No.	Fig.	Description	1	10	50
174290	ValuePro	TBC-090	6	Jack, chassis mount .....	\$1.49	\$1.25	\$1.09
355178	ValuePro	31-221	7	50Ω jack, panel mount, solder cup (UG-1094/U) <sup>1</sup> .....	2.25	1.95	1.75
223511	Amphenol RF	31-221	8	50Ω jack, panel mount, solder cup <sup>1</sup> .....	2.49	2.25	1.95
223520	Amphenol RF	31-236-RFX	8	50Ω bulkhead jack, panel mount, solder cup .....	1.75	1.49	1.29
2161297	ValuePro	B-235-1-R	9	50Ω bulkhead jack, solder terminal .....	1.25	1.09	.99
658427	Amphenol Connex	112424	10	50Ω bulkhead jack, solder cup <sup>1</sup> .....	2.49	2.25	1.95
2161262	ValuePro	B-235-R	10	50Ω bulkhead jack, isolated, solder terminal <sup>1</sup> .....	1.75	1.49	1.25
296067	Amphenol Connex	112431	9	50Ω bulkhead jack, isolated, solder terminal .....	4.49	3.95	3.59
493917	AMP	227161-3	11	50Ω jack, right angle, PCB <sup>2</sup> .....	1.95	1.75	1.49
421331	AMP	227726-3	12	50Ω jack, isolated, solder .....	2.75	2.49	2.25
111561	Steren	200-148	13	50Ω jack, isolated, panel mount <sup>1</sup> .....	2.49	2.25	1.95
223360	Amphenol RF	31-5	14	50Ω jack, 6 pcs, RG-55/141/142/223/400 .....	3.95	3.59	3.25
2185731	Amphenol RF	31-347	15	50Ω jack, 6 pcs, straight, bulkhead .....	1.49	1.25	1.09
2185723	Amphenol RF	UG-909B/U	15	50Ω jack, 8 pcs, straight, panel mount .....	2.49	2.25	1.95
160929	ValuePro	B211F-58	16	Jack, 3 pcs, crimp type, for RG-58 .....	1.49	1.25	1.09
2205190	ValuePro	WJ-7022-M-A	16	Jack, 3 pcs, crimp type, for RG-58/U/141 .....	2.95	2.59	2.29
2185820	Amphenol RF	31-332	16	50Ω jack, 3 pcs, crimp .....	2.49	2.25	1.95
2077618	ValuePro	BNC-CR	17	75Ω jack, chassis PCB receptacle .....	1.25	1.09	.99
2185715	Amphenol RF	31-5486	18	50Ω jack, right angle, PC mount, valox w/ Hdwr <sup>2</sup> (0-1GHz) .....	1.49	1.25	1.09
146511	ValuePro	CH-7044S	18	50Ω jack, right angle, PC mount, w/ Hdwr <sup>2</sup> (0-2GHz) .....	2.49	2.25	1.95
71590	ValuePro	G1B235	19	Jack, panel mount (UG-1094A) <sup>1</sup> .....	1.95	1.75	1.49
1952821	Foxconn	KDA1001-H0	20	Jack, right angle, plastic insulation, PC mount <sup>2</sup> .....	.65	.55	.45

Additional Panel Mounting Hardware: P/N 2186030 (1) (2 nuts, 1 washer) and P/N 2186021 (2) (2 nuts, 1 washer), see pg 78

### Adapters/Couplers

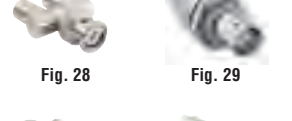
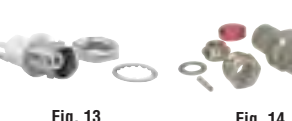
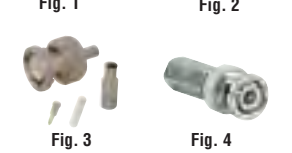
Part No.	Manufacturer	Product No.	Fig.	Description	1	10	50
127343	ValuePro	B-311	21	50Ω male/male coupler (UG-491B/U) .....	\$2.75	\$2.49	\$2.25
363961	Steren	31-218	21	50Ω straight adapter, plug-plug (UG-491A/U) .....	1.95	1.75	1.49
355152	ValuePro	31-219-RFX	22	50Ω straight adapter, jack-jack (UG-914/U) .....	2.95	2.65	2.39
2185811	Amphenol RF	31-5500	22	BNC jack-to-jack straight adapter, PC mount .....	.99	.89	.79
311351	ValuePro	31-220N-RFX	23	50Ω bulkhead adapter, jack-jack <sup>2</sup> .....	2.25	2.09	1.89
72629	Steren	200-150	24	50Ω female to female/female T-adapter .....	1.95	1.75	1.49
118594	Steren	200-155	25	50Ω male to female/female T-adapter .....	2.19	1.95	1.75
188429	Amphenol RF	31-208-RFX	25	50Ω male to female/female T-adapter .....	2.49	2.25	1.95
71909	Steren	200-160	26	Female/female coupler (UG-914) .....	1.49	1.25	1.09
148232	ValuePro	31-4803-RFX	27	50Ω coupler, jack-jack, isolated, w/ washer & nut <sup>2</sup> .....	2.95	2.65	2.39
100597	ValuePro	40958-Y	28	50Ω male to female/female T-adapter (180°) .....	5.95	5.49	4.95
658451	Amphenol Connex	112437	29	50Ω jack-to-jack bulkhead adapter (all 50Ω coax cables) .....	3.49	3.25	3.09
127352	ValuePro	B-412	30	50Ω male to female right angle (DG-306B/O) .....	3.95	3.25	2.49
2085204	Amphenol RF	82-5590	31	Receptacle, twinaxial solder cup, front-mounted .....	1.75	1.49	1.25

Additional Panel Mounting Hardware: P/N 2186021 (2) (2 nuts, 1 washer), see pg 78

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



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# BNC, RCA, SMA/SMB Connectors & Adapters

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Amphenol Connex



## BNC Terminators

\* Web Code: BCT

Part No.	Manufacturer	Product No.	Description	1	10	50
71458	ValuePro	B-611T	50Ω BNC male terminator	\$1.49	\$1.25	\$1.19
658523	Amphenol Connex	202103	50Ω terminator plug	2.25	2.09	1.89
2185993	Amphenol RF	MX554A/U	50Ω BNC straight terminator with cap and chain	.79	.69	.59



## BNC, RCA & SMA RF Adapters

\* Web Code: RFS

Part No.	Manufacturer	Product No.	Description	1	10	50
153454	ValuePro	SB-321	SMA female to BNC male	\$2.75	\$2.49	\$2.25
159469	ValuePro	CH-7830-N	SMA female to BNC female	3.25	2.95	2.59
153593	ValuePro	4288	SMA male to BNC male	2.95	2.69	2.39
159477	ValuePro	CH-7820-N	SMA male to BNC female	4.25	3.95	3.55
2185985	Amphenol Connex	95625	SMA female to BNC male, right angle, 3 pcs.	1.49	1.25	1.09
207168	ValuePro	BJ-7072	RCA female to BNC female	.95	.85	.75
114789	ValuePro	BR312	RCA female to BNC male	1.89	1.65	1.49
207176	ValuePro	BJ-7055	RCA male to BNC male	1.49	1.25	1.09
114753	ValuePro	RB312	RCA male to BNC female	1.89	1.65	1.49
114770	Steren	200-108	BNC female to F connector male	1.25	1.09	.99
174255	Steren	TBC-176	BNC male to F connector female	1.75	1.49	1.25



## 75Ω "F" Connector

\* Web Code: FCA

Part No.	Manufacturer	Product No.	Description	1	10	50
295380	Steren	200-107*	F-right angle jack to plug (nickel)	\$1.25	\$1.09	\$.99

\* Additional panel mounting hardware (2 nuts, 1 washer) P/N 2182611, see pg 78

Amphenol Connex

## RF "N" Type Connector

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Part No.	Manufacturer	Product No.	Description	1	10	50
2185926	Amphenol Connex	15975	Right angle clamp connector, N-type	\$.99	\$.89	\$.79



## 50Ω MMCX Connector

NEW  
MARKED IN PINK

Part No.	Manufacturer	Product No.	Description	1	10	50
311693	ValuePro	908-43300-VP	Right angle plug, crimp (RG-174/188/316)	\$1.95	\$1.75	\$1.49

Amphenol Connex

## 50Ω SMA/SMB Connectors

\* Web Code: SGX

Part No.	Manufacturer	Product No.	Fig.	Description	Plating	1	10	50
2178304	ValuePro	SS-A111F-RNGT†	1	Straight crimp type male plug (RG-58), 3 pcs.	Nickel	\$1.49	\$1.25	\$1.09
153366	ValuePro	4804	2	Straight crimp type male plug (RG-174), 3 pcs.	Gold	3.59	3.25	2.95
2185934	Amphenol Connex	31-5187	11	Straight crimp type male plug, 4 pcs., SMB	Nickel	2.49	2.25	2.09
145382	ValuePro	19-46G	3	Straight female PCB mount, 4 legs	Gold	2.95	2.65	2.39
145374	ValuePro	19-49G	4	90° female PCB mount, 4 legs	Gold	3.25	2.95	2.65
2217060	ValuePro	S-P225-RNGT	5	Jack, right angle, PC mount	Nickel	2.49	2.25	2.09
355283	ValuePro	901-143-6-RFX	6	Jack, right angle, PC mount	Gold	3.95	3.59	3.25
159531	ValuePro	CH-7814#	7	Female panel mount, 4 mounting holes (G-58/174)	Gold	3.59	3.25	2.95
160013	ValuePro	CH-7818-N ✓	8	Panel mount feed thru, female-female	Nickel	4.95	4.25	3.75
153286	ValuePro	SMA-7813	9	Bulkhead solder female w/ washer, rear mount (RG-58/174)	Gold	3.49	3.19	2.89

† Reverse polarity # Solder cup ✓ Additional panel mounting hardware (2 nuts, 1 washer) P/N 2182611, see pg 78



Amphenol Connex

## SMA Adapters and Couplers

\* Web Code: SGX

Part No.	Manufacturer	Product No.	Fig.	Description	Plating	1	10	50
659041	Amphenol Connex	132169	10	50Ω jack-to-jack adapter	Gold	\$5.49	\$4.95	\$4.45
2161300	ValuePro	S-322-H-R	12	50Ω jack-to-jack adapter, bulkhead feed-through	Gold	2.95	2.69	2.39
659059	Amphenol Connex	132170	12	50Ω jack-to-jack adapter, bulkhead feed-through	Gold	7.95	7.25	5.95
161294	ValuePro	S-311-G	13	Straight coupler male-male	Gold	3.49	3.25	2.95
161307	ValuePro	S-412-G	14	Right angle coupler male-female	Gold	5.95	5.49	4.95
153294	ValuePro	SMA-7817	15	Straight coupler female – jack-to-jack	Gold	3.95	3.59	3.19

## 50Ω TNC Bulkhead Connector

NEW  
MARKED IN PINK

Part No.	Manufacturer	Product No.	Fig.	Description	1	10	50
2197521	Rosenberger	56RK607-803N4	16	50Ω bulkhead jack, solder cup	\$1.95	\$1.59	\$1.25

\* SMB Connectors — Enter Web Code SCS



## JAMECO ValuePro SMA/SMB 50Ω Coax Cables



\*Web Code: BZM

Fig. 1: SMA male to SMA male

Fig. 2: SMA male to SMA right angle male

Fig. 3: SMA right angle male to SMA right angle male

Fig. 4: SMB plug female to SMB plug female

Part No.	Cable	Fig.	Lgth (ft.)	1	10	50
159397	RG-58	1	6	\$4.95	\$4.49	\$3.95
169801	RG-174	1	0.5	3.19	2.75	2.49
163855	RG-174	1	1	3.95	3.59	3.25
153382	RG-174	1	2	4.95	4.49	3.95
153391	RG-174	1	4	5.95	5.49	4.95
159451	RG-174	1	6	6.95	6.25	5.59
175135	RG-174	2	1	3.95	3.59	3.25
175143	RG-174	3	0.5	3.25	3.09	2.89
175152	RG-174	3	1	4.49	3.95	3.59
175178	RG-174	4	1	4.95	4.49	3.95

## JAMECO ValuePro BNC Male Coax Cables



\*Web Code: BBD

Fig. 1

Fig. 2

### RG58/U 50Ω Network & Oscilloscope Cables

Part No.	Cross Ref.	Fig.	Length	1	10	50
181308	CRG58-1RR	1	1'	\$3.55	\$3.19	\$2.89
102315	CRG58-1	2	1.5'	3.95	3.55	3.19
256743	CBB-224-24	2	2'	4.25	3.95	3.59
11404	CRG58-3*	2	3'	4.49	4.19	3.75
102331	CRG58-6*	2	6'	4.75	4.35	3.95
180822	CRG58-10	2	10'	4.95	4.59	4.09
102350	CRG58-12	2	12'	5.35	4.85	4.35
169818	CRG58-15	2	15'	5.49	4.95	4.49
102357	CRG58-25*	2	25'	5.59	5.19	4.75
102365	CRG58-50*	2	50'	7.95	6.95	6.25
102381	CRG58-100*	2	100'	9.95	8.95	7.95

\*Manufacturer: Steren

### RG6 75Ω Cables

Part No.	Cross Ref.	Fig.	Length	1	10	50
176794	RG6-3	2	3'	\$4.49	\$3.95	\$3.59
176815	RG6-6	2	6'	4.75	4.25	3.75

### RG59/U 75Ω CATV & Video Patch Cord

Part No.	Cross Ref.	Fig.	Length	1	10	100
85543	CRG59-6	2	6'	\$4.49	\$3.95	\$3.59

### RG174/U 50Ω Network & Oscilloscope Cables

Part No.	Cross Ref.	Fig.	Length	1	10	50
111473	RG174U3	2	3'	\$5.49	\$4.95	\$4.49
111482	RG174U6	2	6'	6.95	6.25	5.49

## EGE Telecom Splice Connectors

Provides clean, solid and rapid connection of wires to keep lines free of noise

169755: Y-type

Part No.	Color	AWG	Conductors	1	10	100
169747	Yellow	22-26	2	\$0.25	\$0.22	\$0.15
169755	Red	19-26	3Y	.29	.19	.15



## CINCH ADAM TECH Standard Double Row Barrier Terminal Blocks

- Insulation: molded mono block, general purpose phenolic, black, UL94V-1
- Screw material: steel with nickel over copper flash plating



### 140 Series 15A (5-40 x 3/16" BH screws)

- 3750-watts/terminal max.
- 16 AWG wire max.
- Size: 0.88"W x 0.41"H

\*Web Code: YBM

Part No.	Mfr. P/N	Pos.	Length	1	10	100
2172682	TDA-02*	2	1.42"	\$0.99	\$0.89	\$0.79
230973	2-140	2	1.41"	1.95	1.75	1.49
2173757	TDA-03*	3	1.79"	.75	.65	.55
230981	3-140	3	1.78"	1.25	1.09	.99
230990	4-140	4	2.16"	1.95	1.85	1.75
2173773	TDA-06*	6	2.91"	1.75	1.59	1.45
231010	6-140	6	2.91"	2.39	2.29	2.15
231036	8-140	8	3.66"	2.89	2.75	2.49
231052	10-140	10	4.41"	3.95	3.59	3.25

\*Manufacturer: Adam Tech

### 141 Series 20A (6-32 x 1/4" BH screws)

- 5000-watts/terminal max.
- 14 AWG wire max.
- Size: 1.13"W x 0.5"H



Part No.	Mfr. P/N	Pos.	Length	1	10	100
2100021	3-141*	3	1.78"	\$1.09	\$0.89	\$0.79
231394	6-141	6	3.38"	3.49	3.25	2.95
231415	8-141	8	4.25"	3.95	3.59	3.25
231431	10-141	10	5.13"	4.95	4.59	4.25

\*Manufacturer: Arndt

### 142 Series 30A (8-32 x 5/16" BH screws)

- 7500-watts/terminal max.
- 10 AWG wire max.
- Size: 1.312"W x 0.625"H



Part No.	Mfr. P/N	Pos.	Length	1	10	100
440891	42	8	5.47"	\$7.95	\$7.19	\$6.49

### Terminal Block Jumpers

For connecting between adjacent terminals or alternate terminals.

- 2-position
- Brass w/ nickel plating



Part No.	Mfr. Part No.	1	10	100
659382	140J-1 (140 series)	\$0.39	\$0.35	\$0.29
448500	141J (141 series)	.39	.35	.29

## JAMECO ValuePro European Terminal Blocks

- Number of poles: 12
- Terminal insert: brass metal alloy, nickel plated
- Material: polyamide 66 (nylon 66), UL94V-2, natural
- Screws: zinc plated, yellow chromed, PA8 (M2.6), PA10, ES08, ES10 (M3.0), PA12 (3.5)



\*Web Code: CBJ

Part No.	Product No.	Amps	AWG	1	10	100
2120161	ES1000/12DS*	20	16-20	\$1.49	\$1.25	\$1.09
2120170	ES1000/12DS*	20	16-20	1.95	1.75	1.49
215011	PA8HDS†	20	12-22	1.75	1.59	1.39
215029	PA10HDS†	30	10-22	2.39	2.25	1.95
215037	PA12HDS†	35	10-22	2.95	2.75	2.49

\*300V, Mfr.: On-Shore Technology †450V

## moLEX BEAU Barrier Terminal Blocks

### .375" Double Row Low Profile

\*Web Code: YBM

- Wire AWG range: 12-24AWG
- Terminal: brass, nickel plated
- Insulator: thermoplastic, UL94V-0
- Screws: #6-32 BH screws, steel, zinc chromate plate



Part No.	Mfr. Part No.	Beau No.	Pos.	1	10	100
659411	38770-0104	77004	4 ..	\$1.49	\$1.25	\$1.09
659454	38770-0108	77008	8 ....	3.49	3.19	2.75

## JAMECO ValuePro Metric Tri-Barrier Single Row Terminal Blocks

- Off center PC mount
- Brass, tin-plated terminals
- Steel, nickel-plated screws
- UL/CSA recognized

\*Web Code: YBT

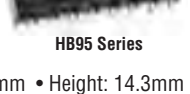
### DT39 Series

- Current rating: 20A @ 300V
- Wire gauge range: 12-22 AWG
- M3 screw size
- Pitch: 8.25mm
- Height: 12.7mm



### HB95 Series

- Current rating: 10A @ 250V
- Wire gauge range: 14-22 AWG
- M3.5 screw size
- Pitch: 9.5mm
- Height: 14.3mm



Part No.	Cross Ref.	Pos.	Lgth (mm)	1	10	100
2133616	DT39-B01W-06	6	50.6	\$0.39	\$0.29	\$0.25
2133624	DT39-B01W-08	8	67.2	.59	.49	.39
2162628	HB951-08P	8	77.5	.49	.39	.29

## JAMECO ValuePro Metric Double Row Terminal Blocks

- Body: black thermoplastic (UL94V-0)
- Terminals: brass tin plated
- Screws: steel nickel plated
- 12-18 AWG

\*Web Code: YBT

### 10A @ 600V

- Screw size: M3.0
- Size: 19.5mm W x 11.9mm H



Part No.	Cross Ref.	Pos.	Lgth (mm)	1	10	100
208857	GGE-10-4P	4	55	\$0.99	\$0.89	\$0.79
208865	GGE-10-6P	6	74	1.49	1.35	1.19
208900	GGE-10-10P	10	112	2.35	2.09	1.89
208882	GGE-10-12P	12	131	2.49	2.25	2.09

### 20A @ 600V

- Screw size: M3.5
- Size: 22.0mm W x 13.2mm H

Part No.	Cross Ref.	Pos.	Lgth (mm)	1	10	100
207572	GGE-20-12P	12	150.7	\$2.95	\$2.75	\$2.49

## JAMECO ValuePro Wire Connectors

- UL approved nylon 66, 94V2
- Strip wire before application
- Twist on type



182450: UL/CSA approved

140717: PE – metal inside

Part No.	Description	10	100	1000
140717	Wire IDC 22-18 AWG	\$0.15	\$0.12	\$0.09
182511	Wire nut 16 AWG	.12	.09	.07
182450	Crimp 16-14 AWG*	.15	.09	.07

\*Requires crimping tool (P/N 72996, pg 63)

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Terminal Blocks

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



## 0.138" (3.5mm) to 0.200" (5.08mm) Terminal Blocks

Part No.	Mfr.	Mfr. Part No.	Fig.	Term.	Terminal Spacing	Description	1	10	100
2094506	OST	OSTTE020161	1	2	0.138"/3.5mm	Top screw	\$.35	\$.29	\$.25
2094522	OST	OSTTF020161	2	2	0.138"/3.5mm	Side screw	.45	.39	.35
2094514	OST	OSTTE030161	1	3	0.138"/3.5mm	Top screw	.49	.45	.39
2124411	OST	OSTTE040161	1	4	0.138"/3.5mm	Top screw	.55	.49	.45
2094565	OST	OSTTJ0231530	4	2	0.150"/3.81mm	R/A screw	.55	.49	.45
2094485	OST	OSTTA020161	5	2	0.197"/5.0mm	Top screw	.39	.35	.29
160785	Dinkle	EK500V-02P	6	2	0.197"/5.0mm	Top screw	.65	.59	.49
164794	OST	OSTTH020160	3	2	0.197"/5.0mm	Top screw	.55	.45	.39
99427	Dinkle	128V2P-R	7	2	0.197"/5.0mm	Top screw	.85	.65	.55
189676	OST	OSTTC020162	8	2	0.197"/5.0mm	Top screw	.45	.35	.29
161067	Dinkle	EK500A-02P	9	2	0.197"/5.0mm	45° angle screw	.79	.59	.49
2159656	Phoenix	SMKDSN1.5/2	14	2	0.197"/5.0mm	55° angle screw	.39	.29	.19
2094493	OST	OSTTA030161	5	3	0.197"/5.0mm	Top screw	.45	.39	.35
189668	OST	OSTTC030162	10	3	0.197"/5.0mm	Top screw	.39	.35	.29
99398	Dinkle	DT128V3P	7	3	0.197"/5.0mm	Top screw	1.09	.99	.89
160793	Dinkle	EK500V-03P	6	3	0.197"/5.0mm	Top screw	.99	.89	.79
164806	OST	OSTTH030160	3	3	0.197"/5.0mm	Top screw	.75	.59	.55
161059	Dinkle	EK500A-03P	9	3	0.197"/5.0mm	45° angle screw	1.25	1.09	.95
2124429	OST	OSTTA040161	5	4	0.197"/5.0mm	Top screw	.65	.59	.55
2124470	OST	DT128V4P-R	7	4	0.197"/5.0mm	Top screw	.75	.65	.55
164815	OST	OSTOP240000	13	24	0.197"/5.0mm	1.3 x 1.3mm	1.35	1.19	1.05
2120567	OST	OSTYC022150	6	2	0.200"/5.08mm	Top screw	.49	.45	.39
2120647	OST	OSTTC022162	1	2	0.200"/5.08mm	Top screw	.35	.29	.25
2094581	OST	OSTTJ025153	11	2	0.200"/5.08mm	Top screw	.65	.59	.55
152347	OST	OSTTA024163	12	2	0.200"/5.08mm	Top screw	.69	.65	.59
2120575	OST	OSTYC032150	6	3	0.200"/5.08mm	Top screw	.45	.39	.35
2120655	OST	OSTTC032162	1	3	0.200"/5.08mm	Top screw	.49	.45	.39
152355	OST	OSTTA034163	12	3	0.200"/5.08mm	Top screw	.59	.55	.49
2094590	OST	OSTTJ035153	11	3	0.200"/5.08mm	Top screw	.99	.89	.79
2124445	OST	OSTTA044163	12	4	0.200"/5.08mm	Top screw	.69	.65	.59

Interconnects



\*Web Code: XBD

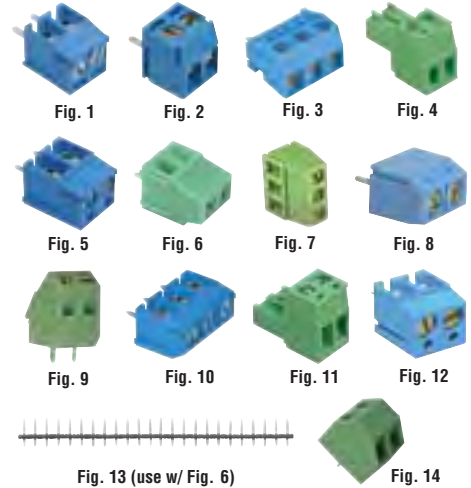


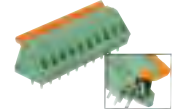
Fig. 13 (use w/ Fig. 6)

Fig. 14

## PCB Terminal Block

PCB mounted terminal blocks with spring loaded contacts for easy connections.

- Stackable terminal blocks
- Accepts 14-24 AWG wires
- Nominal current: 16A
- Nominal voltage: 250V
- 5.08mm lead spacing
- Spring cage connection
- 10-position with right end plate
- 45° position



Part No.	Mfr. Part No.	Pos.	Lgth (mm)	1	10	100
2162636	1706714-10	10	50.88	\$1.75	\$1.49	\$1.25



## UL1007 & UL1569 Rated Hook-Up Wire

\*Web Code: JAS

Make wiring simple with these small gauge wire rolls. Able to handle high voltages while fitting and mounting easily into your terminal block slots. Applications: Interconnection circuits, wiring of computer and data processing equipment, applications and automotive.

- 300V peak
- PVC insulation
- Stranded
- Sold in 100' rolls
- VW-1
- Tin-plated copper
- Temp. range: -40°C to 80°C (UL1007); -40°C to 105°C (UL1569)

Appliance Wiring Material (AWM) is UL recognized covering of insulated wire & cable intended for internal wiring of appliances & equipment.



AWG	Stranding	UL1007	UL1569	Black P/N	Red P/N	White P/N	Green P/N	Yellow P/N	Blue P/N	1	5	10
28	7 x 36	x	x	734611	734603	734610	734606	734605	734614	\$5.95	\$5.49	\$4.95
26	7 x 34	x	x	734511	734503	734510	734506	734505	734514	6.75	5.95	5.49
24	7 x 32	x	x	734411	734403	734410	734406	734405	734414	7.49	6.75	5.95
22	7 x 30	x		126085	126034	126077	310852	310878	310886	8.49	7.49	6.75
22	7 x 30	x	x	734311	734303	734310	734306	734305	734314	8.49	7.49	6.75
20	10 x 30	x		125840	125795	125831	310894	310915	310922	11.49	10.49	9.49
20	10 x 30	x	x	734211	734203	734210	734206	734205	734214	11.49	10.49	9.49
18	16 x 30	x		125787	125736	125752	310932	310949	310958	14.49	12.95	11.49
18	16 x 30	x	x	734111	734103	734110	734106	734105	734114	14.49	12.95	11.49
16	26 x 30	x	x	734011	734003	734010	734006	734005	734014	16.95	15.25	13.95

## BREADBOARD TO PROTOBOARD DESIGNING

These boards have the same pinouts so you can design on the breadboard and solder the design directly to the protoboard.

Breadboard				ProtoBoard			
Part No.	Points	Size	Price	Part No.	Points	Size	Price
2125018	300	3.3" x 1.4" x 0.3"	\$4.95	2125042	300	3.0" x 1.2" x 0.06"	\$4.95
2123830	400	3.3" x 2.1" x 0.3"	5.95	2125051	400	3.0" x 1.9" x 0.06"	5.95
2125026	830	6.5" x 2.2" x 0.3"	7.95	2125034	830	7.0" x 1.9" x 0.06"	6.95

Component Kits and Grab Bags, see pages 29 & 30 for complete listing

## DIN Rail-Mounted Terminal Block & DIN Rail

- Molded thermoplastic
- 12-22 AWG
- Spacing: 5.06mm (.199")
- UL rated voltage and current: 600V @ 20A
- 248736: 35mm W x 7.5mm D
- 237083: Sold in 1 meter (39") length

Part No.	Mfr. Part No.	Type	1	10	100
237083	41296.2	SR2.5	\$.75	\$.59	\$.55
248736	2094.0(1M)	TS35 x 7.5	8.95	7.95	6.95

## BEST SELLING NICHIBO DC MOTORS

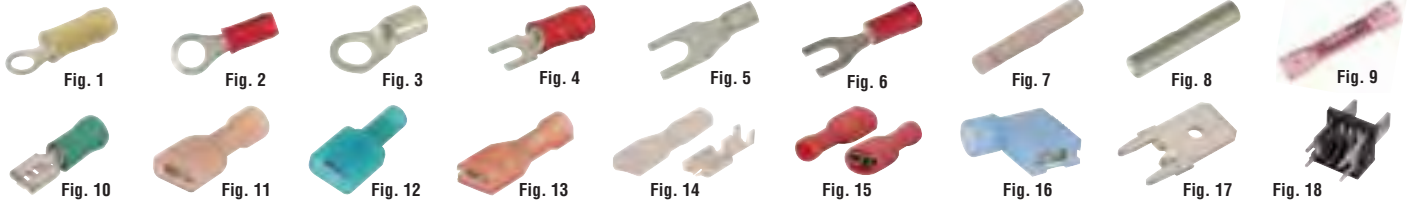
		2209203		2217781	
Part No.	Nom. Volt. (VDC)	Speed (RPM)	Torque (g-cm)	Pricing	
				1	10
2158442	3	2104	13.4	\$2.95	\$2.75
2173044	6	2100	11	3.95	3.49
2158434	6	4787	34.28	2.25	1.95
2209203	12	3203	36.05	4.95	4.49
2167681	12	5624	18.17	1.75	1.49
2217781	12	7524	7524	1.95	1.75
2210845	12	12610	93.7	6.95	5.95
2208833	12	16234	35.93	3.95	3.49
2208841	12	18587	41.5	4.49	3.95
2208850	12	25253	33.2	4.95	4.49
2217801	18	15432	78.9	2.95	2.49
2167672	24	2475	97.18	1.95	1.75
2192421	24	9346	193	3.95	3.49



## Terminals, Splices and Quick Connect/Disconnect

JAMECO ValuePro

\* Web Code: TSQ



### Ring Tongue Terminals

\* Order in multiples of 10

Part No.	Mfr.	Product No.	Fig.	Insul.	Stud Size	AWG	Color	1	10	100
2139073	Panduit	PV18-6R-M	2	Plastic	#6	22-18	Red	.....	\$.12	\$.09
103684	ValuePro	2048	2	Plastic	#6	22-16	Red	.....	\$.19	\$.15
302666	AMP	36152	2	Plastic	#6	22-16	Red	.....	\$.25	\$.22
2160622	ValuePro	31890VP	2	Plastic	#8	22-16	Red	.....	\$.15	\$.12
302674	AMP	31890	2	Plastic	#8	22-16	Red	.....	\$.19	\$.15
844289	AMP	34107	3	Uninsul.	#6	22-16	—	.....	\$.25	\$.19
844377	AMP	34111	3	Uninsul.	#8	22-16	—	.....	\$.15	\$.12
302720	AMP	320619	1	Nylon	#6	16-14	Blue	.....	\$.19	\$.15
2160569	ValuePro	320565VP	2	Nylon	#8	16-14	Blue	.....	\$.19	\$.15
302738	AMP	320565	2	Nylon	#8	16-14	Blue	.....	\$.29	\$.25
302746	AMP	36160	1	Nylon	#10	16-14	Blue	.....	\$.15	\$.12
2160606	ValuePro	321045VP	1	Nylon	#1/4	16-14	Blue	.....	\$.09	\$.07
302754	AMP	321045	1	Nylon	#1/4	16-14	Blue	.....	\$.15	\$.12
2144681	Panduit	PV10-8R-D	2	Vinyl	#8	12-10	Yellow	.....	\$.12	\$.09
302800	AMP	35109	1	Nylon	#10	12-10	Yellow	.....	\$.15	\$.12

### Spade Tongue Terminals

\* Order in multiples of 10

Part No.	Mfr.	Product No.	Fig.	Insul.	Stud Size	AWG	Color	1	10	100
302851	AMP	328394	4	Nylon	#2	22-16	Red	.....	\$.29	\$.25
2125780	3M	MVU18-4FLK	4	Vinyl	#4	22-16	Red	.....	\$.25	\$.19
302869	AMP	327717	4	Nylon	#4	22-16	Red	.....	\$.29	\$.25
2160577	ValuePro	34541VP	4	Nylon	#6	22-16	Red	.....	\$.15	\$.13
302877	AMP	34541	4	Nylon	#6	22-16	Red	.....	\$.25	\$.22
103588	ValuePro	SVS1-3.7	4	Vinyl	#6	22-16	Red	.....	\$.17	\$.15
2160631	ValuePro	323127VP	5	Uninsul.	#6	22-16	—	.....	\$.12	\$.09
842929	AMP	323127	5	Uninsul.	#6	22-16	—	.....	\$.19	\$.15
502879	Molex	19144-0001	6	PVC	#5-6	18-22	Red	.....	\$.19	\$.15
2160585	ValuePro	35559VP	4	Nylon	#6	16-14	Blue	.....	\$.19	\$.15
302906	AMP	35559	4	Nylon	#6	16-14	Blue	.....	\$.19	\$.15
302914	AMP	32059	4	Nylon	#8	16-14	Blue	.....	\$.35	\$.29
103596	ValuePro	SVM-2	4	Vinyl	#8	16-14	Blue	.....	\$.19	\$.15
302949	AMP	326859	4	Nylon	#6	12-10	Yellow	.....	\$.39	\$.35

### Solderless Terminal Kit

- Clear, hinged plastic box
- Use crimping tool P/N 72996, right

170 Terminals and Connectors!



Qty.	Description	Wire Gauge	Blade Size	Qty.	Description	Wire Gauge	Blade Size
10	Male spade	22-16	1/4"	10	Ring terminal	16-14	#10
10	Male spade	16-14	1/4"	5	Ring terminal	12-10	#10
10	Female spade	22-16	1/4"	5	Ring terminal	12-10	#14
10	Female spade	16-14	1/4"	10	Spade terminal	16-22	#6
10	Ring terminal	22-16	#6	10	Spade terminal	16-22	#8
10	Ring terminal	22-16	#8	10	Spade terminal	16-14	#10
10	Ring terminal	16-14	#10	10	Butt connect	16-22	—
15	Ring terminal	16-14	#6	10	Butt connect	16-14	—
10	Ring terminal	16-14	#8	5	Butt connect	12-10	—

Part No.	Cross Ref. No.	Description	1	10	25
10990	G1C175-R	Solderless terminal kit	.....	\$14.95	\$13.49

See page 30 for Solderless Terminal Grab Bag (P/N 2082118)

### Butt Disconnect Splices

\* Order in multiples of 10

Part No.	Mfr.	Product No.	Fig.	Insul.	Type	AWG	Color	1	10	100
303167	AMP	323994	7	Nylon	Butt	24-20	Natural	.....	\$.65	\$.59
2160542	ValuePro	320559VP	7	Nylon	Butt	22-16	Red	.....	\$.19	\$.15
303175	AMP	320559	7	Nylon	Butt	22-16	Red	.....	\$.55	\$.49
494469	Molex	19215-0009	8	Uninsul.	Butt	22-18	—	.....	\$.12	\$.09
491305	Molex	19164-0013	9	NiAC	Butt	22-18	Red	.....	\$.29	\$.25
503062	Molex	19154-0004	7	PVC	Butt	18-22	Red	.....	\$.15	\$.12
303183	AMP	320562	7	Nylon	Butt	16-14	Blue	.....	\$.55	\$.49

### Quick Connect/Disconnect Female Terminals

\* Order in multiples of 10

Part No.	Mfr.	Product No.	Fig.	Insul.	Size (ins.)	AWG	Color	1	10	100
303247	AMP	640923-1	10	Nylon	.110 x .020	22-18	Red	.....	\$.29	\$.25
303255	AMP	640917-1	10	Nylon	.187 x .020	22-18	Red	.....	\$.19	\$.15
489635	Molex	19003-0011*	11	Nylon	.187 x .020	22-18	Red	.....	\$.19	\$.15
837134	AMP	2-520411-2*	11	Nylon	.187 x .032	22-18	Red	.....	\$.15	\$.12
489643	Molex	19003-0017*	11	Nylon	.187 x .032	22-18	Red	.....	\$.25	\$.22
524197	AMP	2-520182-2	13	Nylon	.187 x .020	22-18	Red	.....	\$.19	\$.15
303280	AMP	640903-1	10	Nylon	.250 x .032	22-18	Red	.....	\$.25	\$.22
489627	Molex	19003-0001*	11	Nylon	.250 x .032	22-18	Red	.....	\$.19	\$.15
489475	Molex	19002-0001	12	Nylon	.250 x .032	22-18	Red	.....	\$.35	\$.29
489758	Molex	19005-0001	11	Nylon	.250 x .032	22-18	Red	.....	\$.25	\$.19
2121551	ValuePro	QCD187	14	Nylon	.187 x .032	22-16	Clear	.....	\$.12	\$.09
106922	ValuePro	FDV1-187	10	Vinyl	.187 x .032	22-16	Red	.....	\$.12	\$.09
109112	ValuePro	GFF1250	15	Vinyl	.250 x .032	22-16	Red	.....	\$.19	\$.15
103668	ValuePro	FDV1-250	10	Vinyl	.250 x .032	22-16	Red	.....	\$.19	\$.15
303301	AMP	640919-1	10	Nylon	.187 x .020	16-14	Blue	.....	\$.15	\$.12
489694	Molex	19003-0050*	11	Nylon	.187 x .020	16-14	Blue	.....	\$.25	\$.19
303327	AMP	640905-1	10	Nylon	.250 x .032	16-14	Blue	.....	\$.25	\$.22
489766	Molex	19005-0005	11	Nylon	.250 x .032	16-14	Blue	.....	\$.25	\$.22
489678	Molex	19003-0040*	11	Nylon	.250 x .032	16-14	Blue	.....	\$.19	\$.15
489871	Molex	19007-0021*	16	Nylon	.250 x .032	16-14	Blue	.....	\$.29	\$.25
303343	AMP	640907-1	10	Nylon	.250 x .032	12-10	Yellow	.....	\$.35	\$.29
489774	Molex	19005-0010	11	Nylon	.250 x .032	10-12	Yellow	.....	\$.39	\$.35

\* Translucent

### Quick Connect/Disconnect Male Terminals Insulated

Part No.	Mfr.	Mfr. Part No.	Fig.	Insul.	Size (ins.)	AWG	Color	1	10	100
489432	Molex	19001-0003	12	Nylon	.187 x .020	22-18	Red	.....	\$.29	\$.25
489723	Molex	19004-0001	12	Nylon	.250 x .032	22-18	Red	.....	\$.25	\$.19
489731	Molex	19004-0005	12	Nylon	.250 x .032	16-14	Blue	.....	\$.29	\$.25

### Printer Circuit Board Male Quick Connect

Order in multiples of 10

Part No.	Mfr.	Product No.	Fig.	Material	Size (ins.)	10	100	500
2150897	AMP	1217056-1*	17	Tin/Copper	.250 x .032	.....	\$.12	\$.09
853927	AMP	63824-1**	17	Tin/Copper	.250 x .032	.....	\$.07	\$.05
2129730	ValuePro	250-D†	18	Tin/Copper	.250 x .032	.....	\$.09	\$.07
2222221	Keystone	1266	18	Tin/Brass	.250 x .032	.....	\$.25	\$.19
2222213	Keystone	1289	17	Tin/Brass	.250 x .032	.....	\$.19	\$.15

\* Single \*\* Continuous strip † Dual



### Solderless Terminal Crimping Tool

- Crimps solderless terminals: 18-22 AWG red, 14-16 AWG blue and 10-12 AWG yellow



Part No.	Mfr. Part No.	Size	1	10	25
72996	HT303	9.0"L x 2.0"W	.....	\$24.95	\$21.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



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# Basic & Slide Switches

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## Super and Subminiature Basic Switches

- Economical, subminiature basic switch offers long service life
- Free from overtravel restrictions, permits easy setting
- Lead spacing: A = 0.35"; B = 0.29"
- Dimensions: 0.78"L x 0.25"W x 0.40"H



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

\* Web Code: MBE

Part No.	Manufacturer	Mfr. Part No.	Fig.	Contact Form	Contact Rating	Actuator Type	Service Life (Mech./Elec.)	Terminal Type	Pricing		
									1	10	100
2204015	ValuePro	BSM2-0508-13	6	SPST	5A @ 250VAC, 5A @ 30VDC	Straight lever (1.31")	1M/30k	.110" quick connect	\$1.09	\$ .99	\$ .89
2097580	ValuePro	13-03-050ST-EV	1	SPDT-NC	3A @ 125VAC, 0.2A @ 60VDC	Straight lever (0.551"L)*	1M/15k	Solder terminal	.79	.69	.59
188867	Omron	D2F-L	2	SPDT-NC	3A @ 125VAC, 2A @ 30VDC	Hinge lever (0.5"L)	1M/30k	Solder terminal	1.95	1.75	1.59
2187892	ValuePro	DM3-01P-30-6	2	SPDT-NC	3A @ 125VAC, 2A @ 30VDC	Hinge lever (0.5"L)	1M/300k	Solder terminal	.75	.65	.55
2187913	ValuePro	SM5-01N-40-C51	3	SPDT-NC	5A @ 125VAC, 3A @ 250VAC	Hinge lever (0.6"L)	30M/200k	Solder terminal	.85	.75	.65
187709	Omron	SS-5GL	3	SPDT-NC	5A @ 125VAC, 3A @ 250VAC	Hinge lever (0.6"L)	30M/200k	Solder terminal	1.95	1.75	1.49
2187905	ValuePro	SM5-05N-45S-C51	4	SPDT-NC	5A @ 125VAC, 3A @ 250VAC	Hinge roller (0.6"L)	30M/200k	Solder terminal	1.25	1.09	.99
187733	Omron	SS-5GL2	4	SPDT-NC	5A @ 125VAC, 3A @ 250VAC	Hinge roller (0.6"L)	30M/200k	Solder terminal	1.95	1.75	1.59
159599	Highly Electric	SS0505A	4	SPDT-NC	5A @ 125VAC, 3A @ 250VAC	Hinge roller (0.7"L)	30M/200k	Solder terminal	1.49	1.25	1.09
187717	Omron	SS-5GL13	5	SPDT-NC	5A @ 125VAC, 3A @ 250VAC	Simulated roller lever	30M/200k	Solder terminal	1.25	1.09	.99
2097678	Mountain Switch	61-05-025RR-Q-EV	4	SPDT-NC	5A @ 125VAC, 5A @ 250VAC	Roller lever (0.571"L)	10M/100k	.110" quick connect	1.95	1.75	1.49

\* Super subminiature



## Miniature Basic Switches

\* Large Basic Switches — Enter Web Code RBS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

- 3 terminals: common; normally open; normally closed
- Size: 1.10"L x 0.40"W x 0.63"H

\* Web Code: UEM

Part No.	Manufacturer	Product No.	Fig.	Contact Form	Contact Rating	Actuator Type	Service Life (Mech./Elec.)	Terminal Type	Pricing		
									1	10	100
2210950	Omron	V-16G-1C25	3	SPST	10A @ 250VDC, 16A @ 250VAC	Pin plunger	50M/100k	0.187" quick connect	\$1.49	\$1.25	\$1.09
2207072	ValuePro	BMNO-0503D-IN	1	SPST-NO	5A @ 125VAC/250VAC	Long hinge lever (2.0"L)	10M/200k	0.187" quick connect	1.09	.95	.85
2076244	Honeywell	V3-23-D8	2	SPST-NO	5A @ 125VAC	Pin plunger	50M/300k	0.183" quick connect	1.25	1.09	.99
2178937	Zero Plus	1033013	2	SPST-NO	15A @ 250VAC	Pin plunger	10M/100k	0.250" quick connect	.79	.69	.59
2162804	Mulon	M8-1P1	3	SPDT	5A @ 250VAC	Pin plunger	10M/1M	0.250" quick connect	.85	.75	.65
483284	Cherry	D44CR1RD	4	SPDT	10A @ 125VAC/250VAC	Hinge lever (1.24"L)	6k	0.187" quick connect	3.49	3.19	2.79
1917099	Honeywell	V7-1C17D8	3	SPDT	15A @ 125/250/270VAC	Pin plunger	50M/300k	0.183" quick connect	2.95	2.59	2.29
187792	Omron	V-10G2-1C24K	5	SPDT-NC	0.1A @ 125VDC, 10A @ 250VAC	Hinge lever (1.08"L)	50M/300k	0.183" quick connect	2.95	2.75	2.49
187805	Omron	V-10G3-1C24K	1	SPDT-NC	0.1A @ 125VDC, 10A @ 250VAC	Long hinge lever (2.01"L)	50M/300k	0.183" quick connect	3.25	2.95	2.59
2178574	Micro	V3-101-D812	6	SPDT-NC	0.5A @ 125VDC, 4A @ 125VAC	Pin plunger	10M/1M	0.187" quick connect	.99	.89	.79
2117333	ValuePro	VM-05S-03D0-Z	1	SPDT-NC	5A @ 125VAC/250VAC	Long lever (2.0"L)	50M/300k	0.185" quick connect	1.95	1.75	1.49
2178929	Mulon	M8-1P1DS1	5	SPDT-NC	5A @ 250VAC	Short lever (0.6"L)	50M/300k	0.250" quick connect	.99	.89	.75
159572	Highly Electric	VS10N051C	7	SPDT-NC	10A @ 125VAC/250VAC	Hinge roller (0.60"L)	10M/100k	0.250" quick connect	1.95	1.75	1.49
159581	Highly Electric	VS10N021C2	5	SPDT-NC	10A @ 125VAC/250VAC	Hinge lever (1.05"L)	10M/100k	0.183" quick connect	1.95	1.75	1.49



## Slide Switches

- Two mounting flanges
- 6/6 nylon plastic housing
- Phenolic insulated
- Nylon actual
- Top actuation

\* Web Code: LAP



Fig. 1



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

Part No.	Manufacturer	Product No.	Fig.	Pins	Contact Form	Contact Rating	Dimensions (L" x W" x D")	Lead Spacing		Housing Material	Lead Length	Actuator Height	Pricing		
								A"	B"				1	10	100
2182311	Alco	SE1DGRA	5	5	SPDT on-none-on	0.02A @ 20VDC	.37 x .31 x .20	.20	.10	Plastic	.16"	.10"	\$1.95	\$1.75	\$1.49
2180818	Tyco Electronics	TSS11DG1RA	5	5	SPDT on-none-on	0.02A @ 20VDC	.40 x .52 x .23	.10	.14	Plastic	.14"	.11"	.59	.49	.39
588220	C&K Switches	OS102011MA1QN1	1	3	SPDT on-on	0.2A @ 30VDC	.34 x .17 x .15	—	.08	Metal	.11"	.16"	.35	.29	.25
621325	GC Electronics	35-202-BU	2	3	SPDT on-on	0.3A @ 30VAC	.44 x .22 x .18	.14	—	Metal	.14"	.16"	2.49	2.25	1.95
2133704	ValuePro	SS12D02	3	3	SPDT on-on	0.3A @ 50VDC	.35 x .18 x .18	—	.08	Metal	.12"	.15"	.29	.25	.15
2192384	ValuePro	3450XBB-4	4	3	SPDT on-on	0.3A @ 125VAC	.45 x .22 x .23	—	.12	Plastic	.21"	.15"	.49	.45	.39
2184392	ValuePro	SV65010F-0102-6H-FN	5	3	SPDT on-on	0.3A @ 125VAC	.63 x .26 x .41	0.05	.16	Metal	.19"	.24"	.75	.65	.55
2184384	ValuePro	SS60012F-0102-4V-NB	2	3	SPDT on-on	0.3A @ 125VAC	.75 x .21 x .35	—	.15	Metal	.14"	.34"	.75	.65	.59
109171	ValuePro	G4050X-R	4	3	SPDT on-on	0.5A @ 50VDC	.45 x .22 x .23	—	.15	Plastic	.17"	.15"	.39	.35	.29
2181124	C&K Switches	S102031MS02QE	4	3	SPDT on-off	6.0A @ 125VAC/250VAC	1.38 x .53 x .28	—	.25	Plastic	.30"	.34"	.99	.89	.79
2209191	CW Industries	SS-5-125V	2	4	SPDT on-off-on	0.5A @ 125VDC	.79 x .40 x .30	—	.17	Metal	.21"	.45"	.45	.39	.35
2209771	Alco	MHS133	3	3	SP3T on-on-on	0.3A @ 30VDC	.63 x .27 x .29	—	.08	Metal	.18"	.39"	.29	.25	.19
2184413	ValuePro	SV65020F-0103-6H-01-FN	5	8	SP3T on-on-on	0.3A @ 125VAC	.63 x .26 x .41	.10	.08	Metal	.19"	.24"	.99	.89	.75
2182442	Alco	AS2DG-PC	7	6	DPDT on-on	0.2A @ 20VDC	.37 x .20 x .37	.10	.10	Plastic	.14"	.11"	.35	.29	.25
161817	ValuePro	MS-306-R	6	6	DPDT on-on	0.3A @ 6VDC	.35 x .14 x .14	.10	.10	Plastic	.14"	.08"	.65	.55	.45
621472	GC Electronics	35-222	7	6	DPDT on-on	6.0A @ 125VAC	.88 x .53 x .35	.22	.29	Plastic	.25"	.36"	1.09	.99	.89
2178591	Switchcraft	46206LFE*	8	6	DPDT locking	0.5A @ 125VDC	.88 x .53 x .44	.25	.28	Plastic	.17"	—	.35	.29	.25
2181061	NKK Switches	SS-14SDP2	4	4	SP3T on-on-on	0.1A @ 30VDC	.62 x .16 x .18	—	.10	Plastic	.13"	.08"	.29	.22	.19

\* DPDT locking, flushed, 115/230 legend, 3A @ 125VAC

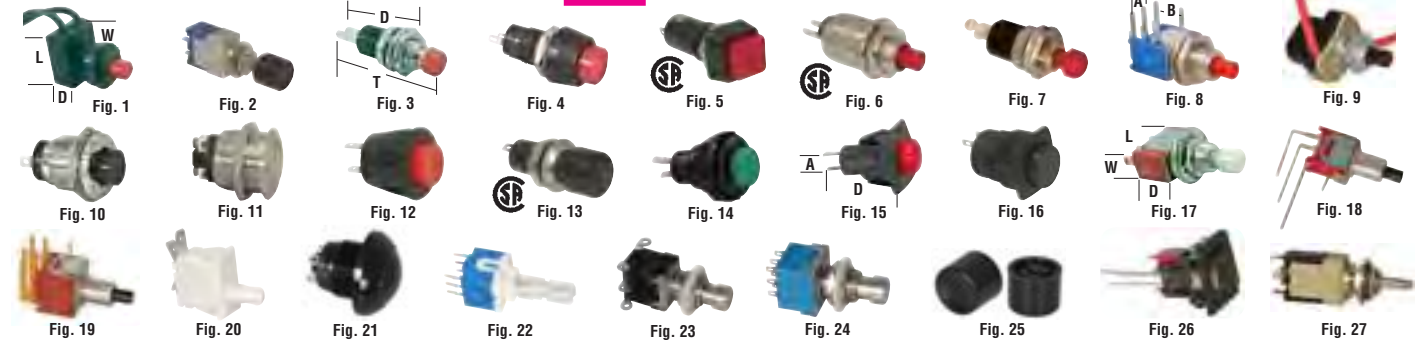


## Pushbutton Switches

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\* Web Code: **UBU**



Part No.	Manufacturer	Product No.	Fig.	Pins	Contact Form ( ) Momentary	Contact Rating	Mounting Hole Dia.	Dimension (L" x W" x D")	Lead Spacing		Terminal Type	Button Color	Pricing		
									A"	B"			1	10	100
22200	Judco	J1881	1	2*	SPST on-off, Alt†	2A @ 14VDC	.375"	.65 x .52 x .40	.25	—	5" Pigtail	White	\$1.95	\$1.75	\$1.49
215388	ValuePro	PA101A1-R/BL	2	2	SPST on-off, Alt†	6A @ 125VAC	.250"	1.2 (D) x 1.7 (T)	.185	—	Solder	Red	1.75	1.49	1.25
164639	ValuePro	MS3120R	7	2	SPST on-(off)2	.5A @ 125VAC	.295"	.31 (D) x 1.1 (T)	.175	—	Solder	Red	1.09	.99	.89
26649	ValuePro	GPB002-CN	3	2	SPST on-(off)2	3A @ 125VAC	.299"	.36 (D) x 1.13 (T)	—	.17	Solder lugs	Black	.95	.85	.75
164494	ValuePro	R13-84B	4	2	SPST off-on	3A @ 125VAC	.406"	.59 (D) x 1.2 (T)	.175	—	Solder	Red	2.49	2.25	1.95
315492	ValuePro	R13-23B-B	5	2	SPST off-on	3A @ 125VAC	.480"	1.13 (D) x 1.53 (T)	.20	—	Solder	Black	1.25	1.09	.99
315484	ValuePro	R13-23B-R	5	2	SPST off-on	3A @ 125VAC	.480"	1.13 (D) x 1.53 (T)	.20	—	Solder	Red	1.25	1.09	.99
315521	ValuePro	R13-23B-Y\$	5	2	SPST off-on	3A @ 125VAC	.480"	1.38 (D) x 1.53 (T)	.18	—	Solder	Yellow	1.25	1.09	.95
164566	ValuePro	MS-402-RED	6	2	SPST off-(on)	.5A @ 125VAC	.172"	.60 (D) x .80 (T)	.08	—	Solder	Red	1.25	1.09	.99
315643	ValuePro	R13-81-R	6	2	SPST off-(on)	.5A @ 125VAC	.203"	.44 (D) x .78 (T)	.08	—	PC terminal	Red	.95	.85	.75
71643	ValuePro	SWB210✓	8	2	SPST off-(on)	1A @ 120VAC	.219"	.36 x .20 x .33	.20	.20	PC right angle	Black	2.95	2.59	2.39
2210870	Leviton	PB-1A-125-W	9	2*	SPST off-(on)	1A @ 125VAC	.370"	.90 x .63 x .73	.80	—	6" wire leads	Black	2.49	2.25	1.95
164671	ValuePro	NS801M0	10	2	SPST off-(on)	1A @ 125VAC	.492"	1.0 (D) x 1.1 (T)	.213	—	Solder terminal	Black	1.25	1.09	.99
2189492	ValuePro	PB-28B	11	2	SPST off-(on)	2A @ 48VDC	.750"	.87 (D) x 1.2 (T)	—	.37	Screw	Silver	3.25	2.95	2.65
2131274	Velleman	R1400A	11	2	SPST off-(on)	2A @ 48VDC	.750"	.87 (D) x 1.2 (T)	.37	—	Screw	Silver	3.95	3.59	3.29
171774	Apem	AV191003C900	11	2	SPST off-(on)	2A @ 48VDC	.750"	.87 (D) x 1.2 (T)	.37	—	Screw	Silver	13.95	12.95	11.95
2181351	ValuePro	R13-502MA	10	2	SPST off-(on)4	3A @ 125VAC	.500"	.59 (D) x 1.0 (T)	.16	—	Solder	Black	1.95	1.75	1.49
164486	ValuePro	R13-84A	4	2	SPST off-(on)3	3A @ 125VAC	.406"	.59 (D) x 1.2 (T)	.175	—	Solder	Red	2.25	1.95	1.75
315580	ValuePro	R13-40B-B	13	2	SPST off-(on)	3A @ 125VAC	.480"	.87 (D) x 1.4 (T)	.20	—	Solder	Black	1.49	1.25	1.09
315599	ValuePro	R13-40A-R	13	2	SPST off-(on)	3A @ 125VAC	.480"	.98 (D) x 1.56 (T)	.20	—	Solder	Red	1.49	1.25	1.09
315432	ValuePro	R13-23A-R	5	2	SPST off-(on)	3A @ 125VAC	.480"	1.13 (D) x 1.53 (T)	.20	—	Solder	Red	1.25	1.09	.99
26623	ValuePro	MS102	3	2	SPST off-(on)2	3A @ 125VAC	.250"	.65 (D) x 1.10 (T)	—	.14	Solder lugs	Red	.85	.75	.69
164582	Mountain Switch	112-R13-502MA-BLB	10	2	SPST off-(on)4	3A @ 125VAC	.490"	.90 (D) x 1.0 (T)	.19	—	Solder	Black	2.95	2.59	2.39
315678	ValuePro	R13-502A-05-BG	14	2	SPST off-(on)	3A @ 125VAC	.500"	.82 (D) x 1.02 (T)	.20	—	Solder	Green	1.75	1.49	1.25
315660	ValuePro	R13-502A-05-BR	14	2	SPST off-(on)	3A @ 125VAC	.500"	.82 (D) x 1.02 (T)	.22	—	Solder	Red	1.75	1.49	1.25
315651	ValuePro	R13-502A-05-BB	14	2	SPST off-(on)	3A @ 125VAC	.500"	.82 (D) x 1.02 (T)	.23	—	Solder	Black	1.95	1.75	1.49
174414	ValuePro	R13-510A	15	2	SPST off-(on)	3A @ 125VAC	.500"	.82 (D) x 1.02 (T)	—	.167	Solder lugs	Red	.95	.85	.75
315820	ValuePro	R13-508AL-05-BRR	16	4	SPST off-(on)	3A @ 125VAC	.630"	.93 (D) x 1.14 (T)	.21	.25	Solder w/ LED	Red	2.49	2.25	1.95
315791	ValuePro	R13-508A-05-BB	16	2	SPST off-(on)	3A @ 125VAC	.630"	.94 (D) x 1.16 (T)	.24	—	Solder	Black	1.95	1.75	1.49
106112	Mountain Switch	DS-412-RED	12	2	SPST off-(on)	3A @ 125VAC	.734"	.66 (D) x .63 (T)	.275	—	Solder lugs	Red	1.95	1.75	1.49
22218	Judco	J1882	1	2*	SPST off-(on)	4A @ 14VDC	.375"	.65 x .52 x .40	.25	—	5" Pigtail	Red	1.75	1.49	1.25
2182098	C&K Switch	8125J85ZBE225	26	5	SPDT on-(on)	1A @ 120VAC	—	.50 x .37 x .37	.20	—	Solder lugs	Black	1.95	1.75	1.49
2182080	C&K Switch	8121J81ZGE99	6	3	SPDT on-(on)	1A @ 120VAC	.250"	.50 x .27 x .41	.185	—	Solder lugs	Gray	1.75	1.49	1.25
575701	C&K Switch	8121SD9A2GE	8	3	SPDT on-(on)	1A @ 120VAC	.250"	.50 x .27 x .41	.185	—	PC right angle	White	1.95	1.75	1.49
2159592	E-Switch	800-SP8-B7-M7-Q-E✓	18	3	SPDT on-(on)	3A @ 120VAC	.240"	.20 x .34 x .32	.10	—	PC right angle	Black	.79	.69	.59
121305	ValuePro	GPB006-WH	17	3	SPDT on-(on)1	3A @ 120VAC	.250"	.52 x .27 x .38	—	.185	Solder lugs	White	3.95	3.59	3.29
28063	ValuePro	PB126	17	3	SPDT on-(on)1	3A @ 120VAC	.250"	.52 x .28 x .38	—	.185	Solder lugs	Red	3.95	3.59	3.29
2217262	ValuePro	7MS7P1B20M7QNS	20	3	SPDT on-(on)	5A @ 125VAC	.250"	.50 x .27 x .37	—	.14	Solder right angle	Red	1.95	1.75	1.49
2182101	C&K Switch	8168SHABE2	19	3	SPDT on-(on)	6A @ 120VAC	.300"	.50 x .27 x .45	.185	—	PC right angle	Black	1.75	1.49	1.25
2209107	C&K Switch	NP8S2D203QE	21	3	SPDT on-(off)	5A @ 32VDC	.484"	.80 (D) x .43 (T)	.17	.26	Solder lugs	Black	8.95	7.95	6.95
2215785	C&K Switch	PVA1-OA-H1-1.2N	22	6	DPST on-(on)	.1A @ 32VDC	—	.36 x .34 x .30	.24	.10	PC pin	Red	.75	.65	.55
594718	C&K Switch	PVA2EH21.7N	22	6	DPDT on-(on)	.1A @ 32VDC	—	.36 x .36 x .43	.24	.10	PC pin	White	.49	.39	.29
2181407	ValuePro	01-690C	23	6	DPDT off-on	4A @ 125VAC	.472"	1.7 x .71 x .98	.35	—	Solder lugs	Silver	4.95	4.49	3.95
2181415	ValuePro	01-690DB-RH	24	9	3PDT off-on	4A @ 125VAC	.472"	1.7 x .68 x .77	.21	.19	Solder lugs	Silver	4.95	4.49	3.95
2182240	Alco Switch	MSP105F	27	3	SPDT (on)-off-(on)	5A @ 115VAC	.250"	.50 x .26 x .66	—	.14	Solder lugs	Silver	1.95	1.75	1.49
2203055	LKG	SW-CAP	25		Red pushbutton switchcap (154878) round .30"Dia. x .30"H x .12"ID, snap fit								.49	.45	.39
2202132	Alcoswitch	C22004	25		Black pushbutton switch cap (1825068), round, .402"Dia x .315"H x .099"ID, snap fit								.39	.35	.29
578591	C&K Switch	894102000	25		Black pushbutton cap, round, .395"Dia. x .325"H								.59	.49	.45

\* Lead wires † Alt = alternate action \$ Illuminated: red/green ✓ Uses 2202132 pushbutton cap Additional panel mounting hardware: 1 2182477; 2 2182688; 3 2183242; 4 2182733, see pg 78

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Subminiature & Miniature Toggle Switches

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Jameco ValuePro

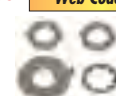
## Subminiature Toggle Switches

Additional Toggle Switches, visit [Jameco.com](http://Jameco.com) and use Web Code

\* Web Code: NAN

- Mounting hole diameter: 7/32 (.21")
- Thread: 10-48 UNS
- Round toggle
- Pre-tinned leads
- Metal construction

Includes: Panel mounting hardware



Part No.	Manufacturer	Product No.	Fig.	Pins	Contact Form ( ) Momentary	Contact Rating	Dimensions (L" x W" x D")	Lead Spacing		Terminal Type	Pricing		
								A"	B"		1	10	100
72161	ValuePro	SW1501\$	1	2	SPST on-off	5A @ 120VAC & 1.5A @ 250VAC	.33 x .21 x .33	.10	—	Solder lugs	\$1.49	\$1.35	\$1.19
2180834	JVP	TT11AGPC9T1/4	1	2	SPST on-none-off	3 @ 125/20VDC	.32 x .20 x .35	—	0.20	PC straight	1.49	1.25	1.09
567752	Fujisoku	AT1D-6M3	2	3	SPDT on-on	0.05A @ 48VDC/VAC	.37 x .22 x .33	.30	.10	PC right angle	1.49	1.25	1.09
106067	ValuePro	SWP124	2	3	SPDT on-on	0.4VA max.	.25 x .33 x .40	.20	.10	PC right angle	1.95	1.75	1.59
2202757	JBT	A123S1D9AB	2	3	SPDT on-on	0.5VA @ 28VDC/AC	.50 x .37 x .26	.17	—	PC right angle	2.95	2.49	1.95
75969	ValuePro	SWM136\$	1	3	SPDT on-on	3A @ 125VAC & 1.5A @ 250VAC	.33 x .21 x .33	.10	—	Solder lugs	1.75	1.49	1.25
72557	ValuePro	GTS304\$	1	3	SPDT on-off-on	1.0A @ 250VDC	.32 x .20 x .28	.10	—	Solder lugs	1.75	1.49	1.25
75977	ValuePro	SWM137\$	3	6	DPDT on-on	3A @ 125VAC	.33 x .37 x .33	.17	.10	Solder lugs	1.95	1.75	1.59
138907	ValuePro	SW1503	3	6	DPDT on-off-on	3A @ 125VAC & 1.5A @ 250VAC	.36 x .37 x .33	.17	.10	Solder lugs	1.49	1.25	1.09
2182549	ValuePro	10-48HDWR	4	—	Additional 10-48UNS threaded panel mounting hardware for above switches indicated with \$						.89	.79	.69

Jameco ValuePro

## Miniature Toggle Switches

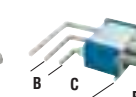
C&K Alcoswitch

UL US

NEW MARKED IN PINK

\* Web Code: PAJ

- Mounting hole dia.: 1/4"
- Thread: 1/4-40 UNS-2B
- Waterproof boot seals (pg 67)





# Toggle Switches, Switch Covers & Rocker Switches



## Standard Toggle Switches

- Mounting hole diameter: 1/2"
- Shaft thread: M12 x 0.75
- Waterproof boot seals (below)

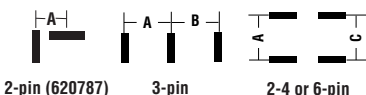


Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Part No.	Manufacturer	Product No.	Fig.	Pins	Contact Form	Contact Rating (A @ VAC)	Dimensions (L" x W" x D")	Lead Spacing			Terminal Type	Lever Type	Pricing		
								A"	B"	C"			1	10	100
76241	ValuePro	SWM128	1	2	SPST on-off	4 @ 125 & 2 @ 250	1.00 x .56 x .52	.23	—	—	Solder lugs	Round	\$1.95	\$1.75	\$1.49
76232	ValuePro	SWM125	2	2	SPST on-off	6 @ 125 & 3 @ 250	1.00 x .53 x .51	.23	—	—	6" lead wire	Round	2.25	1.95	1.75
2126192	Philmore	30-350B*	2	2	SPST on-off	8 @ 125 & 4 @ 250	1.00 x .64 x .33	.23	—	—	6" lead wire	Round	3.25	2.95	2.65
317825	ValuePro	R13-25A2-01	3	2	SPST on-off	10 @ 125 & 6 @ 250	1.14 x .59 x .62	.38	—	—	.250" quick connect	Round	2.49	2.25	1.95
318027	ValuePro	R13-28A-06	3	2	SPST on-off	15 @ 125 & 10 @ 250	1.33 x .75 x .75	.45	.46	—	M3 screw	Round	2.95	2.59	2.29
318002	ValuePro	R13-28A-01	3	2	SPST on-off	15 @ 125 & 10 @ 250	1.33 x .75 x .75	.45	.57	—	.250" quick connect	Round	2.95	2.75	2.49
621499	GC Electronics	35-3005*	4	2	SPST on-off	20 @ 125 & 10 @ 250	.92 x .64 x .40	.47	—	.96	.250" quick connect	Round	4.95	4.49	3.95
318123	ValuePro	R13-28D-01	3	3	SPDT on-off-on	15 @ 125 & 10 @ 250	1.33 x .75 x .75	.45	.65	.45	.250" quick connect	Round	2.75	2.49	2.25
158060	ValuePro	JKN32†	1	4	DPST on-off	4 @ 125 & 2 @ 250	1.00 x .56 x .52	.23	.65	.23	Solder lugs	Round	1.25	1.09	.99
317850	ValuePro	R13-25B1-05	5	6	DPDT on-on	10 @ 125 & 6 @ 250	1.14 x .79 x .62	.40	.38	.40	Solder lugs	Flat	2.75	2.49	2.25
158078	ValuePro	JKN3CC	1	6	DPDT on-on	15 @ 125 & 10 @ 250	1.19 x .76 x .73	.44	.59	1.0	Screw lugs	Round	1.49	1.25	1.09
318043	ValuePro	R13-28B-01	3	6	DPDT on-on	15 @ 125 & 10 @ 250	1.33 x .75 x .75	.45	.61	2.5	.250" quick connect	Round	3.95	3.59	3.19
317972	ValuePro	R13-25E1-05	5	6	DPDT on-off-on	10 @ 125 & 6 @ 250	1.14 x .59 x .62	.38	.38	.38	Solder lugs	Flat	3.25	2.95	2.65
567761	ValuePro	T-1224	3	6	DPDT on-off-on	10 @ 125 & 5 @ 250	1.18 x .77 x .75	.40	.60	2.64	M3 screw	Round	3.95	3.59	3.29
2182733	ValuePro	M12HDWR	6	Additional M12 hardware (2 hex nuts, 1 internal lock washer, 1 key lock washer)									.89	.79	.69

\* Shaft thread: 15/32-32 use 2182506 (pg 78) for additional panel mounting hardware † alternate action



## Protective and Waterproof Boot Seal Switch Covers

\* Web Code: SBS

- Full protection from water, oil, sand, dust, dirt, humidity, moisture and other contaminants
- Applications: aerospace, automotive, computer and electronic equipment • IP68 rated



2150184  
(Switch not included)



2150192



2192683

Part No.	Manufacturer	Product No.	Description	Dimensions	1	10	100
2150184	Zago	TH 605-GY	Toggle switch boot seal, gray, 1/4-40, fits miniature toggle switches (pg 66)	0.375" OD x 0.071" ID x 0.500"D	\$1.95	\$1.75	\$1.49
2150192	Zago	TH 606-GY	Toggle switch boot seal, gray, 15/32-32, fits standard toggle switches (above)	0.625" OD x 0.209" ID x 0.890"H	1.75	1.49	1.25
2192683	Zago	TH609-BLK	Toggle switch boot seal, black, 15/32-32, fits standard toggle switches (above)	0.324" OD x 0.226" ID x 0.937"H	2.25	1.95	1.75



## Standard Appliance Panel Mount Rocker Switches



\* Web Code: VBU



Part No.	Mfr.	Product No.	Pins	Contact Form ( ) Momentary	Contact Rating (A @ VAC)	Dimensions (L" x W" x D")	Lead Space		Rocker Color	Terminal Type	Pricing		
							A"	B"			1	10	100
2208198	JVP	RS-001G-A-BB-4	2	SPST on-off	3 @ 250 & 6 @ 125	.59 x .41 x .75	—	.20	Black	.145" quick connect	.75	.59	.45
316048	JVP	R13-66B-G-02	3	SPST on-off	9 @ 125 & 6 @ 250	.83 x .59 x .47	.31	.31	Green illum.	.187" quick connect	1.25	1.09	.99
316128	JVP	R13-73B-R-02	3	SPST on-off	9 @ 125 & 6 @ 250	.83 x .59 x .87	.35	.35	Red illum.	.187" quick connect	1.25	1.09	.99
316136	JVP	R13-73B-Y-02	3	SPST on-off	9 @ 125 & 6 @ 250	.83 x .59 x .87	.35	.35	Yellow illum.	.187" quick connect	.75	.65	.55
316451	JVP	R13-243A-02	2	SPST on-off	10 @ 125 & 6 @ 250	.83 x .37 x .85	.35	—	Black	.187" quick connect	.99	.89	.65
1945284	PRO	R13-66	2	SPST on-off	10 @ 125 & 6 @ 250	.83 x .59 x .55	.31	—	Dark gray	5.5" wire leads	.79	.65	.49
218839	JVP	RS-105A-BB-3-UL	2	SPST on-off	6 @ 250 & 10 @ 125	.91 x .78 x .70	.30	—	Black	.187" quick connect	.99	.89	.79
577221	CHY	RRA22H3BBBNN	2	SPST on-off	12 @ 125 & 10 @ 250	.69 x .51 x .64	.35	—	Black	.187" quick connect	1.19	1.09	.99
316022	JVP	R13-66A-R-02	2	SPST on-off	15 @ 125 & 8 @ 250	.83 x .59 x .63	.31	—	Red	.187" quick connect	.99	.89	.79
316014	JVP	R13-66A-B-02	2	SPST on-off	16 @ 125 & 10 @ 250	.83 x .59 x .63	.31	—	Black	.187" quick connect	.99	.89	.79
2201914	HNY	028-01011-00	2	SPST on-off	16 @ 125 & 12 @ 250	1.3 x .55 x .90	.26	—	Black	.250" quick connect	.75	.65	.55
2182389	ARN	160112E	2	SPST on-none-off	6 @ 125 & 16 @ 250	1.0 x .48 x .98	.38	.38	White	.250" quick connect	1.49	1.25	.99
2182354	ALC	MHL106D10MO	3	SPDT on-off	6 @ 125 & 3 @ 250	.50 x .30 x .39	.19	.19	Black	Solder lugs	1.49	1.25	1.09
1945241	ITW	163-099-029	3	SPDT	16 @ 125 & 12 @ 250	1.2 x .55 x .59	.26	.26	Black	.250" quick connect	.69	.59	.39
2182135	C&K	7101J50ZBE2	3	SPDT on-none-on	5 @ 120 & 2 @ 250	.50 x .28 x .37	.19	.19	Black	Solder lugs	1.95	1.75	1.49
2181255	C&K	7101J1V6BE2	3	SPDT on-none-on	5 @ 120 & 2 @ 250	.50 x .28 x .37	—	.19	Black	PC terminal	1.95	1.75	1.49
2178566	CWI	GRS-4012-0050	3	SPDT on-on	8 @ 125 & 4 @ 250	.74 x .50 x .46	.22	—	Red	.187" quick connect	.49	.39	.29
2182418	DIA	570-12574-1212-0104-007	3	SPDT on-off-on	5 @ 125 & 2 @ 250	.50 x .28 x .37	—	.19	Black	PC terminal	.79	.69	.59
316072	JVP	R13-66D-02	3	SPDT on-off-on	16 @ 125 & 10 @ 250	.83 x .59 x .47	.31	.31	Black	.187" quick connect	1.19	.99	.89
2181722	GCE	7105J1V3QE2	3	SPDT (on)-off-(on)	5 @ 120 & 2 @ 250	.50 x .28 x .37	—	.19	Black	PC terminal	.99	.85	.75
617473	C&K	35-695	3	SPDT (on)-off-(on)	16 @ 125 & 16 @ 250	.93 x .43 x .62	.34	.56	Black	.250" quick connect	4.49	3.95	3.59
316111	JVP	R13-73A2-B-02	4	DPST on-off	9 @ 125 & 6 @ 250	.83 x .59 x .68	.20	.34	Black	.187" quick connect	1.49	1.25	1.09
316153	JVP	R13-73C-R-02	4	DPST on-off	10 @ 125 & 6 @ 250	.83 x .59 x .87	.20	.34	Red illum.	.187" quick connect	1.25	1.09	.99
2181271	OTT	K2ABHLCADA	4	DPST on-off	16 @ 125/250	1.06 x .65 x 1.45	—	—	Green illum.	.187" quick connect	3.95	3.59	3.29
2181183	C&K	ET21J1ABE2	6	DPDT on-none-on	.4VA @ 20VAC/VDC	.37 x .32 x .36	—	.10	Black	PC terminal	1.95	1.75	1.49

\* ALC = Alcoswitch | ARN = Arndt | CHY = Cherry | C&K = C&K Components | CWI = CW Ind. | DIA = Dialight | GCE = GC Elec. | HNY = Honeywell | JVP = ValuePro | ITW = Illinois Tool | PRO = Pronic Elec.

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



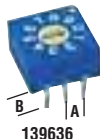
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# Rotary, DIP & Keylock Switches

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## Rotary DIP Switches

- Gold plated contacts to ensure reliable, low resistance connection
- Fully sealed construction
- Terminals: PC pin leads
- Life: 10,000 cycles min.
- Op. force: 500g-cm max.
- Lead spacing: A = 0.1"; B = 0.3"
- Size: .39"W x .39"D x .20"H
- Material: UL94V-0 grade
- Top adjustment
- Max. switching load rating: 25mA @ 24VDC



\*Web Code: UAX

Part No.	Mfr. Part No.	Type	Pos.	1	10
139636	ERD110RSZ	BCD	10	.....	\$2.95
139652	ERD116RSZ	HEX	16	.....	2.95

## Rotary Switches

- Contact rating: 30VDC @ 0.3A; except P/N 2170353/2167533: 125VAC @ 0.3A
- Insulation resistance: 10MΩ min.
- Mounting hole diameter: 3/8"; except P/N 2170353: 0.345"
- Contact resistance: 30mΩ
- Material: solid brass bushings, slotted aluminum shafts (except for P/N 2170353/2167533: D-type); round, plated frame, plastic contact wafer (except for P/N 2170353/2167533: Phenolic casing)
- Solder eyelet lugs
- Make before break except for ones noted with "†"
- Shaft size: 0.46"L x 0.25" Dia.; except P/N 2170353: 0.34"L x 0.25" Dia.
- Lug size: 0.07"
- Panel mount
- P/N 2170353 size 0.32"L x 0.25" Dia.
- P/N 2167533 size 0.73"L x 0.25" Dia. (no threads)



\*Web Code: TMU



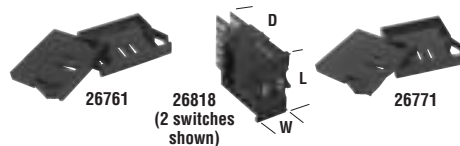
Part No.	Product No.	Poles	Pos.	1	10	100
2184464	SR2511F-0107	1	7	.....	\$2.49	\$2.25
101532	G3SR026	1	12	.....	1.25	1.09
2184448	SR2511F-0112†	1	12	.....	2.25	1.95
2170353	SR2511F-25FN†	2	5	.....	2.25	1.95
101574	G3SR022	2	6	.....	1.25	1.09
2167533	SR2513F-26NS*	2	6	.....	2.25	1.95
2184472	SR2511F-0303	3	3	.....	2.25	1.95
101566	G3SR023	3	4	.....	1.25	1.09
101558	G3SR024	4	3	.....	1.25	1.09
2184481	SR2511F-0602	6	2	.....	2.25	1.95
2182709	Additional panel mtg. hardware	..	..	..	.69	.59

\*Non shorting after breaking

## Binary Coded Decimal (BCD) Switches

- Contact resistance: 100mΩ max.
- Contacts: gold plated BE-CU alloy
- Front snap-tab mounting with end plates
- Continuous load: 1 amp max.
- 28VDC @ 0.15A
- Character height: P/N 26789: 0.19"; P/N 26818: 0.25"

\*Web Code: QAD

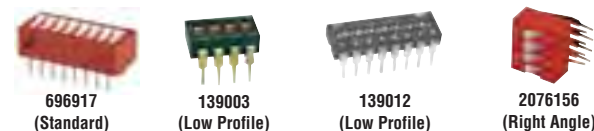


Part No.	Description	Size (L"xW"xD")	1	10
26789	10-pos. pushbutton	1.2 x 0.3 x 1.7	\$4.95	\$4.75
26761	End plates for 26789 (2)	1.2 x 0.2 x 1.1	1.25	1.09
26818	10-pos. thumbwheel	1.2 x 0.3 x 1.9	4.95	4.75
26771	End plates for 26818 (2)	1.2 x 0.2 x 1.3	1.25	1.09

## Standard, Low Profile, Piano & Right Angle DIP Switches

- Switch contacts: SPST (except P/N 2122781 - DPST)
- Piano switches have raised lever

\*Web Code: UCY



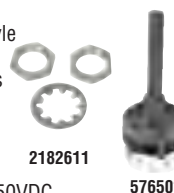
\* Order in multiples of 10

Part No.	Product No.	*Mfr.	*Type	*Pos.	1	10	100
2122781	78F02	GRY	1,5	2	.....	\$0.55	\$0.45
109059	206-2-VP-R	JVP	1,5	2	.....	.75	.65
2076156	SDAX-2RX-X	BNS	3,5	2	.....	* .15	.12
206359	206-3	JVP	1,5	3	.....	.49	.45
202472	ADF03	ALC	2,6	3	.....	.59	.49
38820	DT-04VP	JVP	1,5	4	.....	.85	.75
696950	78B04ST	GRY	1,5	4	.....	1.09	.99
2082231	3-4356405	AMP	1,7	4	.....	.99	.89
696888	76SB04	GRY	1,7	4	.....	.99	.89
472690	78J04	GRY	1,8	4	.....	.79	.69
139003	206-4LP	JVP	2,5	4	.....	.79	.69
2082505	206-517	ARN	1,7	5	.....	* .19	.15
546759	3-435668-5	AMP	1,8	5	.....	.45	.35
2076674	DPL-06KT	JVP	1,4,7	6	.....	.59	.49

\*1. Standard; 2. Low Profile; 3. Right Angle; 4. Piano Style; 5. Slide Raised; 6. Slide Flush; 7. Rocker Raised; 8. Rocker Flush

## A Series Rotary Switches

- 30° index flatted actuator, 3/8-32 threaded mounting style
- Solder lug termination
- Dielectric strength: 1000Vrms
- 15,000 make & break cycles
- Contact resistance: 20mΩ typical @ 2-4VDC
- Contact rating: 2.5A @ 125VAC; 350mA @ 250VDC
- Contact and terminals: brass, silver plated
- Housing/actuator: glass filled 6/6 nylon (UL94V-0)
- Stop style: Adjustable



Part No.	Mfr. Part No.	Poles	Pos.	Act. Ht.	1	10
576501	A11215RNZQ	1	12	1.5"	.....	\$5.49
576421	A20615RNZQ	2	6	1.5"	.....	4.95
2132234	A30403RNCBE	3	4	0.375"	.....	3.95
2182611	Additional panel mtg. hardware	.....	..	..	..	.69

## Rotary Switch

- 1 to 4 poles
- No stop option
- 1 to 12 positions
- Operating force: 8.6 N/cm
- Insulation resistance: 100MΩ
- Rating: 350mA @ 125VAC; 150mA @ 250VAC

Part No.	Product No.	1	10	100
2167322	KC52A13.00NPS	.....	\$0.99	\$0.89
2182611	Additional panel mtg. hardware	..	.69	.59

## Pocket Trim Potentiometer Adjustment Tool

- Glass-filled body
- Stainless steel blade

Part No.	Description	Size	1	10	100
153315	Trimmer tool	5.2"L	.....	\$1.95	\$1.75

## Round Keylock Switches

- Used in computer and other security systems
- Mounting hole = 0.75" (except P/N 2220613 = 0.42")
- Key removable from 2 positions
- Two keys
- 105832: All keys marked different (2001, 2007, 2024)
- 196649: All keys marked alike (2341)
- Includes: Mounting nut
- 2167701: Key removable in 1 position, .577" mounting hole; DPDT
- 2167710: Key removable in 4 position, .732" mounting hole; SP4T
- 2172025: Key removable in 4 position, .413" mounting hole; SPDT

\*Web Code: RAN



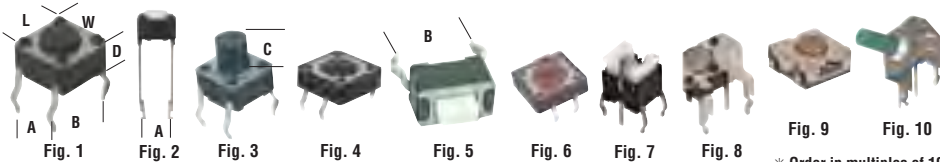
Part No.	*Mfr.	Product No.	No. Flat, Dia.	Length	Terminal	Voltage/Current	1	10	100
2220613	JVP	S126-2	2, 0.59"	0.91"	Barrel	125VAC/3A	.....	\$5.49	\$4.95
105832	JVP	KS3B	2, 0.66"	1.48"	0.25" quick connect	125VAC/6A	.....	4.95	4.49
196649	JVP	3313E-M	2, 0.66"	1.48"	0.25" quick connect	125VAC/6A	.....	5.95	5.39
2167701	JVP	31-295-025D	1, 0.574"	1.42"	0.126" solder, quick conn.	250VAC/5A	.....	4.95	4.49
2167710	LOR	KC77362	4, 1.1"	1.42"	Solder	110VAC/.35A	.....	2.95	2.75
2172025	JVP	S116-1	1, 0.42"	1.20"	Solder	125VAC/1A	.....	4.49	3.95

\* ALC = Alcoswitch | AMP = AMP/Tyco | ARN = Arndt | BNS = Bourns | C&K = C&K Switches | GRY = Grayhill | JVP = Jameco ValuePro | LOR = Lorlin Electronics

# Tactile, Cord & Specialty Switches

## OMRON C&K Tactile Switches

- Bounce time: 10 msec.
- SPST momentary ON
- Lead type: PC
- Contact resistance: 100mΩ



\* Order in multiples of 10

Part No.	Mfr.	Product No.	Fig.	Pins	Contact Rating (mA @ VDC)	Dimensions (ins.)				Lead Spacing		Button Color	Pricing		
						L	W	D	C	A"	B"		1	10	100
1586074	PAN	EVQ-PAG04K	1	4	20 @ 12	.24	.24	.14	.05	.17	.26	Black	\$.35	\$.25	\$.19
199726	PAN	EVQ11A04M	2	2	20 @ 15	.24	.24	.14	.03	.20	.17	White	.39	.29	.25
2095120	PAN	EVQ11L07K	2	2	20 @ 15	.24	.24	.14	.11	.20	—	Black	.39	.35	.29
119011	JVP	KTIIIBICM	1	4	20 @ 15	.24	.24	.15	.03	.17	.25	Black	.35	.29	.25
149948	JVP	KT11P4CM	3	4	20 @ 15	.24	.24	.15	.13	.17	.25	Black	.35	.29	.25
122973	JVP	DTS1212	4	4	20 @ 15	.47	.47	.18	—	.20	.50	Black	.39	.35	.29
2162791	ALP	SKHLAAA010	5	2	50 @ 12	.24	.14	.14	.06	—	.26	Black	.29	.19	.15
155249	JVP	KRS-3550-BK	5	2	50 @ 12	.24	.14	.15	—	—	.27	Brown	.39	.35	.29
155256	JVP	KRS-3550-WH	5	2	50 @ 12	.24	.14	.15	.03	—	.26	White	.29	.25	.19
153252	JVP	SDT620K	1	4	50 @ 12	.24	.24	.15	.06	.17	.25	Black	.35	.29	.25
155380	JVP	KRS-1273B	6	4	50 @ 12	.47	.47	.14	.14	.17	.53	Brown	.45	.39	.35
162886	OMN	B3F-1000	1	4	50 @ 24	.24	.24	.13	.03	.17	.25	White	.39	.35	.29
2076261	OMN	B3E-1100-Red*	7	4	50 @ 24	.24	.24	.19	.07	.17	.25	Red	*	.09	.07
2076287	OMN	B3E-1300-Green*	7	4	50 @ 24	.24	.24	.19	.07	.17	.25	Green	*	.09	.07
1953575	OMN	B3F-3122	8	4	50 @ 24	.29	.29	.25	.06	.17	.28	Gray	*	.15	.09
2076252	ITT	KSC121JB	9	4	50 @ 32	.24	.24	.10	—	.15	.26	Gray	*	.19	.15
583461	C&K	KSAOV311	8	4	50 @ 50	.32	.31	.23	.04	.30	.20	Green	*	.19	.15
587180	C&K	KSL0V311	10	4	50 @ 50	.37	.32	.24	.22	.20	.30	Green	*	.19	.15

\* Illuminated ♦ See switch caps below

### Tactile and Pushbutton Switch Caps

155409

2202132

Part No.	Mfr.	Cross Ref. No.	Description	Dimensions	Material	For Use With	1	10	100
155409	JVP	KRS-CAP-B	Round	.50"L x .25"W x .149"SqID	Plastic	P/N 155380	\$.29	\$.19	\$.15
2202132	ALC	C22004	Round	.40"D x .32"H .09"ID	Plastic	P/N 71643	.39	.35	.29

### JAMECO ValuePro Magnetic Reed Switches

- NO (normally open)
- Contact form: SPST

Part No.	Cross Ref. No.	Contact Rating	Size (L" x D")	Type	1	10	100
171872	MKA14103	0.5A @ 100VDC	0.53 x 0.1	Axial	\$1.49	\$1.29	\$1.09
2208817	RI-OIC	0.5A @ 200VDC	1.81 x 0.07	Axial	1.59	1.45	1.29
1951342	MKC-27103	1.0A @ 220VDC	2.24 x 0.1	Axial	1.95	1.75	1.49

### GC C&K Magnetic Proximity Switches

- Current rating:  
0.5A @ 20VAC/VDC; 0.08A @ 120VAC,  
P/N 588131: 30VAC @ .3A

\* Web Code: SPS

Part No.	Mfr.	Mfr. Part No.	Contact Form	Actuator	Terminal Type	1	10	100
617545	GCE	35-756	SPDT NO/NC	Use magnet	Screw term., 1/4" gap, surface mount	\$6.95	\$6.25	\$5.59
588131	C&K	MPS45WGW	SPST NO	Use magnet	Lead wires, 22AWG, 12"L	6.95	6.25	5.59

### Switchcraft® Cord-Switch®

- Max. cable dia.: .375"
- Plastic insulation
- Contact form: SPDT off-(on)
- Button color: red
- Die-cast zinc plated housing
- 1-C switching circuit
- Copper alloy plated switch body and insert bushing

\* Web Code: CSH

Part No.	Mfr. Part No.	1	10	50
297502	ED903	\$15.95	\$14.49	\$12.95

### seed studio PRI Motion Sensor

This highly integrated module is most commonly used for motion and entry detection. It is compatible with microcontrollers or other DC loads. Can detect motion up to 7.5 feet away.

- Application: switch, motion sensor, thief-guarding system, industrial automation

Part No.	Description	Price
2217713	4.5~20VDC input voltage	\$9.95

## Incremental Encoders

\* Web Code: ECR

- SPST push ON momentary
- Insulated shaft
- Vertical through-hole PC terminals
- Rotational life: 15,000 cycles minimum
- Closed circuit resistance: 3Ω max.

Part No.	Mfr.	Size	Detents	1	10
2123531	Parallax	6mm	16 .....	\$6.95	\$6.25
2184341	Alpha	11mm	30 .....	1.95	1.75
2184368	Alpha	12mm	12 .....	1.19	1.09
776386	Bourns	12mm	24 .....	1.19	1.09
2184333	Alpha	16mm	24 .....	2.69	2.25

## Temperature Switch

- SPST-NC (Normally-Closed)
- Contact current: 5A
- PCB mount
- 1.64"L leads
- Contact voltage: 120V
- Operational life: 100,000 cycles
- Contact resistance: 50MΩ or less
- Temperature: 75°C (167°F)
- UL/CSA approved

Part No.	Mfr. Part No.	1	10	100
159636	7AM-202A	\$.79	\$.69	\$.59

## Capacitive Touch Switch

- 1.7μA @ 1.8V to 80μA @ 5V
- Auto calibrate on power up for panel/overlay thickness (up to 0.4")
- No moving parts, can be mounted behind wood, plastic, glass, fabric, etc.
- Use for kiosk control panel, interactive art, industrial control panel or props

Part No.	Mfr. Part No.	Size	1	5
2135806	RK-150	2" x 2"	\$9.95	\$8.95

## JAMECO ValuePro Voltage Selector Switch

- Type SWZ 6-position, panel mount
- Series — parallel connection
- Contact resistance: <10mΩ
- Combination solder and quick disconnect terminals
- UL rated 10A @ 250V, and CSA rated 6.3A @ 250V
- Insulation resistance: 10MΩ @ 500VDC/1 min.

Part No.	Cross Ref. No.	1	10	100
2154943	0033.3504	\$4.95	\$4.49	\$3.95

## Centrifugal Force Switch

- Contact rating: 0.4VA (max.) @ 20VAC or 20VDC
- Normally open (NO)
- Triggers @ 1.5g (min.) to 5g
- Dielectric strength: 500VDC min. for 1 min.
- Insulation resistance: 1000MΩ (min.)
- Apps: rotational devices, tire centrifugal force detection, direction or axis motion, motion control
- Life: 100,000 cycles (typical)

Part No.	Mfr. Part No.	1	10	100
2126563	RV-RUG-00-000-BB	\$.65	\$.55	\$.45

## Reed Alarm Switch

- Housing: white ABS
- Contact rating: DC 100V/0.5A
- Standard type magnetic switch: NO & NC
- Mounting with screws or double-sided tape

Part No.	Size (in.)	1	10
2131143	2.5 x 0.5 x 0.5	\$7.95	\$6.95

\* ALP = ALPS Electric | ALC = Alcoswitch | C&K = C&K Switches | ESW = E-Switch Inc. | GCE = GC Electronics | ITT = ITT Cannon | JVP = Jameco ValuePro | OMN = Omron | PAN = Panasonic

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# PC Mount Relays

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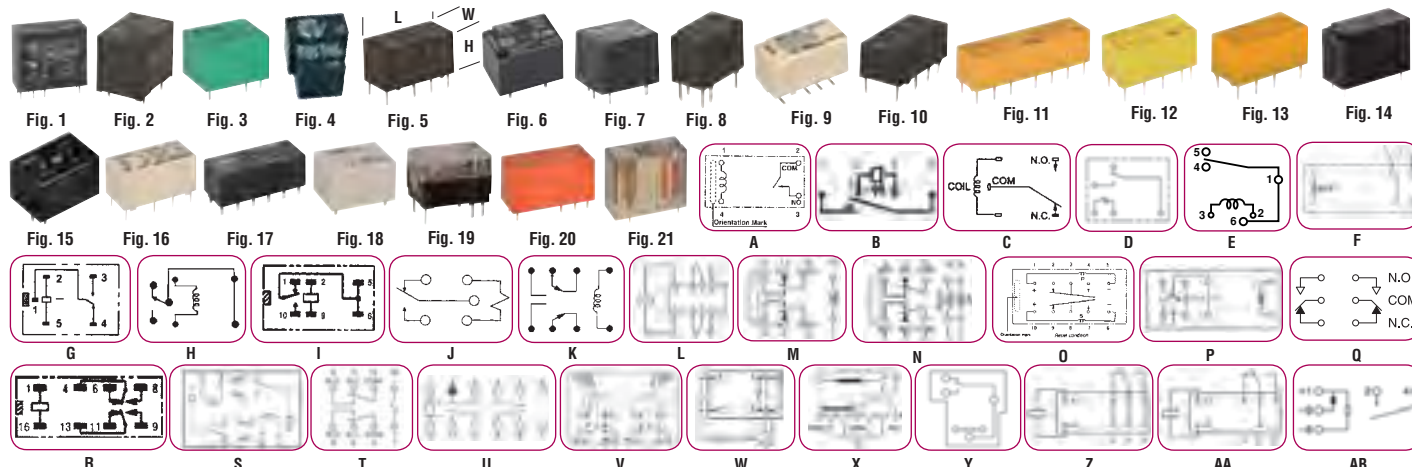
## OMRON HAMLIN FUJITSU Small PC Mount Relays

Designed for the appliance and temperature control markets, these relays are also well suited for automotive load management.

- Mechanical life: 10 million operations
- Electrical life: 100,000 operations
- Dielectric strength: 1500V<sub>RMS</sub> (between contact and coil)

\*Web Code: SAV

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Electromech

Part No.	Manufacturer	Product No.	Potter & Brumfield Cross Reference	Fig.	Contact Form	Coil Voltage	Coil (Ohms)	Contact Current	Contact Voltage	Pins	Dimensions (L" x W" x H")	Pricing		
												1	10	50
2198891	Panasonic	ADJ23005	—	16AB	SPST-NO	5VDC	100	16A	277VAC	7	1.14 x .51 x .63	\$5.95	\$5.49	\$4.95
1860070	Hamlin	HE3621A0500 #	—	1B	SPST-NO	5VDC	500	1A	200VDC	4	.75 x .19 x .30	1.75	1.49	1.25
2220058	Omron	G6D-1A-ASI-DC12	—	1G	SPST-NO	12VDC	720	5A	250VAC/30VDC	4	.68 x .26 x .50	4.39	3.95	3.59
2089694	Tyco	1-1393194-5	T77S103-12	2A	SPST-NO	12VDC	720	3A	250VAC/30VDC	4	.72 x .40 x .57	1.25	1.09	.99
2210861	Omron	G6C-2114P-US-DC12	—	15††	SPST-NO/NC	12VDC	720	8A	250VAC/30VDC	6	.78 x .59 x .59	3.95	3.49	2.95
2220040	Omron	G6B-2114P-US-DC12	—	5††	SPST-NO/NC	12VDC	480	5A	250VAC/30VDC	6	.78 x .43 x .43	4.39	3.95	3.59
2077378	Fujitsu	FBR161NED006-WB	—	2C	SPST	6VDC	100	10A	120VAC/30VDC	5	.85 x .63 x .63	1.95	1.75	1.49
2167550	Fujitsu	FBR562ND12-N*	—	18V	SPST	12VDC	170	60A	14VDC	10	1.0 x .78 x .64	1.25	1.09	.99
843171	Panasonic	JS1A-24V	—	7C	SPST	24VDC	1600	10A	250VAC/100VDC	4	.87 x .63 x .63	1.49	1.25	1.09
2179551	Nais/Panasonic	RK1-L2-5V	—	5X	SPDT	5VDC	62.5	.5A	30VDC	10	.80 x .44 x .36	2.49	2.25	1.95
187151	Omron	G5LE-1DC5	—	2G	SPDT	5VDC	63	10A/8A	120VAC/30VDC	5	.90 x .65 x .75	1.75	1.49	1.25
843155	Panasonic	JS1-5V	T7C55D-05	6C	SPDT	5VDC	69.4	10A/5A	250VAC/100VDC	5	.87 x .63 x .63	1.25	1.09	.99
174450	Rayex	LU-5	T81H5D215	7H	SPDT	5VDC	125	1A/2A	120VAC/24VDC	6	.60 x .40 x .45	1.75	1.49	1.25
760616	Panasonic	DS1E-S-DC5V	—	7P	SPDT	5VDC	125	3A	250VAC/220VDC	5	.59 x .39 x .37	2.95	2.75	2.49
187240	Omron	G5V-1-DC5	T5C-105L3H	8I	SPDT	5VDC	166.7	.5A/1A	125VAC/24VDC	6	.50 x .30 x .40	2.95	2.59	2.29
2131805	Fujitsu	FBR211AD006M	—	19W	SPDT	6VDC	80	.5A/1A	120VAC/28VDC	6	.59 x .40 x .41	1.09	.99	.85
2188457	CIT Relay	WJ115F1C12VDCS6.9	—	4Y	SPDT	12VDC	160	30A	240VAC/30VDC	5	1.25 x 1.06 x .80	.95	.85	.75
2155081	ValuePro	895-1C-S-12VDC	—	6F	SPDT	12VDC	225	20A	14VDC	5	.61 x .47 x .54	.89	.79	.69
2201543	Schrack	RP419012	—	21AA	SPDT	12VDC	270	8A	250VAC	5	1.14 x .50 x 1.0	.95	.85	.75
2197636	American Zettler	AZ8	AC8-1CH-12DE	1C	SPDT	12VDC	320	6A	300VAC/150VDC	5	.84 x .64 x .57	1.09	.99	.89
172937	Nais (Aromat)	JS1-12V	T72M5D121-12	6C	SPDT	12VDC	400	10A/5A	125VAC/24VDC	5	.85 x .62 x .63	1.49	1.25	1.09
2179471	Hongfa	HF3FF-012-1ZST	—	6C	SPDT	12VDC	400	10A	125VAC/28VDC	5	.74 x .59 x .60	1.09	.99	.89
174432	Rayex	LEG-12F	T7C55D12	7J	SPDT	12VDC	400	15A	120VAC/24VDC	5	.76 x .62 x .60	1.95	1.75	1.49
2179569	American Zettler	AZ942-ICT-12DE	—	7G	SPDT	12VDC	400	16A	277VAC/250VAC	5	.89 x .65 x .66	.99	.89	.79
1937612	Porter & Brumfield	T7555D112-12	—	3E	SPDT	12VDC	652	10A/8A	240VAC/24VDC	5	.18 x .39 x .59	1.35	1.19	1.09
184461	Omron	G5V-1-DC12	—	8I	SPDT	12VDC	960	.5A/1A	125VAC/24VDC	6	.50 x .30 x .40	2.49	2.25	1.95
843201	Aromat/Panasonic	JW1FSN-DC24	RTB14024F	14D	SPDT	24VDC	1100	10A/10A	250VAC/30VDC	5	1.11 x .49 x .78	2.25	1.95	1.75
2201551	Schrack	RT314024	—	20Z	SPDT	24VDC	1440	16A	250VAC	8	1.14 x .50 x .64	1.19	1.09	.99
2133528	Siemens	V23042-C2108-B101	—	16U	DPDT	3VDC	90	5A	220VAC/250VDC	8	.80 x .40 x .42	1.49	1.25	1.09
2202351	Panasonic	TN2-4.5V	—	14U	DPDT	4.5VDC	145	1A	125VAC/110VDC	10	.55 x .22 x .39	3.25	2.95	2.75
2095390	ValuePro	V23079A1011B301	—	5L	DPDT	4.5VDC	145	2A	250VAC/220VDC	10	.57 x .28 x .39	1.25	1.09	.99
842996	Panasonic	DS2Y-S-DC5V	—	2C	DPDT	5VDC	125	2A/3A	250VAC/220VDC	8	.78 x .39 x .37	2.49	2.25	1.95
842953	Panasonic	DS2E-S-DC5V	—	11M	DPDT	5VDC	125	2A	125VAC/30VDC	8	.79 x .39 x .39	3.95	3.59	3.25
140290	Panasonic	TQ2-L2-5V†	—	10U	DPDT	5VDC	178	1A	125VAC/110VDC	10	.55 x .35 x .20	3.25	2.95	2.75
843649	Panasonic	TXA2SA-5V	—	9K	DPDT	5VDC	178	2A	30VDC	8	.59 x .29 x .22	2.95	2.59	2.39
2158338	ValuePro	TC-5VDC-C14	—	5L	DPDT	5VDC	178	2A	220VDC	8	.59 x .30 x .33	2.49	2.25	1.95
2081650	NEC	EC2-5NJ	—	5K	DPDT	5VDC	178	2A	220VAC/220VDC	8	.59 x .30 x .37	2.25	1.95	1.75
2120516	Panasonic	DS2Y-SL2-DC6V†	—	12N	DPDT	6VDC	200	2A	250VAC/220VDC	10	.79 x .39 x .37	1.95	1.75	1.49
2077386	Fujitsu	AL-D9W-K	—	100	DPDT	9VDC	45	.5A/1A	125VAC/30VDC	10	.55 x .35 x .20	2.95	2.59	2.29
2135726	NEC	EP2-3NIST*	—	15S	DPDT	12VDC	225	25A	30VDC (max.)	10	.94 x .64 x .63	3.95	3.59	3.39
174378	Rayex	LM2-12D	RKA5DZ12	1P	DPDT	12VDC	270	5A	250VAC/30VDC	8	1.2 x .48 x 1.0	3.95	3.59	3.29
187258	Omron	G5V-2-DC12	—	5Q	DPDT	12VDC	288	.5A/2A	125VAC/30VDC	8	.81 x .40 x .45	3.49	3.19	2.79
842902	Panasonic	DS2E-S-DC12V	—	13R	DPDT	12VDC	720	2A	250VAC/220VDC	8	.79 x .39 x .39	2.75	2.49	2.25
2202685	Panasonic	AGN200A12	—	1U	DPDT	12VDC	1030	1A	125VAC/110VDC	8	.41 x .35 x .22	1.75	1.49	1.25
2139049	Omron	G5V-2-HI-DC24	—	5R	DPDT	24VDC	2880	.83A	125VAC/125VDC	8	.81 x .40 x .45	1.09	.99	.89
2133499	SDS/Relais	S3-12V	—	17T	4PST	12VDC	720	4A	250VAC/30VDC	12	1.11 x .48 x .41	2.25	1.95	1.75

\* Automotive, dual relay, separate type # SIP package † Latching †† See schematic on Web datasheet.

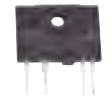
# Solid State, Enclosed & Reed Relays

OMRON crydom EGE

## DC/AC and DC/DC Solid State Relays



\* Web Code: DBA



164988 (Fig. 1)



153059 (Fig. 2)



162342 (Fig. 3)



186992 (Fig. 4)



176698 (Fig. 5)



176648 (Fig. 6)



2144737 (Fig. 7)

Part No.	Mfr.	Mfr. Part No.	Type	Contact Form	Contact Voltage	Contact Current	Control Voltage	Pins	Fig.	Agency Terminal Type	Dimensions Approval	(L" x W" x H")	Pricing		
													1	10	50
Solid State Relays DC/AC Type															
164988	Sharp	S101S02	DC/AC	SPST	125VAC	1.5A	1.2VDC@20mA	4	1	Solder lead	UL/CSA	0.9 x .16 x .63	\$3.95	\$3.59	\$3.29
164996	Sharp	S202TA1	DC/AC	SPST	200VAC	2A	1.2VDC@20mA	4	1	Solder lead	UL/CSA	0.9 x .16 x .63	3.25	2.95	2.59
153059	Rayex	RSR2ND-A24003	DC/AC	SPST	240VAC	3A	4-32VDC	4	2	Solder lead	UL	1.7 x 0.4 x 2.0	9.95	8.95	7.95
162342	Excel	ESR51024-010	DC/AC	SPST	240VAC	10A	3-32VDC	4	3	Screw terminal	UL	1.7 x 1.1 x 2.3	18.95	16.95	15.49
186992	Omron	G3NA-210B-DC5-24	DC/AC	SPST	240VAC	10A	5-24VDC	4	4	Screw terminal	UL/CSA	1.7 x 1.1 x 2.3	24.95	22.49	19.95
2179462	Gordos	M-OAC5AH	DC/AC	SPST	240VAC	20A	2.75-8VDC	4	2	Solder lead	UL/CSA	1.7 x 1.0 x 0.4	6.95	6.25	5.59
162369	Excel	ESR51024-025	DC/AC	SPST	240VAC	25A	3-32VDC	4	3	Screw terminal	UL	1.7 x 1.1 x 2.3	22.95	20.95	18.95
175214	Kyoto	KB20C02A	DC/AC	SPST	280VAC	2A	3-32VDC	4	5	Solder lead	CE	1.4 x 0.3 x 1.5	7.95	6.95	6.25
2217975	Teledyne	BS24D4A	DC/AC	SPST	280VAC	4A	3-10VDC	4	5	Solder lead	UL/VDE	1.7 x 1.0 x .39	12.95	11.95	10.95
176698	Kyoto	KB20C06A	DC/AC	SPST	280VAC	6A	3-32VDC	4	5	Solder lead	CE	1.4 x 0.3 x 0.9	9.95	8.95	7.95
176719	Kyoto	KD20C40AX	DC/AC	SPST	280VAC	40A	4-32VDC	4	6	Screw terminal	UL/CE	1.7 x 0.9 x 2.3	19.95	17.95	15.95
Solid State Relays DC/DC Type															
172591	Kyoto	KF0602D	DC/DC	SPST	60VDC	2A	3-32VDC	4	5	Solder lead	CE	1.4 x 0.3 x 0.9	\$8.95	\$7.95	\$7.19
175222	Kyoto	KF0604D	DC/DC	SPST	60VDC	4A	3-32VDC	4	5	Solder lead	CE	1.5 x 0.3 x 0.9	9.95	8.95	7.95
2218126	Crydom	CMX60D10	DC/DC	SPST	60VDC	10A	3-10VDC	4	5	Solder lead	CE	1.6 x 0.3 x 0.9	19.95	17.95	16.49
2144737	Teledyne	C47F-20	DC/DC	SPST	90VDC	1A	3.8-32VDC	4	7	DIP-14	—	.75 x .25 x .17	9.95	8.95	7.95
176648	Kyoto	KG1005D	DC/DC	SPST	120VDC	5A	3-32VDC	4	6	Screw terminal	CE	2.3 x 1.7 x 0.9	22.95	20.95	18.95
176655	Kyoto	KG1010D	DC/DC	SPST	120VDC	10A	3-32VDC	4	6	Screw terminal	CE	2.3 x 1.7 x 0.9	24.95	22.49	19.95

## CLARE Panasonic OptoMOS® Solid State Relays

### Applications:

Telecom: Tip/Ring circuits, modem switching  
Instrumentation: Multiplexers, data acquisition

\* Web Code: WDX



1583041

Part No.	Mfr. Part No.	Package	Description	Schem.	Load Voltage (V)	Current Handling (mA)	On-Resistance (Ω)	Isolation Voltage (Vrms)	Input Control Current (mA)	Off-State Leakage (μA)	Switching Speed (on/off) (ms)	Pricing		
												1	10	50
1583041	LCA710	DIP-6	Single pole, 1-Form-A	A	60	1000	0.5	3750	10	1	2.5/0.25	\$4.49	\$3.95	\$3.59
991220	AQV252G	DIP-6	Single pole, 1-Form-A	D	60	2500	0.8	1500	5	1	1.1/0.25	5.95	5.39	4.79
1582997	LCA110	DIP-6	Single pole, 1-Form-A	B	350	120	35	3750	2	1	3/3	2.49	2.25	1.95
1582903	LAA110	DIP-8	Dual single pole, 1-Form-A	C	350	120	35	3750	5	1	3/3	4.49	3.95	3.59

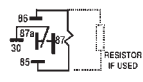
## Potter & Brumfield Equivalent Plastic-Enclosed Construction Relays

### VF Series

- Dielectric strength: 500VDC (between contact & coil)
- Operating temp.: -35°C to +85°C
- Contact current: 20A
- Coil voltage: 12VDC
- Terminal type: quick connect
- Normally open (NO)
- Dimensions: 1.1"L x 1.1"W x 1.0"H



Schematic 1



Schematic 2



171433 (Fig. 1)



171442 (Fig. 2)



171460 (Fig. 3)

Part No.	Mfr.	Product No.	P&B Cross Ref. No.	Fig.	Contact Form	Coil Voltage	Coil Ohms	Contact Schematic	Pins	Pricing		
										1	10	50
1810179	Rayex	LD1A-12BP*	—	2	SPST-NO	12VDC	80	1	4	\$1.49	\$1.35	\$1.19
171460	Rayex	LD1A-12F	—	3	SPST-NO	12VDC	80	1	4	2.95	2.59	2.39
171442	Rayex	961A-1A12D†	—	2	SPST-NO	12VDC	80	1	4	2.95	2.59	2.39
2198831	Panasonic	CB/AH-24V	—	2	SPST-NO	24VDC	320	1	4	2.49	2.25	1.95
171522	Rayex	LD5F	VF4-45D11	3	SPDT	5VDC	14	2	5	2.49	2.25	1.95
148583	Rayex	LD12F	VF4-85F11	1	SPDT	12VDC	78	2	5	2.95	2.59	2.29
2094135	Sanyou	SARL-112D	VF4A-15F11	2	SPDT	12VDC	80	2	5	4.95	4.49	3.95
2094151	Sanyou	SARL-112DF	VF45A-45F11	1	SPDT	12VDC	80	2	5	3.95	3.59	3.39
171433	ValuePro	961A-1C-12DM	VF4-81F11	1	SPDT	12VDC	90	2	5	3.95	3.59	3.39
2094186	Sanyou	SARL-125D	VF4A-15F11	2	SPDT	24VDC	320	2	5	3.95	3.59	3.19
2094194	Sanyou	SARL-124DF	VF4A-45H11	1	SPDT	24VDC	320	2	5	4.95	4.49	3.95

\* PCB terminals † Comes with a removable clip

## HAMLIN RELAYS

Part No.	Description	2202731	1	10	50
2202722	5V@ .5A, SPST, 4-pin ....	\$1.95	\$1.75	\$1.49	
2202731	5V @ .25A, SPDT, 5-pin ...	2.49	2.25	1.95	

## Reed Type Relay

- Contact form: SPST-NO
- Terminal type: PCB solder
- Contact voltage: 120VAC/60VDC
- Coil voltage @ contact rating: 12V @ 11.4mA
- Dimensions: 1.0"L x 0.37"W x 0.38"H

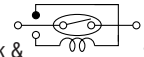


Part No.	Cross Ref. No.	Pins	1	10	50
111448	BR-1050	4 .....	\$1.95	\$1.75	\$1.49

## Relay Socket with Coil Diode

### VF Series

- 14 AWG: 2 black & 1 blue wire; 18 AWG: 1 black & 1 red wire (7.5" length)
- Contact voltage/current: 12V/20A
- Diode coil suppression • Use w/ P/N 148583 (left)



Part No.	Product No.	1	10	50
170624	RSD03 .....	\$2.49	\$2.25	\$1.95

\* For additional products, availability and specifications visit [Jameco.com](http://www.Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# DIP/SIP, General Purpose Relays & Relay Sockets

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## Aromat EGE KEST HAMLIN DIP & SIP Relays

\* Web Code: QAN

- Logic control levels
- Long life with reliable operation
- Excellent for PCB applications
- Compatible with IC sockets
- Compact design/construction
- Moisture resistant



106463



1860088



2081377

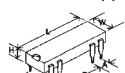
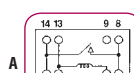


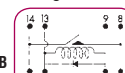
Fig. 1



Fig. 2



A



B



C

Part No.	Manufacturer	Product No.	Fig.	Contact Form	Coil Voltage	Coil Ohms	Contact Voltage	Contact Current	Pins	Jameco Socket	Dimensions (L" x W" x H")	Leads (A" x B" x C")	Pricing		
													1	10	100
138431	Excel	2D1A05	1B	SPST-NO	5VDC	500	100VDC	0.5A	8	37162	.77 x .30 x .22	.10 x .40 x .30	\$3.25	\$2.95	\$2.59
106463	Excel	201A05	1A	SPST-NO	5VDC	500	100VDC	0.5A	8	37162	.78 x .25 x .20	.10 x .40 x .30	2.95	2.59	2.29
1860088	Hamlin Breed	HE3621A0510	—	SPST-NO	5VDC	500	200VDC	0.5A	4†	—	.75 x .20 x .30	.20 x .60	1.49	1.25	1.09
2202722	Hamlin Breed	HE751A0500	1A	SPST-NO	5VDC	500	300VDC	0.5A	4	37162	.77 x .28 x .22	.10 x .40 x .30	1.95	1.75	1.49
106472	Excel	201AIZ	1A	SPST-NO	12VDC	1000	100VDC	0.5A	8	37162	.78 x .25 x .20	.10 x .40 x .30	2.49	2.25	1.95
2202731	Hamlin Breed	HE3321C0500	1A	SPDT-CO	5VDC	125	175VDC	0.25A	5	—	.95 x .27 x .29	.10 x .20 x .01	2.49	2.25	1.95
139977	ValuePro	RSB5S	2C	DPDT	5VDC	125	120VAC/30VDC	1A/2A	8	37373	.79 x .39 x .37	.20 x .40 x .30	2.95	2.59	2.39
2081414	KEST	KS2E-M-DC5	2C	DPDT	5VDC	128	125VAC/28VDC	1A/2A	8	37373	.83 x .40 x .48	.20 x .30 x .30	2.75	2.49	2.25
2081377	KEST	KS2E-M-DC12	2C	DPDT	12VDC	708	125VAC/28VDC	1A/2A	8	37373	.83 x .40 x .48	.20 x .30 x .30	2.49	2.25	1.95
99311	Aromat (NAIS)	DS2Y-S-DC12V	2C	DPDT	12VDC	720	110VAC/30VDC	0.3A/1A	8	37373	.79 x .40 x .43	.20 x .40 x .30	2.95	2.59	2.39
2081406	KEST	KS2E-M-DC24	2C	DPDT	24VDC	1440	125VAC/28VDC	1A/2A	8	37373	.83 x .40 x .48	.20 x .30 x .30	2.95	2.59	2.39

† SIP



## General Purpose Power Relays

\* Web Code: GPR

For complete specifications visit [www.Jameco.com](http://www.Jameco.com)

Part No.	Mfr.	Product No.	Contact Form	Rating	Contact Rating	Coil Resis.	Contact Type	1	10	50
2167453	Panasonic	JTVIAS-PA-12	SPST	12VDC @ 83mA	30A, 277VAC	144Ω	PCB terminals	\$1.25	\$1.09	\$0.99
611928	P&B	T9AP1D52-48-03	SPST-NO	48VDC @ 21mA	30A, 240VAC	2304Ω	Quick connect: .187" for coil/.250" for contacts	4.95	4.49	3.95
137358	ValuePro	953-1C12DM-R	SPDT	12VDC @ 77mA	20A, 240VAC/28VDC	155Ω	Quick connect: .110" for coil/.250" for contacts	3.25	2.95	2.59
2208147	ValuePro	H2R-72ABTAA	DPST-NO	12VDC @ 140mA	30A, 277VAC	23Ω	.250" quick connect	10.95	9.95	8.95
2208155	ValuePro	H2R-72ACTAA	DPST-NO	24VDC @ 70mA	30A, 277VAC	310Ω	.250" quick connect	10.95	9.95	8.95
552462	P&B	PRD-7AG0-120	DPST-NO	120VAC @ 85mA	30A, 240VAC	290Ω	Screw: #8-32 for main; #6-32 for contacts	33.95	30.95	28.95



## General Purpose Blade and Octal Relays



\* Web Code: ACF

- UL/CSA approved
- Industry standard termination for quick installation
- Wide range of coil voltages for industrial and commercial applications



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Part No.	Mfr.	Product No.	Fig.	Contact Form	Coil Voltage	Contact Rating	Coil Resis. (Ω)	Coil Current (mA)	Mating Socket*		Pricing		
									Standard	DIN Rail	1	10	50
2093079	Omron	LY2F-DC12	1	DPDT	12VDC	10A @ 24VDC; 10A @ 110VAC	160	75	PT08	175531	\$5.95	\$5.39	\$4.79
139766	Rayex	MK2P-I	2	DPDT	12VDC	10A @ 28VDC; 10A @ 240VAC	120	10	141145	141145	7.95	7.29	6.59
282378	P&B	KRPA-11DG-12	3	DPDT†	12VDC	10A @ 240VAC	120	100	282132	—	16.95	15.95	14.95
172719	ValuePro	LB2-12DS-R	4	DPDT	12VDC	12A @ 30VDC; 12A @ 240VAC	160	75	175531	282191	5.95	5.49	4.95
282255	P&B	K10P-11D15-12	5	DPDT	12VDC	15A @ 30VDC; 15A @ 120VAC	160	75	282191	282191	12.95	11.49	9.95
175565	ValuePro	LB2-24DS-R	4	DPDT	24VDC	12A @ 30VDC; 12A @ 240VAC	650	37	175531	282191	6.95	6.25	5.59
2218214	Omron	LY2-UA-006244	4	DPDT	110/120VAC	10A @ 24VDC; 10A @ 110VAC	4430	9.9/10.8	—	175531	5.95	4.95	3.95
175573	ValuePro	LB2-110ASR	4	DPDT†	110VAC	12A @ 30VDC; 12A @ 240VAC	3,900	28	175531	282191	6.95	6.25	5.59
139740	Beta	BTA6-2C-J-CW-120VAC	2	DPDT	120VAC	10A @ 28VDC; 10A @ 240VAC	1,700	122	141145	141145	7.95	7.29	6.59
282247	P&B	K10P-11A15-120	5	DPDT	120VAC	15A @ 30VDC; 15A @ 120VAC	3,900	11	282191	282191	12.95	11.95	10.95
2179809	Omron	G7J-4A-P AC200/240	6	4PST(NO)	240VAC	25A @ 30VDC; 25A @ 220VAC	—	10.8	—	—	7.95	6.95	6.25
2167461	Omron	MY4-DC12	1	4PDT	12VDC	3A @ 30VDC; 3A @ 250VAC	160	75	2167470	2167470	6.95	6.25	5.59
291507	ValuePro	LB4H-12DS-R	4	4PDT	12VDC	5A @ 30VDC; 5A @ 240VAC	160	75	175557	175557	4.49	3.95	3.59
2167496	IDEC	RY4S-U	1	4PDT	12VDC	5A @ 30VDC; 5A @ 240VAC	160	75	2167470	2167470	6.95	6.25	5.59
175602	ValuePro	LB4H-24DS-R	4	4PDT	24VDC	5A @ 30VDC; 5A @ 240VAC	650	37	175557	175557	5.95	5.39	4.79
175611	ValuePro	LB4H-110AS-R	4	4PDT†	110VAC	5A @ 30VDC; 5A @ 240VAC	3,900	28	175557	175557	5.95	5.39	4.79

\* For sockets see below 1 = Silver-cadmium oxide, no lamp



## Blade and Octal Relay Sockets

\* Web Code: TEM

141145/175531/282132: 8-pin DPDT

2167470/175557: 14-pin 4PDT

Part No.	Mfr.	Product No.	Relay Series	Type	1	10	50
141145	Beta	PF-083A	BTA1	Combo†	\$3.95	\$3.59	\$3.29
175531	ValuePro	PTF08A-A	K10	Combo†	4.95	4.49	3.95
2167470	Omron	PYF14A-E	MY	Combo†	3.95	3.59	3.29
282191	P&B	27E895	K10	DIN Rail	7.95	6.95	6.25
282132	P&B	27E122	KRP/KRPA	Standard	6.95	6.25	5.59
175557	ValuePro	PYF14A-A	KHUA	DIN Rail	3.95	3.59	3.29

† Combo: DIN rail or screw terminal



141145



2167470



282191



282132

## GREAT DEALS ON SPECIAL BUY RELAYS



2202351

Part No.	Description	1	10	50
2202351	4.5VDC @ 1A, DPDT .....	\$3.25	\$2.95	\$2.75
140290	5VDC @ 1A, DPDT .....	3.25	2.95	2.75
760616	5VDC @ 3A, SPST-NO/NC ..	2.95	2.75	2.49
2202685	12VDC @ 1A, DPDT-NO/NC	1.75	1.49	1.25
2210861	12VDC @ 8A, SPST-NO/NC	3.95	3.49	2.95
843171	24VDC @ 10A, SPST-NO ....	1.49	1.25	1.09



# Proximity, Hall Effect & Environmental Sensors



## Inductive Proximity Switch Sensors

### Cylindrical and Square Styles

- Operating voltage range: 10-30VDC
- Nominal operating voltage: 12VDC
- Normally open output
- Current consumption: 10mA max.
- Sensing target: inductive type – magnetic metal
- Sensing distance:  $\pm 10\%$  (tin)
- LED status indicator
- Switching frequency: 1.5kHz
- Fast response
- Pre-tinned pigtail
- Short-circuit protected
- 6' long cable

\*Web Code: IPS

167020 155547 248858

Part No.	Mfr. Part No.	Output Circuit	Effec. Dist. (Iron)	Standard Target (Iron) (mm)	Dimensions (L x Dia.)	Mounting Hole (ins.)	Pricing		
							1	5	25
167020	TS12-02N-1	NPN	0-1.6mm	12 x 12 x 1	1.8" x 0.46"	0.46	\$24.95	\$22.49	\$19.95
155547	S18-05N-1	NPN	0-4.0mm	18 x 18 x 1	1.4"Lx1.4"Wx0.7"H	0.112	15.95	14.49	12.95
248858	TS12-02P-1	PNP	0-1.6mm	12 x 12 x 1	1.8" x 0.46"	0.46	22.95	20.95	18.95



## Digital Hall Effect Magnetic Proximity Sensors

- Flange Mount** • Applications: door position sensing, flow sensing, pedal switch
- Capable of millions of operations
  - Reverse battery protection to -24VDC
  - Output saturation voltage max.: 400mV
  - Operating voltage range: 4.5-24VDC
  - Meets IEC529 IPX5 for water protection
  - Output wire: 3-wire sink

\*Web Code: CCC

Part No.	Mfr. Part No.	Supply Curr. Max. (mA)	Output Curr. Max. (mA)	Op. Point Gauss (max.)	Rel. Point Gauss (min.)	Function	Pricing		
							1	5	25
513252	MP101401	5.2	20	185 (south)	60 (south)	Unipolar switch	\$6.95	\$6.25	\$5.59
513261	MP102103	12	25	300 (north)	195 (north)	Switch	7.95	6.95	6.25



## Hall Effect Magnetic Proximity Sensor

- With Snap-Fit Mount
- Operating voltage range: 4.75-24VDC
- No mechanical contacts to wear out
- South pole sensitive or bi-polar latch
- Output saturation voltage max.: 400mV
- Output: 3-wire sink
- Immune to dust, dirt and moisture
- Digital output compatible with all logic families
- Operating temp. range: -40°C to 85°C
- Solid state reliability
- Reverse polarity protection to -24V

\*Web Code: CCC

Part No.	Mfr. Part No.	Supply Curr. Max. (mA)	Output Curr. Max. (mA)	Op. Point Gauss (max.)	Rel. Point Gauss (min.)	Wire	Pricing		
							1	5	25
513244	MP101301	4	25	300	60	24AWG x 1m	\$6.95	\$6.25	\$5.59



## Magnetic Proximity Sensor Cylindrical Plastic Housing

- Omnipolar, magnetically activated switch
- Hermetically sealed
- Contact resistance: 0.2 $\Omega$  max.
- Resistant to dirt and moisture
- Operating temp. range: -40°C to 105°C
- Can be approached by any magnet from any angle with either pole
- Zero power consumption
- Breakdown voltage: 200VDC min.

\*Web Code: CCC

Part No.	Mfr. Part No.	Contact Form	Power (W)	Switching Volt. Max. (VDC)	Switching Curr. Max. (A)	Op. Time Typical (ms)	Pricing		
							1	10	50
513308	MP201701	SPST NO	10	175	0.5	0.5	\$3.95	\$3.59	\$3.29
482417	AS201901*	SPST NO	10	175	0.5	0.6	3.95	3.59	3.29
513359	MP201901	SPST NO	10	175	0.5	0.6	3.95	3.59	3.29

\*Actuator to be used with 513359



## High Performance Sonar Range Finders

MaxBotix is a leader in ultrasonic range finder products for standard, industrial and outdoor applications. These products can detect objects from as close as 6" all the way to 35' depending on the model.

\*Web Code: MXB

Part No.	Mfr. Part No.	Fig.	Max. Beam Width†	Detection Range (ft.)	Data Output*	Pricing	
						1	5
2157335	MB1040	1	2 feet	1-21.16	PW, AV, SD	\$27.95	\$24.95
2157351	MB1240	2	3 feet	1-25.1	PW, AV, SD	39.95	35.95
2157327	MB1010	1	5 feet	1-21.16	PW, AV, SD	27.95	24.95

\*PW = pulse-width; AV = analog volt.; SD = serial digital; †Beam characteristics are approximate

## BEST SELLING ARDUINO COMPATIBLE SENSORS

Part No.	Description	Price	Part No.	Description	Price
2144500	9 Pc set	\$44.95	2167761	24 Pc set	\$89.95
2159445	Analog sound	8.95	2159453	Digital tilt	4.95
2159373	Color	10.95	2159381	Soil moisture	6.95

## Solid State Digital Position Sensors

- High output current capability -50mA absolute max.
- Oper. temp. range: -40°C to 150°C
- 3-pin SIP package
- Output type: sink
- Output volt./curr.: 40mV/20mA max.
- Supply current: 10mA max.
- Supply voltage:

1915915/1915886: 3.8VDC to 30VDC

1915940: 3VDC to 6.5VDC

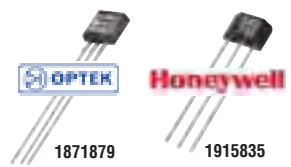
\*Web Code: DPS

Part No.	Mfr. Part No.	Type	1	10	100
1915915	SS466A	Latching ..	\$1.29	\$1.15	\$0.99
1915940	SS49E	Sourcing ....	1.95	1.75	1.49
1915886	SS441A	Unipolar .....	1.29	1.15	.99

## Hall Effect Sensors

\*Web Code: REB

- Supply voltage range: 4.5V-24V
- Supply current: 9mA max.
- Operating temperature up to 150°C



More Hall Effect Sensors on page 10

Part No.	Mfr. Part No.	BOP/BRP* @ 25°C	1	10
1871879	OH180U	180/140 gauss ....	\$2.95	\$2.59
1915835	SS41	40/-40 gauss .....	1.09	.99
2201906	HAL115UA-C	12/-12 gauss .....	.85	.75

\*BOP = Magnetic Operating Point; BRP = Magnetic Release Point



## Gear Tooth Speed Sensor

### Commercial Grade Hall Effect

- Operating voltage range: 4.5-24VDC
- Output type: sink
- Output current: 25mA max.
- Supply current: 6mA max.
- Barrel length: 1.0"
- Output voltage: 400mV max.
- Thread: 15/32" - 32
- Wire: 20 AWG x 1m
- Reverse battery protection from 24VDC
- Operating temperature range: -40°C to 125°C

Part No.	Mfr. Part No.	1	5	25
512401	GS100701	\$31.95	\$28.95	\$26.95



## Humidity Sensors

- Linear volt. output vs %RH
- Voltage & current: 4 to 5.8VDC @ 500 $\mu$ A max.
- Accuracy:  $\pm 3.5\%$  RH
- Operating temp.: -40°C to 85°C
- 0.10" lead pitch SIP with calibration & data printout
- 1860230: 0.05" lead pitch SIP
- 1860248: 0.10" lead pitch SIP w/ calibration & data printout

Part No.	Mfr. Part No.	1	5	25
1860230	HIH-4000-002	\$16.95	\$14.95	\$13.49
1860248	HIH-4000-003	22.95	20.95	18.95



## Environmental Sensor

This special sensor provides very specific functions regarding its environmental situation. As one of the first CO<sub>2</sub> sensors, it determines the concentration of CO<sub>2</sub> in the air by dropping its output voltage as more CO<sub>2</sub> accumulates.

Part No.	Mfr.	Description	Price
2213270	DFRobot	CO <sub>2</sub> sensor	\$59.95

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# Sensors, Keypads & Microphone Cartridges

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## Digital/Analog Distance Sensors

PARALLAX

These sensors are small in size and can be placed just about anywhere on your project.

**2136462:** 3-pin header connection (included)  
**2150256:** Connects with 3-pin JST connector (P/N 2143881, not included)

\* Web Code: PDS

Part No.	Mfr.	Mfr. P/N	Digital/Analog	Detection Range	Res. Time	1	5
2136462	Pololu	1134	Digital	0.8" to 4"	2.56 ms	\$7.95	\$7.19
2150256	Parallax	28995	Analog	3.9" to 31.5"	38.0 ms	15.95	14.49
2136454	Sharp	1137	Analog	7.8" to 59"	38.0 ms	16.95	15.49
2143881	Pololu	117	3-pin female JST cable w/ stripped leads			1.25	1.09
2143419	Pololu	1799	3-pin female JST cable w/ 0.1" crimp terminals			1.95	1.75



## Arduino Compatible Sensors



These plug and play sensors are ready for immediate installation and use.

**2213270:** • Operation voltage: 5V, 7-12V reg. at MCU for heating  
**2190741:** • 2.0VDC to 3.6VDC  
 • SPI and I<sup>2</sup>C interface

\* Web Code: ACS

Part No.	Mfr.	Description	1	5
2213270	DFRobot	CO <sub>2</sub> gas sensor, single digital output (MG-811)	\$59.95	\$56.95
2190741	Liquidware	3-axis accelerometer ADXL345	9.95	8.95

For Arduino Boards and Sensors, see pages 144-145



## Bidirectional Flex Sensors



## Flex Sensor

• Temperature range: -45°F – 125°F  
 • Dimensions: 4.5"L x .375"W x .038"T

• Max. resistance: 30kΩ to 40kΩ, proportional to the degree of flexing or bending  
 • Applications: virtual reality data gloves, robotic, bio-metric, physics and engineering

Part No.	Mfr.	Part No.	Resistance (Ω)	1	5	25
2124867	FLX-01-M	20k – 50k	\$9.95	\$8.95	\$7.95	

Part No.	Nominal Res.	Length	1	10
150551	10kΩ	4.5	\$12.95	\$11.49



## Ultrasonic Sensor Sets

### Motion or Distance Sensing, Transmitter/Receiver Set

• Frequency: 40kHz ±1.0kHz • Aluminum case

**139492:** • Capacitance: 2000pF ±20%  
 • Transmitter: bandwidth 5.0kHz @ 100dB, sound pressure level 112dB @ 40 ±1.0kHz  
 • Receiver: bandwidth 5.0kHz @ -75dB, min. sensitivity 67dB @ 40 ±1.0kHz (R=3.9kΩ)

**2120268:** • Capacitance: 1250pF ±20% • Bandwidth: 4.0kHz @ -73dB  
 • Transmitter sensitivity: 41kHz @ 67dB • Receiver sensitivity: 40kHz @ 67dB (R=3.9kΩ)

**136654:** • Capacitance: 2000pF ±30%  
 • Transmitter: bandwidth 4.0kHz @ 112dB, sound pressure level 119dB @ 40 ±1.0kHz  
 • Receiver: bandwidth 3.5kHz @ -71dB, min. sensitivity 65dB @ 40 ±1.0kHz (R=3.9kΩ)

Part No.	Manufacturer	Product No.	Case Size	Lead Length/Spacing	1	10	100
139492	Jameco ValuePro	40TR12B	0.30"H x 0.43"Dia.	0.28"	\$7.95	\$7.19	\$6.49
2120268	Matsushita	EFR40K2	0.47"H x 0.62"Dia.	0.35"	9.95	8.95	7.95
136654	Jameco ValuePro	40TR16F	0.47"H x 0.62"Dia.	0.39"	7.95	7.29	6.49



## Omni-Directional Electret Condenser Microphone Cartridges

Applications: Tape recorders, intercoms, hearing aids, telephone and answering devices, sonic controlled toys and sensors

• Max current: 0.5mA • Impedance: >2.2kΩ • Terminals: PC pin leads

\* Web Code: QBW

Part No.	Cross Ref. No.	Sensitivity	Frequency (Hz)	Max. Op. Volt.	Stand Op. Volt.	Sensitivity Reduction	S/N Ratio	Size (H x Dia.)	Pricing		
1950948	AMF-097A40-NB1-LF	-60 ±3dB	50-16,000	10VDC	3.0VDC	-3dB @ 3V	>58dB	.27" x .39"	1	10	100
2202095	F9767AP*	-38 ±3dB	20-16,000	10VDC	3.0VDC	-3dB @ 1.5V	>58dB	.26" x .38"	1.09	.99	.89
2186633	AOM-6545P-R*	-45 ±2dB	20-20,000	10VDC	4.5VDC	-3dB @ 3V	>60dB	.26" x .37"	1.09	.99	.85
2126141	EC928P-602	-40 ±2dB	20-12,000	10VDC	4.5VDC	-3dB @ 1.5V	>75dB	.26" x .38"	1.09	.99	.85
136574	WM-60PC	-54 ±2dB	20-12,000	12VDC	4.5VDC	-3dB @ 3V	>40dB	.30" x .38"	1.09	.99	.85
320179	EM-99	-64 ±2dB	20-12,000	12VDC	4.5VDC	-3dB @ 3V	>40dB	.27" x .39"	.99	.89	.75

\* Manufacturer: Arndt

\* Keypads Online — Enter Web Code XBA

## BEST SELLING COMPUTER CABLES

Part No.	Description	Color	Length	1	10	100
222608	2.0 USB-A male to USB-B male	Black	3 ft.	\$1.95	\$1.75	\$1.59
229730	2.0 USB-A male to USB-B male	Beige	6 ft.	2.95	2.49	1.95
222010	2.0 USB-A male to USB-B male	Black	6 ft.	2.95	2.49	1.95
229738	2.0 USB-A male to USB-B male	Black	10 ft.	3.25	2.95	2.25
673694	USB-A male to 5-pin mini USB	Black	6 ft.	2.95	2.59	2.19
132346	DB9 F/F serial cable w/ thumbscrews	Beige	6 ft.	4.95	4.45	3.95
199639	DB9 M/F ext cable w/ thumbscrews	Black	6 ft.	5.95	5.35	4.79
25701	DB9 M/F ext cable w/ thumbscrews	Beige	6 ft.	5.95	5.35	4.79



## Liquid Level Sensor

This liquid level sensor is triggered when water level is either high or low. Black and white are ON and maintained until float is at its lowest, black and red wire is OFF and maintained until float is at its highest.

\* Web Code: LLS

Part No.	Description	1	5	25
176250	24VDC	\$8.95	\$7.95	\$7.25
176251	Extra hardware kit	.99	.89	.79



## Force-Sensing Resistors

• Polymer thick film (PTF) optimized for human touch control of electronic devices  
 • >1MΩ, no force, 100kΩ to >100Ω under pressure  
 • 0.72" dia. circular pad, 0.5" Dia. sense area  
 • Can sense applied force from 1 oz. to 22 lbs.  
 • 1.3" flexible male leads, 0.1" spacing

Part No.	Mfr.	Part No.	Size	1	10
2128260	1696	0.72"Dia./ .50"Circle	\$8.95	\$7.95	
2136471	1645	1.72"L x 1.5"W	10.95	9.95	



## 16-Button Numeric Keypads

• Contact resistance: 200Ω max.  
 • 8-pin solder pad  
 • Contact rating: 24VDC @ 20mA  
 • Life test: 1,000,000 life cycles per key  
 • 8-pin male header, use for P/N 153702 (straight) or P/N 153728 (right angle)

Part No.	Size (L" x W" x H")	1	10	100
2131055	2.5 x 2.6 x 0.4	\$6.95	\$6.25	\$5.59
169245	3.0 x 2.8 x 0.6	8.95	7.95	7.19

## 16-Button Indoor/Outdoor Keypads

• 9-pin .100" headers  
 • Compatible with MOS, TTL & DTL (10Ω max.)  
 • Contact rating: 24VDC @ 10mA resistive  
 • Fully sealed snap-dome contact  
 • Life test: 3,000,000 cycles per key  
 • Recommended connector: P/N 103191 header and P/N 100766 pin, pg 57  
 • Size (housing): 4.7"W x 1.7"H x 0.4"T  
**2161473:** 8-pin access, adhesive backing

Part No.	Description	1	10	100
196171	2x8 matrix keypad	\$16.95	\$14.95	\$13.49
2161473	4x4 membrane keypad	12.95	11.49	9.95
152063	4x4 matrix keypad	19.95	17.95	15.95

# Buzzers, Transducers & Sirens

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VELLEMAN

## Piezo Buzzers (Annunciators)

\* Web Code: JPB

Part No.	Manufacturer	Product No.	Fig.	Tone	Oper. Volt. (V/mA)	Volt. Range	Sound (dB)	Freq. (Hz)	Dimensions (H x Dia.)	Pricing		
										1	10	100
336989	ValuePro	11S3120LF-TA	4	Single	1-16/30	1 - 16	100	2900	1.35" x 1.71"	\$3.49	\$3.15	\$2.79
335557	ValuePro	MSR320	2	Single	3-20/3-16	3 - 20	90	3400	.39" x .91"	2.49	2.25	1.95
1956696	Velleman	SV4/5-S	3	Single	5/25	3 - 6	87	3200	.30" x .47"	3.49	3.15	2.79
2172906	Mallory	SCM616N-1	9	Continuous	6/16/6-22	6 - 16	90	2900	1.06" x 1.70"	1.95	1.75	1.49
1956741	Velleman	SVM06	5	Single	6/20	3 - 7	75	300-500	.91"L x .63"W x .59"H	2.95	2.59	2.39
2173861	ValuePro	20S1060LF-LA	5	Single	6/25	4 - 8	75	400	.91"L x .67"W x .61"H	1.95	1.75	1.49
2205245	SoundTech	SEP-2240	6	Continuous	12/7	3 - 16	70	4100	.30" x .55"	1.75	1.49	1.25
173713	ValuePro	32S4120-PN	6	Single	12/7	3 - 16	80	4000	.30" x .54"	1.95	1.75	1.59
673900	ValuePro	SEP-1172	7	—†	12/7	3 - 28	81	3300	.63" x 1.24"	.49	.45	.39
2202925	Murata	PKM33EP-1001	8	Continuous	12/7	3 - 30	70	4000	.29" x 1.25"	1.75	1.49	1.25
2120452	ValuePro	DB-E238	1	Single	12/8	3 - 20	85	2900	.63" x .93"	1.95	1.75	1.49
2117430	ValuePro	7P3120LF-LA	10	Pulse	12/10	3 - 15	90	3200	.98" x 1.10"	2.95	2.59	2.29
2209123	Arndt	EFM-260	2	Continuous	12/12	3 - 24	85	3500	.62" x .91"	.95	.85	.75
1956750	Velleman	SVM12	5	Single	12/15	7 - 17	75	300-500	.91"L x .63"W x .59"H	2.49	2.25	1.95
249498	ValuePro	1103120-LF-TA	9	Dual#	12/25	4 - 16	95	2900	1.35" x 1.72"	3.95	3.59	3.29
2173870	ValuePro	20S1120LF-LA	5	Single	12/25	9 - 15	75	400	1.32"L x .67"W x .61"D	1.95	1.75	1.49
32602	ValuePro	11S3240-R	9	Single	24/15	1 - 27	95	2900	1.4" x 1.7"	2.95	2.59	2.39
76021	ValuePro	7S3240-LA	9	Single	24/20	1.5 - 28	95	3200	1.0" x 1.1"	3.95	3.59	3.29
123538	ValuePro	11D3240	9	Dual#	24/20	4 - 28	80	2900	1.4" x 1.7"	3.49	3.15	2.79
2192499	Arndt	MBUZ-24VDC	12	Single	24/30	15 - 27	75	400	.90"L x .66"W x .57"H	1.95	1.75	1.49

† Requires driver circuit

# Continuous or fast pulse

\* PCB terminals



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## Piezo Transducers (Speakers)

\* Web Code: JPT

Part No.	Manufacturer	Product No.	Fig.	Rated Voltage	Max. Current	Res Frequency	Sound (dB)	Dimensions (H" x Dia.)	Pricing		
									1	10	100
1956784	Velleman	TV4	1	1.5Vp-p	1.5mA	4kHz	75	0.01 x 1.97	\$2.95	\$2.59	\$2.29
1956776	Velleman	TV1	2	1.5Vp-p	1.5mA	4kHz	85	0.24 x 1.18	2.49	2.25	1.95
1874543	Murata	PKM13EPYH4002-B0	4	3Vp-p	1.5mA	4kHz	70	0.27 x 0.50	.99	.89	.75
2207081	ValuePro	AZ-3040E-W-LF	2	3Vp-p	5mA	4kHz	85	0.22 x 1.18	1.49	1.25	1.09
2098523	Kobitone	PB140-ROX	4	5Vp-p	5mA	4kHz	80	0.27 x 0.54	1.25	1.09	.99
2210968	Panasonic	EAF-12RT04CC	4	5Vp-p	2mA	2.04kHz	85	0.33 x 0.47	.99	.89	.79
2099702	Kobitone	256-PB315	6	10Vp-p	7mA	4kHz	82	0.30 x 0.67	.59	.55	.49
2098566	Kobitone	AZ-3025E-W-LF	2	10Vp-p	9mA	2.5kHz	86	0.37 x 1.18	1.25	1.09	.99
336276	ValuePro	PT-1250W	3	12Vp-p	2mA	4kHz	75	0.17 x 0.53	.99	.89	.75
336314	ValuePro	KWT2340F12L-2ER	2	12Vp-p	3mA	4kHz	80	0.18 x 0.94	1.49	1.25	1.09
2077280	Panasonic	24C411	4	15Vp-p	2mA	4kHz	85	0.24 x 0.94	.99	.89	.75
2151216	Arndt	EAT-17	5	20Vp-p	1mA	3.8kHz	80	0.27 x 0.55	.75	.65	.55
2173896	ValuePro	55PZ30250LF-LA	2	30Vp-p	1.5mA	2.5kHz	80	0.22 x 1.18	.95	.85	.75
2173888	ValuePro	55PZ30400ULF-LA	2	30Vp-p	1.5mA	4kHz	85	0.22 x 1.18	.55	.45	.35



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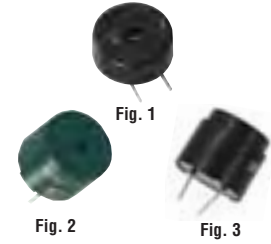
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## Magnetic Transducers (Buzzers)

• Applied voltage: 1/2 duty, square wave

\* Web Code: JMT

Part No.	Manufacturer	Product No.	Fig.	Oper. Volt. (V/mA)	Volt. Range	Frequency (Hz)	Impedance (Ω)	Sound (dB)	Dimensions (H x Dia.)	Pricing		
										1	10	100
2159701	Arndt	CB-12HN	1	2.4/100	1.1 - 3	2700	10	85	.20" x .47"	\$ .45	\$ .29	\$ .25
138740	ValuePro	DBX05-PN	2	5/40	3 - 8	2400	80	85	.35" x .46"	1.49	1.25	1.09
673871	ValuePro	PRT-1205	2	5/40	3 - 8	2400	47	90	.35" x .46"	.89	.75	.65
2129748	Kobitone	256-MB2161	2	12/40	6 - 18	2048	115	85	.55" x .63"	.45	.29	.25
673774	ValuePro	SBT-1612	3	12/40	6 - 18	2048	200	85	.53" x .62"	.45	.35	.29



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## Mechanical/Electromechanical Buzzers

\* Web Code: MEB

Part No.	Manufacturer	Cross Ref. No.	Fig.	Oper. Volt. (V/mA)	Voltage Range	Frequency (Hz)	Sound (dB)	Dimensions	Pricing		
									1	10	100
76065	ValuePro	TDB05-PN	1	5/30	4 - 7	2300	85	.35"H x .46"Dia.	\$3.95	\$3.59	\$2.95
24872	ValuePro	63S109LA	2	9/30	6 - 12	400	85	1.3"L x 0.7"W x 0.6"H	1.75	1.49	1.25
140695	ValuePro	63S1120-LA	2	12/25	9 - 15	400	75	1.3"L x 0.7"W x 0.6"H	1.95	1.75	1.49
2192472	Arndt	MBUZ-120VAC	3	120/180	0 - 120	50-60	75	1.3"L x 0.9"W x 0.7"H	1.49	1.35	1.15



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## Piezo Sirens - High Decibel Output

\* Web Code: PSS

Part No.	Manufacturer	Product No.	Fig.	Oper. Volt. (V/mA)	Voltage Range	Frequency (Hz)	Sound (dB)	Dimensions	Pricing		
									1	10	100
2203063	Intervox	BPS8432L-12-C		12/85	6 - 15	2500 - 2800	105	3.3"L x 2.2"W x 1.3"H	\$7.95	\$7.19	\$6.49
207993	ValuePro	SL15R3120LA		12/250	6 - 16	3500	105	2.3"L x 1.8"W x 1.6"H	4.95	4.49	3.95
2131223	Velleman	SV/PS1		12/200	6 - 15	3500	107	2.2"L x 1.7"W x 1.7"H	5.95	5.39	4.79
2123733	Velleman	SV/PS5		12/1300	6 - 12	4000	125	4.3"Dia. x 3.9"L	9.95	8.95	7.95



\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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JAMCO ValuePro

## Square Flat Element Speakers

- Excellent for alarms or other voice uses
- Stainless steel diaphragm

\* Web Code: XAE

Part No.	Cross Ref.	Dimensions (Dia. " x D")	Input		Impedance (Ω)	Output SPL (dB)	Frequency Range (Hz)	Element Size (Dia. " x H")	Pricing		
			Nom (W)	Max (W)					1	10	100
34025	GSP02-R	1.2 x 0.2	0.4	0.8	8	70	1300 - 8000	1.2 x 0.1	\$2.49	\$2.25	\$1.95
76030	AZ40S	1.6 x 0.2	0.4	0.8	8	70	600 - 6000	1.6 x 0.1	1.95	1.75	1.49
673766	AZ50S	1.9 x 0.2	0.4	0.8	4	70	500 - 6000	1.9 x 0.1	2.95	2.59	2.29



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## Alnico Round, Square and Rectangular Speakers

\* Web Code: EAL

Part No.	Product No.	Fig.	Dimensions (Dia. " x D")	Input		Impedance (Ω)	Output SPL (dB)	Frequency Range (Hz)	Magnet Size (Dia. " x H")	Pricing		
				Nom (W)	Max (W)					1	10	100
111588	B0102	1	1.7 x 0.6	0.1	0.3	8	83	500 - 5500	0.5 x 0.4	\$2.95	\$2.59	\$2.29
2192552	5150RA-45-BXC	2	1.57 x 0.62	0.1	0.3	8	84	600 - 5600	0.7 x 0.4	1.49	1.25	1.09
88411	A0200	2	2.0 x 0.8	0.2	0.4	8	87	430 - 4500	0.5 x 0.4	2.75	2.49	2.25
2146388	TR057A-R	2	2.25 x 0.77	0.25	0.5	8	84	300 - 14000	0.5 x 0.4	3.49	2.95	2.59
307820	UF1082	5	1.73 x 0.275	0.5	1.0	8	80	200 - 6000	0.8 x 0.1	.95	.85	.75
1950972	I-826-219#	4	8.2Lx2.2Wx2.0H	1.0	4.5	8	85	30 - 20000	1.5 x 2.8	2.95	2.59	2.29
135812	A1527C02	3	1.6Lx2.8Wx1.2H	2.0	5.0	8	82	450 - 20000	0.5 x 0.5	4.25	3.85	3.49
2115442	K7048202	6	1.6Lx2.8Wx0.9H	3.0	3.0	8	82	310 - 12000	0.87 x 0.29	3.95	3.59	3.25
2217828	HKS-16-0.5	2	3.0 x 0.9	0.5	1.0	16	89	500 - 5000	1.2 x 0.4	1.25	1.09	.99
1954842	609-0033†	3	3.6Lx2.0Wx1.5H	1.0	3.0	16	89	200 - 3000	0.9 x 0.7	.95	.85	.65
2217836	1.009.841-C†	2	3.0 x 1.2	3.0	4.0	16	89	400 - 10000	1.8 x 0.5	1.49	1.25	1.09

# Sony LCD plasma replacement speaker (actual size: 6"H x 2.15"W x 1.94"D) † With lead wires

- For computer case use
- Paper diaphragm
- Large magnet
- Wide frequency response
- Pre-tinned solder lugs

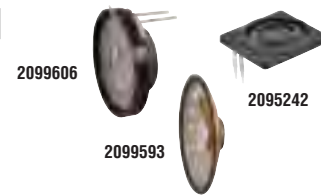


JAMCO ValuePro

## Micro Round and Rectangular Speakers

\* Web Code: TBX

Part No.	Product No.	Dimensions (Dia. " x D")	Input (W)		Impedance (Ω)	Output SPL (dB)	Frequency Range (Hz)	Magnet Size (Dia. " x H")	Pricing		
			Nom.	Max.					1	10	100
2099606	SP801W	1.05 x 0.35	0.1	0.2	8	78	320 - 7500	0.67 x 0.17	\$1.49	\$1.25	\$1.09
2158215	MR-01W	2.25 x 0.43	0.1	0.2	8	84	460 - 7000	0.75 x 0.18	.85	.75	.65
2095242	35CS088-M75NA	1.4Lx1.3Wx0.2H	0.2	0.3	8	80	550 - 6700	0.44 x 0.10	.95	.85	.75
2099593	SP452W	2.25 x 0.5	0.1	0.2	45	86	150 - 9000	0.68 x 0.17	1.09	.99	.85



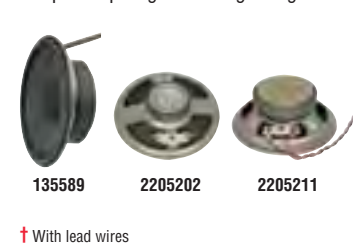
JAMCO ValuePro

## Round Ferrite Speakers

\* Web Code: TAT

Part No.	Manufacturer	Product No.	Dimensions (Dia. " x D")	Input (W)		Impedance (Ω)	Output SPL (dB)	Frequency Range (Hz)	Magnet Size (Dia. " x H")	Pricing		
				Nom.	Max.					1	10	100
2205561	Panasonic	45P30S	1.8 x 0.7	0.1	0.1	8	93	530 - 3000	1.3 x 0.4	\$1.25	\$1.09	\$0.99
135589	ValuePro	FE200	2.0 x 0.7	0.2	0.4	8	83	420 - 5000	1.3 x 0.4	1.95	1.75	1.49
10840	ValuePro	FE201	2.2 x 0.7	0.2	0.4	8	88	400 - 4500	1.3 x 0.4	2.49	2.25	1.95
320362	ValuePro	TR-057F-R	2.0 x 0.7	0.25	0.5	8	86	900 - 9000	1.3 x 0.25	2.49	2.25	1.95
2208825	Arndt	EAS-6P60SD	2.2 x 1.3	0.4	0.8	8	85	100 - 5000	0.7 x 0.6	2.49	2.15	1.95
2190653	ValuePro	GF0502BX	2.0 x 1.0	2.0	5.0	8	88	100 - 17000	1.5 x 0.5	3.59	3.25	2.95
2158223	Regal	RF-10W	4.1 x 2.3	10	20	8	90	1000 - 15000	2.8 x 0.8	4.95	4.49	3.95
2205202	Arndt	HKS-16-5	3.0 x 0.7	0.5	2.0	16	92	200 - 3000	0.8 x 0.5	1.49	1.25	1.09
2205211	Regal	1-009-841-C	3.0 x 0.7	3.0	5.0	16	82	500 - 10000	0.8 x 0.5	1.25	1.09	.99
2188916	Sharp	80P-G3YB	3.0 x 0.7	0.5	2.0	32	92	200 - 3000	0.8 x 0.5	1.49	1.25	1.09
2099585	ValuePro	RF-608E	2.2 x 0.7	0.1	0.2	48	86	300 - 3000	1.3 x 0.4	.75	.65	.55

- Pre-tinned speaker lugs
- Anodized metal surfaces
- Braided copper voice coil leads
- Paper diaphragm
- Large magnet



JAMCO ValuePro

## Square Ferrite Speakers

\* Web Code: EDT

- Pre-tinned speaker lugs
- Anodized metal surfaces
- Braided copper voice coil leads
- Paper diaphragm
- Large magnet

Part No.	Manufacturer	Cross Ref.	Dimensions (Dia. " x D")	Input (W)		Impedance (Ω)	Output SPL (dB)	Frequency Range (Hz)	Magnet Size (Dia. " x H")	Pricing		
				Nom.	Max.					1	10	100
99996	ValuePro	FEB204	2.6 x 0.9	3.0	4.0	4	95	300 - 14000	1.8 x 0.5	\$3.49	\$2.95	\$2.59
135694	ValuePro	FEB200	2.0 x 0.7	0.2	0.3	8	82	500 - 6000	1.3 x 0.5	2.25	1.95	1.75
2179673	Arndt	27JRG	4.0 x 1.4	3.0	3.0	8	85	800 - 10000	1.8 x 0.5	2.25	1.95	1.75
2179657	Arndt	1422	2.6 x 0.7	0.4	0.8	8	85	500 - 8000	1.2 x 0.5	2.59	2.29	1.95
2167285	Arndt	1-529-483-11	3.0 x 2.25	4.0	5.0	8	85.7	180 - 10000	2.5 x 1.0	2.95	2.59	2.29
1954818	ValuePro	TQ-100F-R	4.0 x 1.4	5.0	5.0	8	97	800 - 10000	1.8 x 0.5	3.49	2.95	2.59
31959	ValuePro	FEB216	2.6 x 0.8	0.2	0.4	16	85	330 - 8000	1.3 x 0.5	2.95	2.59	2.29
2205464	Regal	16-3-3	3.0 x 1.0	1.0	1.0	16	85	500 - 10000	0.86 x 0.40	1.75	1.49	1.25
2179681	Arndt	27JRG-1624	4.0 x 1.4	2.0	2.0	16	85	800 - 11000	1.8 x 0.5	1.49	1.25	1.09



## 30mm PCB Mountable Speakers

- Ideal for PC board mounting
- Mylar diaphragm
- Power (nominal/max.): 0.15W/0.2W
- Solder leads

135722

Part No.	Size (H x Dia.)	Impedance	Pin Spacing	Freq. Range	SPL (dB)	1	10	100
2095234	0.57" x 1.24	8Ω	0.69"	700-4kHz	82	\$1.09	\$0.99	\$0.89
135722	0.50" x 1.17"	8Ω	0.59"	700-5kHz	82	1.49	1.25	.99
2099817	0.47" x 1.16"	100Ω	0.58"	1.1kHz ±20%	95	.55	.45	.35



## Thin Flexible Speakers with Amp

- 3V-5V operating voltage, 2 watt amp output
- Good for wearable applications
- Max. current draw: 125mA

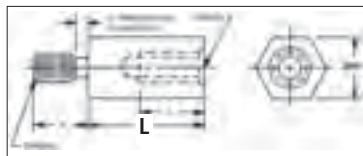
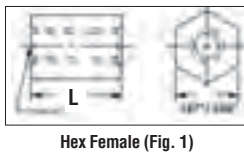
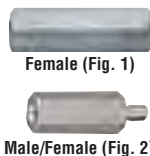
Part No.	Frequency Range	Mean SPL	Size (in.)	1	5
22083315	650Hz - 18kHz	82dB max.	5.1 x 7.1 x 0.08	\$39.95	\$36.95
2208315	700Hz - 25kHz	72dB max.	2.7 x 5.4 x 0.08	27.95	25.95





## .187"/.250" Aluminum, Brass & Steel Hex Threaded Standoffs

- Finish:
- 1 Aluminum iridite (clear)
- 2 Brass bright tin plate
- 3 Chrome
- 4 Nickel



\* Order in multiples of 10

### Hex Male/Female Standoffs

.187" Hex 4-40 (Fig. 2) (A: .250"; B: .187")

Part No.	*Mfr.	Mfr. Part No.	Length of L	Pricing		
				1	10	100
393458	RAF	4501-440AL7 <sup>1</sup>	.250"	\$.45	\$.39	\$.35
393466	RAF	4503-440AL7 <sup>1</sup>	.375"	.45	.39	.35
393474	RAF	4505-440AL7 <sup>1</sup>	.500"	.49	.45	.39
2125202	RAF	4508-440BR7 <sup>2</sup>	.709"	*	.15	.12
393491	RAF	4509-440AL7 <sup>1</sup>	.750"	.49	.45	.39
393503	RAF	4513-440AL7 <sup>1</sup>	1.00"	.49	.45	.39

.250" Hex 4-40 Thread (Fig. 2) (A: .250"; B: .187")

Part No.	*Mfr.	Mfr. Part No.	Length of L	Pricing		
				1	10	100
77586	RAF	4530-440AL7 <sup>1</sup>	.250"	\$.35	\$.29	\$.25
77594	RAF	4532-440AL7 <sup>1</sup>	.375"	.39	.35	.29
111756	RAF	4534-440AL7 <sup>1</sup>	.500"	.45	.39	.29
139214	RAF	4536-440AL7 <sup>1</sup>	.625"	.45	.39	.29
139222	RAF	4538-440AL7 <sup>1</sup>	.750"	.49	.45	.35
139231	RAF	4542-440AL7 <sup>1</sup>	1.00"	.49	.45	.35
128566	RAF	4546-440AL7 <sup>1</sup>	1.25"	.59	.49	.39
166546	RAF	4550-440AL7 <sup>1</sup>	1.50"	.69	.59	.49



## SAE Hardware

- Zinc-plated steel

### Slotted Pan Head Machine Screws

Part No.	Thread	Screw Size	Length (in.)	10 piece multiples		
				10	100	1000
38173	2-56	2	.250	\$.099	\$.079	\$.059
2094338	2-56	2	.500	.099	.079	.059
40952	4-40	4	.250	.059	.025	.018
40970	4-40	4	.375	.079	.069	.059
106810	4-40	4	.500	.079	.069	.059
106543	6-32	6	.250	.065	.029	.022
42446	6-32	6	.375	.079	.069	.059
42438	6-32	6	.500	.065	.029	.022
106817	8-32	8	.375	.069	.035	.025
106797	8-32	8	.500	.079	.039	.029

### Flat Washers

Part No.	Screw Size	Outer Dia. (in.)	10 piece multiples		
			10	100	1000
2094725	2	.188	\$.079	\$.059	\$.039
211131	4	.237	.049	.029	.015
106826	4	.281	.065	.035	.019
106833	6	.373	.079	.059	.039
106842	8	.375	.079	.065	.055
2159971	3/8	.625	.19	.17	.15
2186187	7/16	.650	.35	.29	.25

### Split Lock Washers

Part No.	Screw Size	Outer Dia. (in.)	10 piece multiples		
			10	100	1000
106789	2	.172	\$.079	\$.059	\$.039
40977	4	.242	.079	.059	.039
42463	6	.240	.059	.022	.017
51609	8	.279	.069	.025	.019

\* ABT = Abbatron | RAF = RAF Elect. Hardware | JVP = ValuePro

### Hex Female Standoffs

.187" Hex 4-40 Thread (Fig. 1)

Part No.	*Mfr.	Product No.	Length of L	Pricing		
				1	10	100
175636	JVP	2052-440S0 <sup>3</sup>	.187"	\$.25	\$.19	\$.15
133613	RAF	2053-440AL7 <sup>1</sup>	.250"	.29	.25	.19
102796	JVP	14-552 <sup>2</sup>	.250"	.29	.25	.19
133640	RAF	2057-440AL7 <sup>1</sup>	.500"	.39	.35	.25
133648	RAF	2059-440AL7 <sup>1</sup>	.625"	.39	.35	.25
133656	RAF	2061-440AL7 <sup>1</sup>	.750"	.45	.39	.29
139185	RAF	2065-440AL7 <sup>1</sup>	1.00"	.49	.45	.35

.250" Hex 6-32 Thread (Fig. 2) (A: .375"; B: .250")

Part No.	*Mfr.	Product No.	Length of L	Pricing		
				1	10	100
133542	RAF	4530-632AL7 <sup>1</sup>	.250"	\$.45	\$.39	\$.25
565167	ABT	8249 <sup>4</sup>	.375"	.59	.49	.39
133568	RAF	4532-632AL7 <sup>1</sup>	.375"	.45	.39	.25
77607	RAF	4534-632AL7 <sup>1</sup>	.500"	.45	.39	.25
77623	RAF	4538-632AL7 <sup>1</sup>	.750"	.49	.45	.35
77650	RAF	4542-632AL7 <sup>1</sup>	1.00"	.49	.45	.35

### Phillips Pan Head Machine Screws

Part No.	Thread	Screw Size	Length (in.)	10 piece multiples		
				10	100	1000
2094354	2-56	2	.250	\$.065	\$.029	\$.022
2094371	2-56	2	.500	.065	.029	.022
2185871	4-40	4	.187	.049	.019	.015
2094389	4-40	4	.250	.059	.025	.02
2185889	4-40	4	.312	.049	.019	.015
2094397	4-40	4	.375	.059	.025	.02
2094400	4-40	4	.500	.059	.025	.02
2170231	4-40	4	1.00	.079	.069	.059
2185897	6-32	6	.187	.059	.022	.017
2094418	6-32	6	.250	.079	.069	.059
2094426	6-32	6	.375	.059	.022	.017
2094434	6-32	6	.500	.079	.069	.059
2185900	6-32	6	.625	.045	.019	.013
2094442	8-32	8	.250	.059	.022	.017
2094451	8-32	8	.375	.079	.069	.059

### Hex Nuts

Part No.	Screw/Thread	Thick (in.)	Hex (in.)	10 piece multiples		
				10	100	1000
38165	2-56	.063	.185	\$.059	\$.029	\$.019
2197450	2-56*	.064	.183	.045	.019	.015
40943	4-40	.090	.243	.059	.029	.019
42420	6-32	.112	.306	.059	.029	.019
51553	8-32	.120	.335	.059	.029	.019
2185782	3/8-32	.093	.495	.15	.12	.11
2203119	3/8-32	.085	.435	.19	.12	.10
2182581	3/8-32†	.092	.525	.39	.35	.29
2192501	7/16-32	.095	.562	.59	.45	.39
2086282	1/2-28	.095	.562	.29	.25	.22
2203266	9/16-27	.095	.687	.69	.59	.55
2203231	1-27	.133	1.125	.75	.65	.59

\* Stainless steel † Brass plate

\* Web Code: TBQ

.187" Hex 6-32 Thread (Fig. 2) (A: .375"; B: .250")

Part No.	*Mfr.	Mfr. Part No.	Length of L	Pricing		
				1	10	100
393546	RAF	4503-632AL7 <sup>1</sup>	.375"	\$.45	\$.39	\$.35
393554	RAF	4505-632AL7 <sup>1</sup>	.500"	.45	.39	.35
393588	RAF	4513-632AL7 <sup>1</sup>	1.00"	.49	.45	.39

.250" Hex 4-40 Thread (Fig. 1)

Part No.	*Mfr.	Mfr. Part No.	Length of L	Pricing		
				1	10	100
139193	RAF	2100-440A7 <sup>1</sup>	.250"	\$.29	\$.25	\$.19
77501	RAF	2102-440AL7 <sup>1</sup>	.375"	.35	.29	.25
134763	RAF	2103-440AL7 <sup>1</sup>	.437"	.39	.35	.29
108371	RAF	2104-440AL7 <sup>1</sup>	.500"	.39	.35	.29
77519	RAF	2106-440AL7 <sup>1</sup>	.625"	.39	.35	.29
133605	RAF	2108-440AL7 <sup>1</sup>	.750"	.39	.35	.29
139205	RAF	2112-440A7 <sup>1</sup>	1.00"	.45	.39	.35

.250" Hex 6-32 Thread (Fig. 1)

Part No.	*Mfr.	Mfr. Part No.	Length of L	Pricing		
				1	10	100
77535	RAF	2100-632AL7 <sup>1</sup>	.250"	\$.29	\$.25	\$.19
133591	RAF	2102-632A7 <sup>1</sup>	.375"	.29	.25	.19
77543	RAF	2104-632AL7 <sup>1</sup>	.500"	.35	.29	.25
77552	RAF	2106-632AL7 <sup>1</sup>	.625"	.45	.39	.25
77570	RAF	2108-632AL7 <sup>1</sup>	.750"	.45	.39	.25
77578	RAF	2112-632AL7 <sup>1</sup>	1.00"	.49	.45	.29
143407	RAF	2120-632A7 <sup>1</sup>	1.50"	.59	.55	.49
143441	RAF	2124-632AL7 <sup>1</sup>	1.75"	.79	.69	.59

\* RAF Electronic Hardware — Web Code RHS

\* Web Code: JNN

### Internal Tooth Lock Washers

Part No.	Screw Size	Outer Dia. (in.)	10 piece multiples		
			10	100	1000
2094733	2	.200	\$.079	\$.059	\$.039
106850	4	.258	.059	.022	.017
106868	6	.277	.079	.059	.039
106877	8	.323	.079	.059	.039
2089803	1/2	.509	.29	.25	.19
527646	3/8	.620	.29	.25	.19
2159980	3/8	.673	.17	.14	.11
2203274	9/16	.772	.19	.15	.13
2203240	1.0	1.390	.29	.25	.22



## Round Magnets

Perfect for Science, Fridge or Projects

2111425: Nickel-plated with matte finish and magnetized

2181327: Barrel-shaped, neodymium rare earth magnets with nickel plating for durability, 12mm dia. (6-pack)

109031: Dark colored, ceramic donut with 0.375" Dia. hole

2181319: Barrel-shaped, neodymium rare earth magnets with nickel plating for durability, 8mm dia. (10-pack)

2181335: Barrel-shaped, neodymium rare earth magnets with nickel plating for durability, 10mm dia. (10-pack)

Part No.	Size (Dia. x Thick)	10 piece multiples		
		1	10	100
2111425	.375" x .125" .....	\$1.75	\$1.49	\$1.25
2181327	.480" x .125" .....	9.95	8.95	7.95
109031	1.23" x .190" .....	.79	.69	.59
2181319	0.31" x .120" .....	6.95	5.95	4.95
2181335	0.41" x .203" .....	16.95	15.95	14.95



2181319

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# Switch, Connector, Potentiometer Panel Mounting Hardware & Rubber Feet

## SAE and Metric Panel Mounting Hardware

Hardware sold separately

\* Web Code: JNN

2186030

## Prepackaged Panel Mounting Hardware Kits

Hardware sold in kits

\* Web Code: PAM

2182549

SAE/Metric Thread	Hex or Knurl Nut Part No.	Flat Washer Part No.	Int. Tooth Washer Part No.	Flat Keyway Washer Part No.	Part No.	Mfr. Part No.	Description	Pricing		
								1	10	100
10-32 UNS	2183314*		2182531*		2183322	10-32HDWR	(2) nuts (1) washer	\$ .69	\$ .59	\$ .49
10-48 UNS	578110*		2182531*	2182590*✓	2182549	10-48HDWR	(2) nuts (2) washers	.89	.79	.69
1/4-32 UNS	2183331*	2183381	578339*		2183349	1/4-32HDWR	(2) nuts (1) washer	.69	.59	.49
1/4-40 UNS	578321*	2183381	578339*	578347*✓	2182477	1/4-40HDWR	(2) nuts (2) washers	.89	.79	.69
1/4-40 UNS	578321*	2183381	578339*	2182493*#	2182805	1/4-40HDWR (D)	(2) nuts (2) washers	.89	.79	.69
5/16-32 NEF	2182784*	2182792*	2201527		281852	5/16-32HDWR	(2) nuts (1) washer	.69	.59	.49
3/8-32 NEF	2182514*	2183293	2185791 (small)*		2186030	3/8-32HDWR	(2) nuts (1) washer (small)	.69	.59	.49
3/8-32 NEF	2182514*	2183293	2159980 (large)*		2182611	3/8-32HDWR	(2) nuts (1) washer (large)	.69	.59	.49
7/16-32 UNS	See pg 77 for Nut (P/N 2192501) and Flat Washer (P/N 2186187)				2186208	7/16-32HDWR	(2) nuts (1) washer	1.49	1.25	1.09
15/32-32 NS	578371*		2182557*	578380*	2182506	15/32-32HDWR	(2) nuts (2) washers	.89	.79	.69
1/2-28 NEF	740914*		527646*		2186021	1/2-28HDWR	(2) nuts (1) washer	.79	.69	.59
M6 x 0.50	2183226*	2183234*			2183218	M6HDWR	(2) nuts (1) washer	.69	.59	.49
M7 x 0.75	2182629*	2182637*	2183411†		2182688	M7HDWR	(2) nuts (1) washer	.69	.59	.49
M8 x 0.75	2182573*	2182565*			2182602	M8HDWR	(2) nuts (1) washer	.79	.69	.59
M9 x 0.75	2182696*	2182717*			2182709	M9HDWR	(2) nuts (1) washer	.69	.59	.49
M10 x 0.75	2159947*	2183251*			2183242	M10HDWR	(2) nuts (1) washer	.69	.59	.49
M12 x 0.75	2182725*	2183306	2182741*	2182750*	2182733	M12HDWR	(2) nuts (2) washers	.89	.79	.69
M13 x 0.75	2185686				—					
Pricing (10 pcs. min.)	10 100 500	10 100 500	10 100 500	10 100 500	The parts indicated with "*" on the left are included in the kits on the right.					
	\$ .19 \$ .17 \$ .15	\$ .17 \$ .14 \$ .11	\$ .17 \$ .14 \$ .11	\$ .17 \$ .14 \$ .11	M14 x P1.0 (P/N 2182961) hex nuts available online, visit <a href="http://www.Jameco.com">www.Jameco.com</a>					

# D style (ID) keyway ✓ O style keyway † Lock washer (option)

Fig. 1

Fig. 2

## Right Angle (L) Mounting Brackets

Jameco Part No.	Keystone Part No.	Fig.	Dimensions (in.)								Material	Plating	Pricing		
			A	B	C	D	E	F	G Dia.	H Dia.			1	10	100
<b>Non-Threaded Clear Hole Universal Mounting Brackets</b>															
2203135	613	2	.390	.453	.375	.234	.299	.032	.128	.147	Brass	Nickel	\$ .39	\$ .35	\$ .29
2203143	615	1	.420	.343	.281	.203	.203	.032	.125	.144	Brass	Tin	.25	.22	.19
2203151	4335	1	.562	.562	.500	.412	.411	.062	.120	.120	Steel	Nickel	.45	.39	.29
2203160	618	2	.628	.628	.375	.378	.378	.050	.169	.169	Brass	Nickel	.59	.49	.39
<b>Threaded Hole Universal Mounting Brackets</b>															
2203178	612	1	.343	.375	.250	.203	.250	.062	4-40	.130	Steel	Zinc	\$ .29	\$ .25	\$ .19
1581530	621	1	.343	.375	.250	.203	.250	.062	4-40	4-40	Steel	Zinc	.35	.29	.25
2203186	616	1	.453	.312	.250	.265	.187	.047	4-40	.136	Brass	Tin	.49	.45	.35
2203194	634	1	.375	.375	.281	.218	.218	.032	6-32	.140	Brass	Nickel	.49	.45	.39
2203207	614	2	.420	.343	.312	.250	.197	.032	6-32	.144	Brass	Tin	.29	.25	.19
2203215	4334	1	.562	.562	.500	.412	.412	.062	6-32	6-32	Steel	Nickel	.39	.35	.29
2203223	617	2	.578	.500	.500	.328	.299	.062	6-32	.165	Steel	Tin	.49	.45	.35

## Thumbscrew

- 6-32 thread • Aluminum
- Thread length: 3/8" • Length: 9/16"

Part No.	Mfr. Part No.	1	10	100
394063	7125-A	\$ .75	\$ .65	\$ .55

## PCB & Fan Mounting Hardware



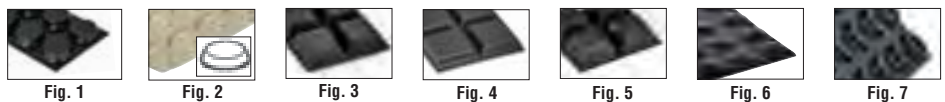
- Snap "on"
- Nylon
- Rubber # Chrome
- † Black anodize

Part No.	Cross Ref.	Size (in.)	Holes	1	10	100
1581572	904	Terminal stud #6	—	\$ .19	\$ .15	
28337	CS1016	1.2L x 0.6W	.2"	.15	.12	
129252	PCST2	0.9L x 0.4Dia.	.2"/.3"	.15	.12	
2133755	PCST3C	0.7L x 0.5W	.1"/.2"	.05	.04	
2133763	PCST4C	0.8L x 0.5W	.1"/.3"	.07	.05	
156831	CS-10	0.68L x 0.32Dia.	.14"	.15	.12	
2100064	SR1036*	1.5L x 0.38Lip	.167"	.05	.03	
2188481	8825-S*	0.4L x 0.2W	—	.07	.05	
2188490	8825†	0.4L x 0.2W	—	.12	.09	

## Adhesive Rubber Feet

\* Web Code: FAV

These durable, pressure sensitive, adhesive-backed urethane bumpers adhere quickly, resist marring and staining on surfaces and give excellent skid and abrasion resistance. The sticky bumpers can be applied to any object that needs protection or stabilization. They will reduce vibration and dampen noise when opening or closing objects, as well as hold objects in place. Preserve and extend the life of a product with this selection of rubber feet.



Part No.	Cross Ref. No.	Type	Fig.	Pack	Size (W" x H")	1	10	50
2119718	BS-34-100BL	Black cylindrical	1	100	.38 x .13	\$3.95	\$3.59	\$3.29
142658	SJ5012BLKC	Black cylindrical	1	100	.50 x .14	6.95	6.25	5.59
2202141	BS35-BLK	Black cylindrical	1	100	.37 x .19	6.95	5.95	5.49
651911	SJ5312CLR56	Clear cylindrical	2	56	.50 x .14	5.95	5.39	4.79
126981	SJ5023BLK4	Black square tapered	3	4	.81 x .30	1.09	.99	.85
142666	SJ5023BLKC	Black square tapered	3	100	.81 x .30	15.95	14.49	12.95
142771	SJ5008BLKC	Black square tapered	4	100	.50 x .12	7.95	6.95	6.25
142682	SJ5018BLKC	Black square tapered	5	100	.50 x .23	10.95	9.95	8.95
2118871	BS-7-100BL	Black hemisphere	6	100	.34 x .09	5.95	5.39	4.79
2185539	BS-18-CLEAR100	Clear recessed	7	100	.50 x .14	6.95	6.25	5.59
2185571	BS-44-BLACK100	Black cylindrical	1	100	.75 x .16	16.95	14.95	13.49
2185598	BS-44-CLEAR100	Clear cylindrical	1	100	.75 x .16	16.95	14.95	13.49
2081385	GB201	100 assorted sizes & types of bumpers & rubber feet				8.95	7.95	6.95

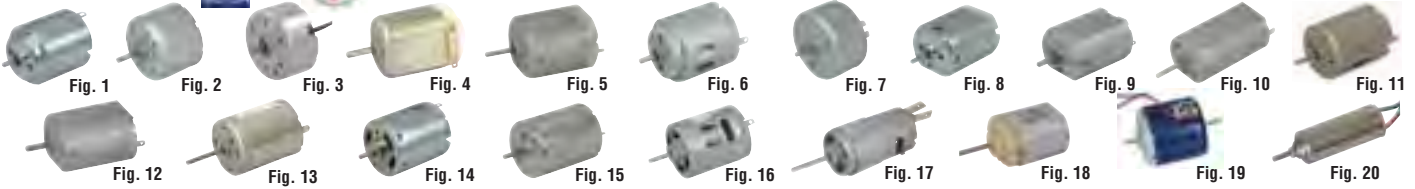




## 1.3VDC – 24VDC Motors



\* Web Code: FBN



Part No.	Manufacturer	Product No.	Fig.	Nominal Voltage (VDC)	Voltage Range (VDC)	@ Maximum Efficiency			Efficiency	Terminal Type	Shaft Dia. (in.)	Shaft Length (in.)	Size Dia. x Depth (in.)	Pricing		
						Speed (RPM)	Current (Amps)	Torque (g-cm)						1	10	100
2209043	Jinlong	Z4SL2A0000009*	20	1.3	1-1.6	21000	0.05	0.3	50	1" wires	0.07	0.10	0.16 x 0.40	\$1.95	\$1.75	\$1.49
231917	ReliaPro	FE-260-2670	1	1.5	1.5-3	3700	0.66	10.5	42.9	0.12"/solder	0.078	0.314	0.937 x 1.063	2.95	2.75	2.49
2192755	Mabuchi Motor	FA130RA#	18	1.5	1.5-3	6990	0.66	6.0	50	0.07"/solder	0.078	0.30	0.787 x 1.00	3.49	2.95	2.75
2209094	Mabuchi Motor	MABUCHI-55	19	1.5	1.5-12	1350	0.32	—	50	5" wires	0.09	0.35/0.25	1.35 x 1.38	2.95	2.75	2.49
238465	ReliaPro	RF-310TA-11400 (CW)	2	2.5	1-6	2190	0.06	3.3	75	0.05"/solder	0.078	0.70	0.962 x 0.712	2.95	2.75	2.49
2158442	Nichibo	RF-500TB-18280-R	2	3	1-3	2104	0.17	13.4	60	0.07"/solder	0.078	0.34	1.25 x 0.75	2.95	2.75	2.49
238458	ReliaPro	RF-300CA-11400 (CW)	3	3	1-6	2400	0.065	4.3	56.4	3" wires	0.078	0.19	0.96 x 0.491	3.49	2.95	2.75
154915	Jency Motor	ST130-12240-38	4	3	1.5-3	3588	0.17	7.4	55	0.09"/solder	0.08	0.37	0.79 x 1.13	2.49	2.25	1.95
1939589	ReliaPro	FF-130RH-15210	5	3	1-4	4280	0.17	5.8	50	0.08"/solder	0.08	0.24/0.21	0.79 x 0.98	2.95	2.75	2.49
1951449	ReliaPro	QJT-260-18130	1	3	1.5-4.5	4780	0.46	10	40	0.12"/solder	0.078	0.314	0.944 x 1.071	2.95	2.75	2.49
231925	ReliaPro	FE-260-2295	1	3	1.5-4.5	6850	0.63	14	53.9	0.12"/solder	0.078	0.314	0.937 x 1.063	2.75	2.49	2.25
154923	Jency Motor	ST-130-22770	4	3	1.5-3	13200	0.95	10.3	40	0.09"/solder	0.08	0.37	0.79 x 1.13	2.49	2.25	1.95
211246	ReliaPro	RC-260RA-2670	6	4.5	3-4.5	15290	1.43	21.8	53	0.11"/solder	0.08	0.28	0.93 x 1.06	2.75	2.49	2.25
2173044	Nichibo	RF-500TB-12560	7	6	6-12	2100	0.08	11	58	0.08"/solder	0.078	0.342	1.259 x 0.767	3.95	3.49	2.95
231829	ReliaPro	PC-280-16210	8	6	3-12	4260	0.28	18	47.6	0.08"/solder	0.078	0.433	0.944 x 1.20	3.95	3.49	2.95
2209182	Mabuchi Motor	RF-370CA-22170	13	6	1-6	4600	0.62	40	60	0.08"/solder	0.079	0.34	0.755 x 1.21	3.49	2.95	2.75
2158434	Nichibo	RF370CH-22170-R	13	6	1-6	4787	0.45	34.28	63	0.15"/solder	0.078	0.19	0.96 x 1.20	2.25	1.95	1.75
231781	ReliaPro	PC-130F-12240	9	6	3-9	6800	0.25	7.0	33.4	0.08"/solder	0.078	0.377	0.803 x 0.984	3.95	3.49	2.95
232144	ReliaPro	FF-050S-11170	10	7	1.5-9	8500	0.17	7.0	51.3	0.08"/solder	0.059	0.433	0.61 x 1.059	3.49	2.95	2.75
177498	ReliaPro	RC280RA-2485	11	7.2	3-14	14260	1.18	33.3	57	0.11"/solder	0.08	0.43	0.95 x 1.20	2.95	2.75	2.49
174693	ReliaPro	21226-384221	13	12	9-14	3000	0.015	85.06	—	0.11"/solder	0.08	0.71	0.97 x 1.19	3.49	2.95	2.75
2209203	Nichibo	MC5BN-12200	14	12	2-20	3203	0.201	36.05	50.9	5" wires	0.09	1.00	1.09 x 1.29	4.95	4.49	3.95
2211101	Nichibo	RF370CH-15370-R	15	12	1.6-16	4378	0.19	31	62	0.15"/solder	0.08	0.42	0.995 x 1.25	1.95	1.75	1.49
2155153	Nichibo	PC260SB-10400-NR/38	5	12	1.5-15	4719	0.053	97.6	55	0.08"/solder	0.08	0.23	0.72 x 1.06	1.95	1.75	1.49
231732	ReliaPro	PC-130SF-09480	9	12	6-24	4800	0.11	12.3	49.6	0.08"/solder	0.078	0.377	0.803 x 0.984	3.95	3.49	2.95
238473	Mabuchi Motor	RF-370CA-15370	15	12	3-12	4840	0.17	187	75	0.08"/solder	0.078	0.346	0.96 x 1.213	3.49	2.95	2.75
206949	Nichibo	QJT360S14280	16	12	9-30	4930	0.35	44.5	52	0.11"/solder	0.09	0.45	1.09 x 1.30	3.49	2.95	2.75
2144673	Mabuchi	RS555PH-23300	14	12	12-30	5050	0.36	380.3	—	0.19"/quick conn.	0.125	0.50	1.44 x 2.625	3.95	3.49	2.95
2155250	Nichibo	MD3BN-14280-R51	16	12	6-18	5260	0.268	36.2	63	0.11"/solder	0.09	0.45	1.09 x 1.30	2.95	2.49	1.95
231896	ReliaPro	FE-260-08450	1	12	6-12	5560	0.11	10.3	46.6	0.12"/solder	0.078	0.314	0.937 x 1.063	3.49	2.95	2.75
2167681	Nichibo	DC-130SB-10410	18	12	6-12	5624	0.2	18.17	47	Plug-in	0.09	0.519	0.78 x 1.00	1.75	1.49	1.25
2217810	Nichibo	JD5B-2655W-R†	14	12	1-18	6468	0.93	122.8	74	0.11"/solder	0.09	0.33/0.22	1.18 x 1.83	3.95	3.49	2.95
2188844	Nichibo	FK-050SHB-07295-R	9	12	3-19	6784	0.12	9.21	47	0.09"/solder	0.05	0.20	0.61 x 1.05	1.49	1.25	.99
2167592	Nichibo	LS5BFN-2465	14	12	6-18	7205	0.75	83.3	72	0.11"/solder	0.09	0.54	1.09 x 1.48	3.49	2.95	2.75
2217781	Nichibo	PC260SB-14280-NR	5	12	12-18	7524	0.25	23.2	61	0.08"/solder	0.078	0.43	0.96 x 1.06	1.95	1.75	1.49
2209140	Mabuchi Motor	FK-260SA-14280	5	12	12-24	8600	0.063	14.8	55	3.5" wires	0.08	0.43	0.96 x 1.06	2.95	2.75	2.49
2081895	Mabuchi Motor	FC-280ST-18180**	9	12	8-15	9700	0.16	54.3	59.08	Wire/push-in	0.08	0.45	0.95 x 1.32	1.95	1.75	1.49
232022	ReliaPro	MD5-1885	14	12	6-18	9820	0.74	53.5	60.7	0.11"/solder	0.091	0.622	1.082 x 1.279	3.49	2.95	2.75
232040	ReliaPro	MD5-2070	14	12	6-12	12586	1.3	52	62.7	0.12"/solder	0.091	0.48	1.082 x 1.279	3.49	2.95	2.75
2210845	Nichibo	775-7013F-R	13	12	1-12	12610	13.52	93.7	76	0.19"/solder	0.19	0.57	1.77 x 2.59	6.95	5.95	5.25
2208833	Nichibo	UC-130S-18149PW\$	14	12	6-12	16234	0.98	35.93	52	0.08"/solder	0.07	0.31/0.43	0.78 x 1.00	3.95	3.49	2.95
2208841	Nichibo	UC-130S-19133PW\$	14	12	6-12	18587	1.18	41.5	56	0.08"/solder	0.078	0.31/0.43	0.78 x 1.00	4.49	3.95	3.49
232047	ReliaPro	MD5-2445	14	12	6-12	19850	2.05	79.7	66	0.12"/solder	0.091	0.622	1.082 x 1.279	4.95	4.49	3.95
2208850	Nichibo	UC-130S-22103PW\$	14	12	6-12	25253	1.48	33.20	50	0.08"/solder	0.078	0.31/0.43	0.78 x 1.00	4.95	4.49	3.95
237391	ReliaPro	29SYT003\$S	17	13.5	13.5	18000	13	509	—	Quick connect	0.125	1.003	1.141 x 2.283	7.95	6.95	5.95
2167699	Nichibo	775-8511FDAS	14	14.4	6-14.4	17606	18.05	103	73	0.19"/solder	0.19	0.74	1.77 x 2.59	5.95	4.95	4.49
2217801	Nichibo	MS5BN-1980-R††	14	18	1-18	15432	1.05	78.9	68	0.11"/solder	0.09	0.511	1.06 x 1.29	2.95	2.49	2.25
2167672	Nichibo	MS5N-07500B-R	14	24	12-24	2475	0.061	25.39	47	0.11"/solder	0.09	0.748	1.1 x 1.279	1.95	1.75	1.49
2120461	Mabuchi Motor	RS385PH-10280	14	24	12-30	3538	0.126	4.54	55.6	0.11"/solder	0.09	0.315	1.15 x 1.50	2.95	2.75	2.49
2218011	Mabuchi Motor	RS385PH-29505	13	24	12-30	7420	0.41	84.6	55	0.11"/solder	0.09	0.96	1.08 x 1.49	2.95	2.75	2.49
2188810	Nichibo	LS5FN-16120W-R	16	24	1-28	8244	0.41	81.7	70	0.11"/solder	0.09	0.61	1.14 x 1.47	2.49	2.25	1.95
2192421	Nichibo	HP5BFN-2670-R††	14	24	1.5-28	9346	1.05	193	74	0.15"/solder	0.12	0.17	0.7 x 1.90	3.95	3.49	2.95
2188828	Nichibo	PC-130SBF-10400TB-R/48	12	24	1-34	10823	0.24	25.4	48.8	0.11"/solder	0.07	0.65	0.8 x 0.98	3.49	2.95	2.75
2188836	Nichibo	PC-130SBF-10400TB-R/55	12	24	1-34	10823	0.24	25.4	48.8	0.08"/solder	0.07	1.02	0.8 x 0.98	2.49	2.25	1.95

# With copper gear

\* Micro DC

\*\* Reverse

† Built-in varistor and capacitor, dual shaft

†† Built-in varistor

\$ Dual shaft

\$S Hi-torque

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JAMECO ReliaPro

## 6, 12 & 24VDC Reversible Gear Head Motors

\*Web Code: KBB

• Solder-type terminal • High torque construction • Dielectric strength: 300VDC • Insulation resistance: 10MΩ • Oil bearing design for long service life

### 32GM Series

Part No.	Cross Ref. No.	Rated Voltage (VDC)	@ Maximum Efficiency			Gear Ratio	Gear Case Size Dia. x Height (in.)	Motor Size Dia. x Depth (in.)	Shaft Size Dia. x Length (in.)	Pricing		
			Speed (RPM)	Current (mA)	Torque (g-cm)					1	5	25
2146505	B32-6V3.1RPM	6	2	90	7350	340:1	1.9 x 0.41	1.3 x 0.9	.28 x .87	\$17.95	\$15.95	\$14.49
253323	B32-6V7RPM	6	6	44	1500	200:1	1.9 x 0.41	1.3 x 0.9	.27 x .76	14.95	13.49	11.95
253307	B32-6V9RPM	6	8	38	1200	150:1	1.9 x 0.41	1.3 x 0.9	.30 x .70	17.95	15.95	14.49

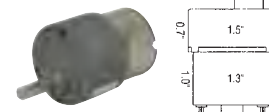


253307

32GM Series

### 38GM Series

253534	38-010	12	24	97	7500	250:1	1.46 x 1.0	1.3 x 0.9	.24 x .50	\$16.95	\$14.95	\$13.49
253518	38-008	12	40	87.5	4800	150:1	1.46 x 1.0	1.3 x 0.9	.24 x .50	16.95	14.95	13.49
253500	38-007	12	66	80	3200	100:1	1.46 x 0.7	1.3 x 0.9	.24 x .50	17.95	15.95	13.95
253489	38-005	12	104	220	600	56:1	1.46 x 0.7	1.3 x 0.9	.24 x .50	14.95	13.49	11.95
253471	38-004	12	115	220	600	50:1	1.46 x 0.7	1.3 x 0.9	.24 x .50	15.95	14.49	12.95
253446	38-001	12	600	61.8	350	10:1	1.46 x 0.7	1.3 x 0.9	.24 x .50	17.95	15.95	14.49



253446

38GM Series

### Nichibo Gear Head Motors

2192878	RK-520-17310-R	12	423	104	1749	50:1	1.46 x 1.0	1.3 x 0.9	.21 x .78	\$14.95	\$13.49	\$11.95
2197476	MD3B-14280-R	12	327	5214	42.89	180:1	1.45 x 1.1	1.1 x 1.3	.24 x .30	8.95	7.95	6.95

### HN27GD Series

Part No.	Cross Ref. No.	Rated Voltage (VDC)	Operating Range (VDC)	@ Maximum Efficiency			Gear Ratio	Gear Case Size Dia. x Length (in.)	Motor Size Dia. x Depth (in.)	Shaft Size Dia. x Length (in.)	Pricing		
				Speed (RPM)	Current (mA)	Torque (g-cm)					1	5	25
167039	GH12-0953Y	12	4.5 - 24	9	90	1200	188:1	1.1 x 1.0	1.0 x 0.9	.16 x .60	\$17.95	\$15.95	\$1.49
167047	GH12-1828Y	12	4.5 - 24	32	106	1300	90:1	1.1 x 0.8	1.1 x 1.3	.16 x .43	22.95	20.95	18.95
249480	GH12-1213Y7-0	12	4.5 - 24	90	51	460	70:1	1.1 x 0.6	1.0 x 0.9	.16 x .60	19.95	17.95	15.95



167039

HN27GD Series

### GH30GM Series

170642	GH12-1828Y-10	12	6.0 - 24	8	105	3500	332:1	1.2 x 0.9	1.2 x 1.2	.16 x .70	\$17.95	\$16.95	\$15.95
153438	GH12-1045Y	12	3.0 - 12	13	90	800	200:1	1.1 x 0.6	0.9 x 1.0	.16 x .70	15.95	14.49	12.95
159418	GH12-1921Y	12	4.5 - 12	25	200	2000	132:1	1.2 x 0.9	1.2 x 1.2	.16 x .70	22.95	20.95	18.95
162191	GH12-1324Y225	12	4.5 - 12	190	145	300	30:1	1.1 x 0.6	1.0 x 0.9	.16 x .70	17.95	15.95	14.49

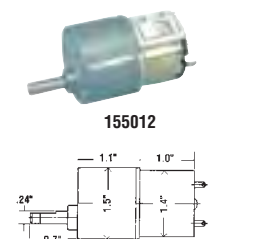


159418

GH30GM Series

### GH35GM Series Plastic Gears

155012	GH12-1926	12	4.5 - 12	2	250	6000	3000:1	1.4 x 0.9	1.3 x 1.0	.23 x .90	\$24.95	\$22.49	\$19.95
155821	GH12-1830Y-P	12	4.5 - 12	4.5	220	4500	1000:1	1.4 x 0.9	1.3 x 1.0	.23 x .90	24.95	22.49	19.95
155839	GH12-1641T-L	12	3.0 - 12	20	250	3000	270:1	1.4 x 0.8	1.3 x 1.0	.23 x .90	25.95	23.49	20.95
152911	GH12-1926Y	12	4.5 - 12	40	172	2370	100:1	1.4 x 0.6	1.3 x 1.2	.24 x .90	24.95	22.49	19.95
161382	GH12-1634T	12	4.5 - 12	145	293	850	30:1	1.4 x 0.6	1.3 x 1.0	.23 x .90	25.95	23.49	20.95
164786	GH12-1640Y	12	4.5 - 24	220	120	180	10:1	1.4 x 0.6	1.3 x 1.1	.23 x .90	24.95	22.49	19.95
176050	GH12-1640Y00	24	12 - 24	1.8	340	6000	3000:1	1.4 x 1.0	1.3 x 1.0	.23 x .90	27.95	24.95	22.49
176032	GH24-1640Y06	24	12 - 24	50	340	2000	90:1	1.4 x 0.6	1.3 x 0.9	.23 x .90	25.95	23.49	20.95
176023	GH24-1640Y19	24	12 - 24	148	340	1000	30:1	1.4 x 0.6	1.3 x 0.9	.23 x .90	25.95	23.49	20.95



155012

### GH35GM Series Metal Gears

2150491	GA25Y37050-75	6	2.0 - 7.5	133	350	8800	75:1	.98 x 0.9	.97 x 1.2	.16 x .38	\$12.95	\$11.95	\$10.95
2150504	GA25Y370-34	6	2.0 - 7.5	293	350	4000	34:1	.98 x .83	.96 x 1.2	.16 x .38	12.95	11.95	10.95
155013	HN-GH12-1632T-R-M	12	4.5 - 12	2	250	6000	3000:1	1.3 x 0.9	1.5 x 1.1	.23 x .90	25.95	23.49	20.95
155822	GH12-1830Y-P-R-M	12	4.5 - 12	4.5	250	4500	1000:1	1.3 x 0.9	1.5 x 1.0	.23 x .90	24.95	22.49	19.95
151442	HN-GH12-1632T-R-M	12	4.5 - 12	57	275	2200	100:1	1.3 x 0.9	1.5 x 0.7	.23 x .90	23.95	21.49	19.49



2150491/2150504

155013

GH35GM Series



JAMECO ReliaPro



## Specialty Gear Motors

Part No.	Mfr.	Product No.	Rated Voltage	Operating Range	Speed (RPM)	Current (mA)	Torque (g-cm)	Gear Ratio	Size (L" x W" x H")	Shaft Size Dia. x Length (in.)	Special Feature	Pricing		
												1	5	25
2150432	Dagu	DG01D	4.5 VDC	4.5 VDC	90	190	800	—	2.5 x 1.5 x 0.9	0.21 x 0.31	Motor pair with 90° shaft	\$8.95	\$7.95	\$7.19
400995	Solarbotics	GM8	6 VDC	3-6 VDC	78	57	5500	143	2.17 x 1.89 x 0.91	0.28 x 0.20	Offset/inline plastic gear motor	8.95	7.95	7.19
2128219	Pololu	1101	6 VDC	6 VDC	320	80	2200	100	0.94 x 0.39 x 0.47	0.12 x 0.35	Mini Gear motor	19.95	17.95	15.95
2190813	DFRobot	FIT0302	6 VDC	3-6 VDC	500	40	1200	30	1.0 x 0.47 x 0.39	0.12 x 0.39	D-shaft, output shaft	14.95	13.49	11.95
2136438	Pololu	1447	12 VDC	6-12 VDC	80	250	18000	131	2.71 x 1.45 x 1.45	0.24 x 0.59	64 CPR encoder	44.95	39.95	35.95
213488	JRP	SOTYZ-R	120 VAC	100-120 VAC	6	40	6700	—	2.0 x 2.0 x 1.0	0.28 x 0.52	Clockwise rotation	12.95	11.49	9.95



2150432

400995

2128219

2136438

213488

## GRAB BAGS

Part No.	Description	No. of Pieces	Wt. (lbs.)	1	10
18294	Toy motors grab bag	5	0.5	\$7.95	\$6.95
55968	Hardware grab bag	100	0.3	14.95	12.95
2082118	Solderless terminal grab bag	100	0.2	7.95	6.95



18294

55968

2082118

# Vibrating Motors & Stepper Motors

## JAMECO ReliaPro 1.3VDC & 3VDC Vibrating Motors

\* Web Code: NBC

• Typical applications: cellular phones, pagers and toys



Fig. 1

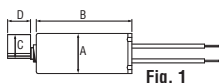


Fig. 1



Fig. 2



Fig. 3

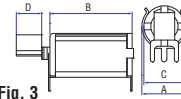


Fig. 3

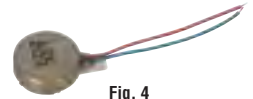


Fig. 4

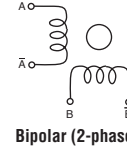
Part No.	Cross Ref. No.	Fig.	Operating Voltage (VDC @ mA)	Operating Range (VDC)	Rated RPM @ VDC	Lead Length (in.)	Motor Size (A x B) (Dia. x Depth)	Shaft Size (C x D) (Dia. x Length)	Pricing		
									1	10	100
175062	OTL-7AL	1	1.3 @ 62	0.70 - 1.60	7000 @ 1.3	0.7	0.28 x 0.67	0.10 x 0.18	\$3.95	\$3.49	\$2.95
256306	6ZK003	2	1.3 @ 80	0.85 - 1.60	8500 @ 1.3	1.0	0.23 x 0.39	0.10 x 0.10	2.95	2.65	2.25
256322	6ZK211	3	1.3 @ 80	0.80 - 1.60	8500 @ 1.3	PC terminal	0.27 x 0.48	0.11 x 0.11	2.75	2.49	2.25
2209035	Z4SL2A0280131	2	1.3 @ 85	1.10 - 1.60	10000 @ 1.3	1.0	0.18 x 0.40	0.20 x 0.15	2.75	2.49	2.25
256365	7ZK692	2	3.0 @ 60	2.40 - 3.00	6500 @ 3.0	4.7	0.28 x 0.66	0.18 x 0.22	3.95	3.49	2.95
256382	7ZK681	2	3.0 @ 60	2.40 - 3.60	7500 @ 3.0	1.1	0.28 x 0.66	0.12 x 0.16	3.95	3.49	2.95
256314	6ZK053	2	3.0 @ 75	1.60 - 3.60	8500 @ 3.0	1.0	0.15 x 0.10	0.15 x 0.10	3.25	2.95	2.65
256331	6ZK261	3	3.0 @ 75	2.40 - 3.00	8500 @ 3.0	PC terminal	0.27 x 0.48	0.11 x 0.11	3.25	2.95	2.65
2189476	C1034B98FR	4	3.0 @ 80	2.50 - 4.00	9000 @ 3.0	1.0	0.39 x 0.13	No shaft	3.49	3.25	2.95
2218169	JL1027-001021-30-01	4	3.0 @ 85	1.20 - 3.00	12000 @ 3.0	1.0	0.39 x 0.10	No shaft	3.95	3.59	3.25

## JAMECO ReliaPro 4VDC to 24VDC Bipolar & Unipolar Stepper Motors

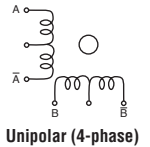
\* Web Code: UBN

Jameco offers the industry's widest variety of off-the-shelf two-phase bipolar and four-phase unipolar stepper motors for your precision applications. Be sure to check out the wide selection of 4 to 24VDC models below.

- Ball bearings
- Dielectric strength: 500V, 50Hz/minute
- Insulation resistance: 100MΩ @ 500VDC
- 18" lead wires
- Ambient temp.: -10°C to +55°C
- Use P/N 161998 (below) for shaft coupler



Bipolar (2-phase)



Unipolar (4-phase)



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

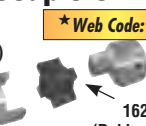
Part No.	Product No.	Fig.	Drive System	Rated Voltage (VDC)	Step Angle (°)	Phase Resis. (Ω)	Curr. (mA)	Phase Inductance (mH)	Detent Torque (g-cm)	Holding Torque (g-cm)	Mounting Hole Space (in.)	Mounting Holes (in.)	Shaft Dia. (in.)	Shaft Length (in.)	Motor Dia. (in.)	Motor Depth (in.)	Wt. (lbs.)	Pricing		
																		1	5	25
1581231	42BYGHM206-07E	3	Unipolar	4	0.9	8.4	670	10	—	793	1.79	0.08	0.195	0.88	1.67	1.27	0.46	\$21.95	\$19.95	\$17.95
237607	57BYGH001	1	Unipolar	5	1.8	5	1000	—	135	3976	1.86	0.20	0.25	0.83	2.24	1.61	1.10	29.95	26.95	23.95
237825	25BY4801	4	Unipolar	5	7.5	10	500	—	45	110	1.38	0.14	0.08	0.35	0.98	0.56	0.07	9.95	8.95	7.95
237631	57BYGH803	1	Unipolar	6.3	1.8	4.2	1500	—	—	14276	1.86	0.20	0.25	0.83	2.24	2.99	2.43	49.95	44.95	39.95
2138812	35BY48030-01	5	Unipolar	7	7.5	20	350	11	125	450	1.59	0.12	0.078	0.47	1.37	0.85	0.22	8.95	7.95	6.95
224022	42BYG016	6	Unipolar	12	1.8	75	160	40	150	900	1.73	0.10	0.20	0.70	1.70	1.30	0.50	21.95	19.95	17.95
155433	42BYG228	6	Unipolar	12	1.8	30	400	23	220	2000	1.73	0.10	0.20	0.90	1.70	1.50	0.50	20.95	18.95	16.95
237543	57BYG007	2	Unipolar	12	1.8	32	380	30	—	2957	1.86	0.20	0.25	0.83	2.29	1.61	1.00	27.95	24.95	22.95
238538	42BYGH404	7	Unipolar	12	1.8	30	400	25	250	3200	1.22	0.10	0.20	0.95	1.67	1.89	0.60	21.95	19.95	17.95
162027	57BYG084	2	Unipolar	12	1.8	20	600	22	725	6000	2.65	0.20	0.25	1.00	2.20	2.00	1.30	35.95	32.25	28.95
238115	35BY48B08	8	Unipolar	24	7.5	75	320	38	65	270	1.65	0.13	0.08	0.35	1.38	0.59	0.15	8.95	7.95	6.95
2120479	RDS3000	9	Bipolar	4	1.8	4	1000	10	—	3600	1.21	0.09	0.195	0.312	1.67	1.62	0.40	19.95	17.95	15.95
237490	39BYG001	6	Bipolar	5	1.8	5	1000	5	200	1800	1.22	0.10	0.20	0.83	1.54	1.34	0.44	21.95	19.95	17.95
237578	57BYG061	2	Bipolar	6	1.8	12	500	24	—	3569	1.86	0.20	0.25	0.83	2.29	1.61	1.00	34.95	31.95	28.95
2158531	STP-42D201-37†	10	Bipolar	12	1.8	1.55	1700	5	163	3200	1.22	0.15	0.19	0.68	1.65	1.49	0.60	9.95	8.95	7.95
155460	42BYG023*	6	Bipolar	12	1.8	30	400	36	220	2100	1.73	0.10	0.20	0.60	1.70	1.30	0.50	21.95	19.95	17.95
237472	39BYG401A	6	Bipolar	12	1.8	30	400	32	200	2100	1.22	0.10	0.20	0.95	1.54	1.34	0.44	17.95	16.95	15.95
2158557	M25SP-5N†	10	Bipolar	24	7.5	50	550	—	177	183	1.25	0.27	0.08	0.22	1.25	0.53	0.06	2.95	2.59	2.29
2209254	PM55L-048-ZXX3	11	Bipolar	24	7.5	5.5	800	—	1400	1600	2.50	0.13	0.25	0.62	2.16	1.00	0.60	7.95	6.95	6.25

\*155460: Dual shaft † Mfr.: 2158531: Shinano Kenshi; 2158557: Mitsumi

## JAMECO ReliaPro Spider Couplers

- Used with motors
- 1 set screw per hub
- Hub OD: 0.625" Dia.
- Hub length: 0.56"
- Parts sold individually

162288 (Coupler)



\* Web Code: EBE

162000 (Rubber Spider)

Part No.	Description	1	10	100
162288	.125" (3.18 mm) ID hub	\$1.95	\$1.75	\$1.25
2220331	.135" (3.50 mm) ID hub	1.95	1.75	1.25
161998	.197" (5.00 mm) ID hub	1.95	1.75	1.25
162270	.250" (6.35 mm) ID hub	1.95	1.75	1.25
162000	Rubber spider	1.95	1.75	1.49

## CLIMAX Spider Shaft Coupler

- 2 set screws (10-32 x 1/8)
- Size: 0.75" L x 0.5" OD

\* Web Code: EBE



Part No.	Description	1	5	25
138288	.250" ID sleeve coupler	\$7.95	\$7.25	\$6.49

\* Rotary Switches — Enter Web Code TMU

\* Arduino Shields — Enter Web Code AOS

\* Terminal Blocks — Enter Web Code XBD

## JAMECO ValuePro 10-Pc Gear Assortment

- Polyethylene resin
- Gears are 0.147" bore size
- Bushings are 0.07" bore diameter
- T10, T20, T30, T40, T50 and bushing

Part No.	Description	1	10	25
1810072	Gear set — 10 pieces	\$7.95	\$6.95	\$6.25

## HARDWARE GRAB BAGS

P/N 171571	500 pcs. ....	\$7.95
P/N 171635	1400 pcs. ....	17.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

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# Stepper & Servo Motor Controllers

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



## 2-Amp Dual-Channel Motor Controller

This motor controller uses the high-power L298N motor driver chip, which allows for direct drive of 2 bidirectional DC motors. It can drive up to 2A of current per motor and uses a broad brush design to reduce wire resistance.

- Logic input voltage: 6V-12V (at 36mA)
- Drive input voltage: 4.8V-46V (at 2A)
- Max. power dissipation: 25W
- Drive type: dual high-power H-bridge driver
- Operating temperature: -25°C to +130°C



Part No.	Mfr. Part No.	Size (L" x W")	Wt. (oz.)	1	5
2159411	DRI0002	1.9 x 2.1	1.03	\$22.95	\$20.95

## KAE Industrial Motion Controllers for Brush, Brushless & Stepper Motors

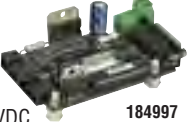
**323942:** • For brush-type DC motors with 2 or 3 channel incremental encoders

- P.I.D. Servo control, trapezoidal position profiling, velocity mode, 32-bit resolution
- Integrated 12 to 48VDC supply power amplifier @ 3A continuous, 6A peak
- Limit switch inputs, general purpose analog input, PWM, DIR output for use with external amps



**323951:** • For 3-phase brushless motors with Hall effect sensors or conventional DC brush-type motors

- Amplifier capable of driving 6A continuously @ up to 48VDC
  - High current amplifier: 7A continuous, 10A peak, 12 to 48VDC supply
  - Support for linear & circular interpolation using the PIC-SERVO CMC chipset
- 184997:** • Trapezoidal position profiling, velocity mode, up to 50,000 steps/sec.
- Full/half step bipolar chopper drive, 2A per phase, 7.5 to 46VDC supply
  - Integrated indexer and driver for 2 or 4 phase stepper motors



Part No.	Description	Size (L" x W" x H")	1	5
323942	PIC-SERVO motor control board	3.1 x 2.1 x 0.9 ...	\$169.95	\$159.95
323951	PIC-SERVO 3-phase motor control board	3.1 x 3.1 x 0.9 .....	\$239.95	\$227.95
184997	PIC-SERVO motor control board	3.1 x 2.1 x 0.9 .....	\$159.95	\$151.95



## Aluminum Mounting Hub with Set Screws

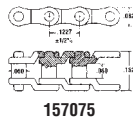
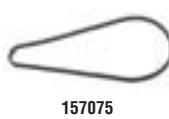
- Low coefficient of friction requires little or no lubrication
- Residual stress removed by annealing process

Part No.	Description	1	5	25
1571104	1/4" bore aluminum mounting hub with set screws	\$9.95	\$8.95	\$7.95



## 16-Pitch Sprocket Set and Chain

- Operates in high humidity and corrosive environments
- Chain links can easily be added or removed to adjust total length
- Chain tension load: 2.0 lbs.



Part No.	Description	1	5	25
157075	Drive chain (12" long)	\$12.95	\$11.49	\$9.95
168276	Sprocket set - 14 pieces (see description above)	\$29.95	\$26.95	\$23.95

## BEST SELLING MOTORS

Part No.	Mfr.	Description	Nom. Volt.	Volt. Range	Speed RPM	@ Max. Efficiency	Current	Torque	Eff.	1	10
2158442	Nichibo	RF-500TB-18280-R	3	1-3	2104	0.17	13.4	60	\$2.95	\$2.75	
2173044	Nichibo	RF-500TB-12560-R	6	6-12	2100	0.08	11	58	3.95	3.49	
177498	ReliaPro	RC280RA2485 (F-7089C460)	7.2	3-14	14260	1.18	33.3	57	2.95	2.75	
238473	Mabuchi	RF370CA-15370	12	3-12	4840	0.17	187	75	3.49	2.95	
232047	ReliaPro	MD5-2445	12	6-12	19850	2.05	79.7	66	4.95	4.49	
206949	Nichibo	QJT-360S-14280	12	9-30	4930	0.35	44.5	52	3.49	2.95	
2144673	Mabuchi	RS555PH-23300	12	12-30	5050	0.36	380.3	—	3.95	3.49	
2167592	Nichibo	LS5BFN-2465-R/58	12	6-18	7205	0.75	83.3	72	3.49	2.95	
232022	ReliaPro	MS5N-1885-R	12	6-18	9820	0.74	53.5	60.7	3.49	2.95	
232040	ReliaPro	MD5-2070-R	12	6-12	12586	1.3	52	62.7	3.49	2.95	



## High Power Motor Driver

- N-channel MOSFET H-bridge enables bidirectional control one of DC brushed motor
- 15 amps continuous output current per channel without heat sink
- 5.5-30V operating voltage range
- Able to provide 21A continuous current with a heat sink
- Only 2 I/O lines allow for both sign magnitude and locked-antiphase operation
- 40kHz max. PWM frequency
- 5.5V max. logic voltage
- Soldering required



Part No.	Mfr. Part No.	Size (L" x W")	Wt. (gram/oz.)	1	5
2128235	755	0.8 x 1.3	2.8/0.1	\$44.95	\$39.95



## DC Motor Speed Control Kit

This kit uses Pulse Width Modulation (PWM) to vary the speed of a DC motor and maintain torque.

- For use with motors up to 100VDC/5A max.
- Intermediate level kit
- Total of 35 pieces
- Requires a 5-16VDC supply (Not included, recommend P/N 114825, pg. 91)

\* Web Code: VBA



Part No.	Cross Ref. No.	Size (L" x W" x H")	1	5
127829	GMC-1102	3.6 x 2.3 x 1.2	\$49.95	\$44.95



## USB Stepper Controller & Driver

- Easy to set up; easy to use
- Daisy chainable on a 4 wire bus
- 1 Amp chopper (PWM) drive
- Operates from 9-30V
- USB/RS232/RS485 interface
- Go Left/Right upon switch closure
- 2 direction and 2 limit switch inputs
- Potentiometer-settable speed and current

\* Web Code: VBA



Part No.	Mfr. Part No.	Size (L" x W" x D")	1	5
2123311	Intelli-Inch-LR	1.0 x 1.0 x 0.5	\$89.95	\$79.95

\* DC Gear Motors — Enter Web Code KBB



## 4-Ch DC Motor Controller with Encoder Support

- Each channel rated for 4A of stall current
- Built-in control logic allows 2-pin motor control (one pin for speed, one pin for direction)
- Low resistance FET H-bridges
- Motor supply: 12VDC max.
- Designed for the Rover 3 chassis (P/N 2143865, pg 142)
- Size: 3.75"L x 2.75"W



**Includes:** Quadrature encoder mixing circuit

Part No.	Mfr. Part No.	1	5
2150539	RS011MC	\$21.95	\$19.95



## MegaMoto Plus H-Bridge Shield for Arduino

- Supply Voltage: 5-28V (24V max battery)
- 20A continuous (25A when used with a fan)
- 40A surge current (5 seconds), over 1100W
- Stack up to three on an Arduino Uno to drive up to six motors in half-bridge mode.
- Control with Arduino PWM pins and even control other DC loads like solenoids or relays.



Part No.	Mfr. Part No.	Wt. (oz.)	Price
2204023	MegaMoto Plus	1.3	\$59.95



## Simple H-Bridge (H-Bridge Circuit)

- Designed for driving DC motors and DC loads
- Activate via 555 timers, MCUs or 3V to 5V logic level signals
- Supply voltage: 5V to 28V (24V max. battery rating)
- 20A continuous (25A with fan), >45A surge current
- Size: 2.5"L x 2.25"W • Weight: 1.32 oz.



Part No.	Mfr. Part No.	Price
2204082	SIMPLE-H	\$49.95



## 6-Channel USB Servo Controller

- 5-16V operating voltage
- USB, TTL (5V) serial & internal scripting
- 0.25µs resolution with built-in speed and acceleration control
- Configure channels as outputs for RC servos, ESCs, digital outputs or analog inputs
- 1kB internal script memory • Can be daisy-chained
- Free configuration control app for Windows®
- Size: 1.2"L x 0.85"W



Part No.	Mfr. Part No.	1	5
2128180	1350	\$20.95	\$18.95

\* Shields for Arduino — Enter Web Code AOS



## 12VDC Solenoid Valve

- Current: 350mA
- Operating voltage: 12VDC
- Dimensions: 1.2"L x 0.92" Dia.
- Air leakage: 4psi, 1c.c./min. max.
- 0.250" quick disconnect terminals
- Operational temp.: -29°C to 85°C



\* Web Code: MEJ

Part No.	Cross Ref. No.	1	5	25
169835	TAV-0829-R	\$11.95	\$10.95	\$9.95



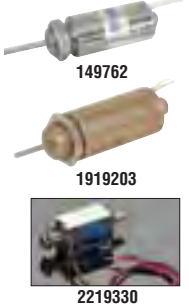
## 12VDC & 24VDC Continuous Push/Pull Solenoids



\* Web Code: MEJ

Part No.	*Mfr.	Product No.	Type	Volt. (VDC)	Coil Res. (±10%) (Ω)	Power Consump. (W)	Holding Force (lbs. @20°C)	Stroke (in.)	Dimensions Length x Dia. (in.)†	Shaft Dia. (in.)	Wt. (lbs.)	Pricing		
												1	5	25
262247	JRP	SMO-0520L12STD	Open frame-pull	12	90	1.6	0.16	0.24	0.8 x 0.6 x 0.5	0.20	0.04	\$10.95	\$9.95	\$8.95
262272	JRP	SMO-0837S12STD	Open frame-push	12	26.2	5.5	0.110	0.24	1.5 x 1.0 x 0.8	0.08/0.31*	0.21	9.95	8.95	7.95
262167	JRP	SMT-1325L12STD	Tubular-pull	12	36	4.0	0.11	0.47	1.0 x 0.5	0.20	0.05	14.95	13.49	11.95
142464	JRP	SH-T1130L-12VDC	Tubular-pull	12	36	4.0	0.63	0.4	1.6 x 0.4	0.15	0.04	11.95	10.95	9.95
2202335	JRP	SHE-T0637**	Tubular-pull	12	27	12	1.3	0.5	2.0 x 0.75	0.25	0.17	7.95	6.95	6.25
2196748	JRP	SH-T2551L	Tubular-pull	12	14.4	10	3.86	0.4	3.1 x 1.0	0.41	0.39	15.95	14.49	12.95
2201818	JRP	SH-T2551	Tubular-pull	24	60	40	4.0	1.0	3.1 x 0.87	0.12	0.39	16.95	14.95	13.49
149754	JRP	SMT-1325S12A	Tubular-push	12	36	4.0	0.75	0.47	1.9 x 0.5	0.063	0.05	19.95	17.95	15.49
149762	JRP	SMT-1632S12A	Tubular-push	12	26	7.0	1.00	0.200	2.5 x 0.6	0.098	0.10	16.95	14.95	13.49
1919203	LEX	191172-001	Stroke-push	12	45	7.3	—	0.125	1.0 x 0.5	0.06	0.10	5.95	5.39	4.79
2219330	ADA	412	Open frame-push/pull	24	100	5.8	1.12	0.22	2.1 x 0.67	—	0.09	14.95	13.49	11.95

† Open frame type dimensions: L" x W" x H" \* Dual shaft \*\* 2-pin Molex connector 1 P/N 281852 (pg 78), 2 P/N 2182611 (pg 78) — additional panel mounting hardware available



\* JRP = Jameco ReliaPro  
LEX = Ledex  
ADA = Adafruit

## Servo Motors & Accessories

- + pulse width 1500µsec. neutral control system
- Operating voltage range: 4.8V to 6V



\* Web Code: FVD

### Motors

Part No.	Manufacturer Part No.	Oper. Speed (4.8V@no load)	Stall Torque @ 4.8V (kg.cm)	Direction	Operating Angle	Current Drain (mA, idle/ mA no load)	Dimensions (L" x W" x H")	Pricing	
								1	5
2128198	105*	.12sec/60°	0.6	Clockwise	—	—	0.8 x 0.3 x 0.8	\$9.95	\$8.95
2150416	RS001A	.10sec/60°	1.5	Clockwise	—	—	0.9 x 0.5 x 1.0	6.95	6.25
2214601	RS001B	.08sec/60°	2.0	Clockwise	—	—	1.3 x 0.5 x 1.1	4.95	4.49
395760	HS-322HD	.19sec/60°	3.0	Clockwise	40°/one side pulse	7.4/160	1.6 x 0.8 x 1.4	14.95	13.49
358635	HS-311	.19sec/60°	3.0	Clockwise	40°/one side pulse	7.4/160	1.5 x 0.8 x 1.1	16.95	14.95
395786	HS-422	.21sec/60°	3.3	Clockwise	45°/one side pulse	8/150	1.6 x 0.8 x 1.4	17.95	15.95
2124980	HS-485HB	.22sec/60°	4.8	Clockwise	45°/one side pulse	8/150	1.6 x 0.8 x 1.5	22.95	20.95
2124971	HS-645MG	.24sec/60°	7.7	Clockwise	45°/one side pulse	8.8/350	1.6 x 0.8 x 1.5	39.95	35.95

\* Manufacturer: Pololu Corp.

### Accessories

Part No.	Description	1	5
358811	Servo gripper, 1.3" opening (compatible with all servos above)	\$16.95	\$14.95
396279	3 color servo wire (red, black, yellow), 22-20, 50'	15.95	14.49
2171209	Analog sensor cable, 3-pin JST female connector	1.95	1.75
2177838	12" female-to-female 3-wire servo/sensor cable	1.95	1.75
2143902	24" male-to-female twisted servo extension cable	4.95	4.49



## Continuous & 0-180° Rotation Servos

Controlled easily from a BASIC Stamp or SX chip I/O pin using PBASICs or SX/B's PULSOUT commands.

- 4-6VDC @ ~190mA

\* Web Code: FVD

- 2128201: 2 ball bearings on the output shaft for reduced friction
- 2110692/283021: Holds position over 180° range; standard servo
- 283039: Bidirectional continuous rotation and includes an adjustable potentiometer port to center the servo

Part No.	Mfr.	Mfr. Part No.	Stall Torque @ 6V	Size (L" x W" x H")	Weight (oz.)	1	5
2201615	ReliaPro	CYS-S3003	38.88 oz.-in	1.6 x 0.8 x 1.5	1.75	\$10.95	\$9.95
2128201	Pololu	1248	66.7 oz.-in	1.7 x 0.8 x 1.6	1.55	14.95	13.49
283021	Parallax	900-00005	43.1 oz.-in	2.2 x 0.8 x 1.6	1.55	17.95	15.95
283039	Parallax	900-00008	47 oz.-in	2.2 x 0.8 x 1.6	1.50	18.95	16.95
2110692	Parallax	900-00014	19.4 oz.-in	0.9 x 0.37 x 0.61	0.31	15.95	14.49

2128201



## BEST SELLING ROBOTIC KITS

2095023



Part No.	Manufacturer	Mfr. Part No.	Description	Exp Level	1	5
387997	Parallax Inc.	28832	Boe-Bot robot kit	BEG	\$169.95	\$159.95
2150619	Dagu Hi-Tech	RS014-USB	2-in-1 Mini robots kit	BEG	59.95	54.95
386708	Jameco KitPro	21-880	Line tracking mouse kit	INT	22.95	20.95
2095023	OWI Robots	OWI-535	Robotic arm edge kit	INT	59.95	53.95
386610	Jameco KitPro	21-886	Infrared escape robot kit	EXP	22.95	19.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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## DC Brushless Tubeaxial Fans & Blowers

NEW  
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\*5V Web Code: TAS

\*12V Web Code: LBZ

### mm to Inches Conversion Chart



695050



2134125



2131944

mm	6	6.8	10	15	20	25	28	30	32	35	38	40	45	51	60	70	75	76	80	92	94	95	97	120	125	126	127	150	172
Inches	0.24	0.27	0.40	0.60	0.80	1.00	1.10	1.18	1.26	1.40	1.50	1.60	1.80	2.00	2.36	2.76	2.95	2.99	3.15	3.63	3.70	3.74	3.82	4.72	4.92	4.96	5.00	5.90	6.77

Part No.	Manufacturer	Mfr. Part No.	Voltage (VDC)	Size mm (W x H x D)	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection (Leads)	Pricing			
												1	10	50	100
2095277	Adda	AD2005LX-G70-LF	5	20 x 20 x 10	0.6	Hypro	80	0.4	UL/CUL/CSA/TUV/CE	20	5.5"	\$4.95	\$4.49	\$3.95	\$3.59
2131872	Adda	AD0205MX-K53-LF	5	25 x 25 x 6	2.4	Hypro	120	0.6	CE	29	6" <sup>1</sup>	8.95	7.95	6.95	5.95
131247	Adda	AD0205LX-G50-LF	5	25 x 25 x 10	1.8	Hypro	100	0.5	UL/CSA/CE	15.6	5.5"	8.95	7.95	6.95	6.25
695050	Sunon	GM0502PFV2-8	5	25 x 25 x 10	3.0	Vapo	80	0.4	UL/CUL	16	5.5"	10.95	9.95	8.95	7.95
2208905	Sunon	KDE0503PEB1-8	5	30 x 30 x 6	4.9	Ball	180	0.9	UL/CUL/TUV/CE	28	12"	4.95	4.49	3.95	3.49
2188924	Adda	AD0305HX-K70(TX)	5	30 x 30 x 6.8	3.5	Hypro	180	0.9	UL/CUL/TUV/CE	32	5.5"	7.95	6.95	6.25	5.95
2095293	Adda	AD305HB-D50-LF	5	30 x 30 x 15	3.7	Ball	130	0.65	UL/CUL/TUV/CE	22.5	11"	2.95	2.49	1.95	1.75
2203354	Adda	AB3505LB-Q80 <sup>†</sup>	5	35 x 35 x 7	0.09	Ball	100	0.5	UL/CUL/TUV/CE	19	12"	9.95	8.95	7.95	6.95
2134096	Adda	AD3505MX-G53	5	35 x 35 x 10	6.0	Hypro	130	0.65	UL/CUL/TUV/CE	30	5.5" <sup>1</sup>	4.95	4.49	3.95	3.49
1708457	Sunon	KDE0504PEB3-8 (MS)	5	40 x 40 x 6.8	3.5	Ball	90	0.45	UL/CUL/TUV	20	6"	4.95	4.49	3.95	3.59
2167242	Adda	AD0405LB-K90(S)-LF	5	40 x 40 x 6.8	4.5	Ball/Sleeve	50	0.25	UL/CUL/TUV/CE	19.9	5.4"	7.95	6.95	6.25	5.95
2133866	Adda	AD0405LX-G70	5	40 x 40 x 10	4.7	Hypro	80	0.40	UL/CUL/TUV/CE	21	11"	5.95	5.39	4.79	4.39
2138628	Adda	AD0405MX-G70-LF	5	40 x 40 x 10	5.7	Ball	110	0.55	UL/CUL/TUV/CE	22	12"	7.95	6.95	5.95	5.49
2131928	Adda	AD0405MX-G76-LF	5	40 x 40 x 10	5.7	Hypro	110	0.55	UL/CUL/TUV/CE	15.9	11" <sup>2</sup>	4.95	4.49	3.95	3.49
1581265	Sunon	KDE0504PFS1-8	5	40 x 40 x 10	7.0	Sleeve	110	0.7	UL	27	12"	6.95	6.25	5.59	4.95
2131910	Adda	AD0405MX-C50-LF	5	40 x 40 x 20	8.1	Hypro	160	0.8	UL/CUL/TUV/CE	27	13"	6.95	6.25	5.59	4.95
2134125	Adda	AP0505HB-J90 <sup>§</sup>	5	50 x 50 x 8	6.0	Ball	140	0.60	UL/CUL/CE	30	5"	4.95	4.49	3.95	3.49
136494	Delta	AFB0505LA	5	50 x 50 x 10	7.4	Ball	120	0.4	UL/CE/CSA/VDE	26	11"	5.95	4.95	3.95	3.49
2150774	Adda	AD0505MB-G70-LF	5	50 x 50 x 10	10.5	Ball	180	0.9	UL/CUL/TUV/CE	24	12"	9.95	8.95	8.49	7.95
2121324	Adda	AD0505MB-G76LF	5	50 x 50 x 10	10.5	Ball	180	0.9	UL/CUL/TUV/CE	24	11" <sup>1</sup>	9.95	8.95	7.95	6.95
2186241	Sunon	KDE0505PVI1.1.MS.AGN	5	50 x 50 x 10	13	Vapo	270	1.4	UL/CUL/VDE	30	16" w/ conn	8.95	7.95	6.95	5.95
2081756	Adda	AD0605HB-D71GL(CS)	5	60 x 60 x 15	16.6	Ball	370	1.8	UL/CUL/TUV/CE	32	6" w/ conn	5.95	5.39	4.79	4.29
1951414	Delta	AFB0605HD	5	60 x 60 x 20	16.6	Ball	360	1.2	UL/CUL/TUV/CE	28	12"	4.95	3.95	3.49	2.95
2132120	Adda	AD0605LB-A72GL	5	60 x 60 x 25	13.8	Ball	150	0.75	UL/CUL/TUV/CE	20.3	12" <sup>1</sup>	5.95	5.39	4.79	4.29
2131944	Adda	AD0605HB-A71-LF	5	60 x 60 x 25	23.2	Ball	450	2.25	UL/CUL/TUV/CE	32	11"	6.95	6.25	5.59	4.95
2095269	Adda	AD2012LX-670(X)	12	20 x 20 x 10	0.6	Hypro	60	0.84	UL/CUL/CE	20	5.5"	9.95	8.95	7.95	6.95
2095306	Adda	AD0212MB-K50 (S)-LF	12	25 x 25 x 6	2.4	Ball/Sleeve	90	1.08	UL/CUL/TUV/CE	26	5.5"	11.95	10.95	10.49	9.95
2179454	Jamicon	KF0210S1H	12	25 x 25 x 10	2.57	Sleeve	120	1.44	UL/TUV/CE	27.4	12"	3.95	3.49	2.95	2.49
1708449	Sunon	KDE1202PFB1-8 (V)	12	25 x 25 x 10	3.1	Ball	80	1.0	UL/CUL	33	6"	5.95	4.95	3.95	3.49
2133958	Adda	AD0312DB-G50	12	30 x 30 x 10	2.18	Ball	50	0.6	UL/CUL/CE	17	12"	5.95	5.39	4.79	4.29
2133860	Adda	AD0312DX-G53	12	30 x 30 x 10	2.45	Hypro	90	0.3	UL/TUV/CE	20.3	5.5" <sup>1</sup>	3.95	3.49	2.95	2.49
212784	Sunon	KDE1203PFB1-8V	12	30 x 30 x 10	5.1	Ball	80	0.9	UL/CUL/TUV/CE/VDE	32	4"	6.95	5.95	4.95	3.95
1928134	Adda	AD0312HB-D50	12	30 x 30 x 15	3.7	Ball	50	1.3	UL/CUL/TUV/CE	22.5	3" w/ conn	3.95	3.49	2.95	2.49
212741	Sunon	KDE1235PFB2-8	12	35 x 35 x 10	4.5	Ball	60	0.8	UL/CUL/TUV/CE/VDE	21	3" w/ conn	7.95	6.95	5.95	4.95
2179411	Sunon	MC35101V1-0000-A99	12	35 x 35 x 10	7.0	Vapo	60	0.72	UL/CSA/TUV/CE	28	6"	11.95	10.95	9.95	8.95
2186224	Delta	FFB03812VHN-F00	12	38 x 38 x 28	20.2	Ball	650	7.8	UL/CSA/VDE/CE	58.5	13" <sup>1</sup>	7.95	6.95	6.25	5.95
2215435	Adda	AD0412HX-K96 (X)	12	40 x 40 x 6	5.4	Hypro	140	0.96	UL/CUL/TUV/CE	30.5	5.5" <sup>1</sup>	8.95	7.95	6.95	6.25
2132162	Adda	AD0412LS-G70(T)	12	40 x 40 x 10	4.7	Sleeve	70	0.84	UL/CUL/TUV/CE	14	12"	5.95	5.39	4.79	4.29
2167630	Sunon	HA04101V4-0000-999	12	40 x 40 x 10	5.3	Vapo	65	0.8	UL/TUV/CE	18.2	12"	6.95	6.25	5.59	4.95
2133915	Adda	AD0412MX-G70	12	40 x 40 x 10	5.7	Hypro	80	0.96	UL/CUL/TUV/CE	20	11.5"	4.95	4.49	3.95	3.49
2197530	JMC	4010-12-HBHA	12	40 x 40 x 10	6.4	Dual Ball	80	0.96	UL/CUL/TUV	25	8" w/ conn <sup>1</sup>	7.95	6.95	6.25	5.59
2205384	Adda	AD0412HB-G70(T)	12	40 x 40 x 10	6.7	Ball	100	1.2	UL/CUL/TUV/CE	25	12"	7.95	6.95	6.25	5.59
2179753	Sunon	MB40101V2-000U-A99	12	40 x 40 x 10	7.0	Vapo	80	1.0	UL/CUL/TUV/CE	27	12" w/ conn	4.95	4.59	4.25	3.95
2133923	Adda	AD0412UX-G70	12	40 x 40 x 10	7.0	Hypro	120	1.2	CE	25	11"	3.95	3.59	3.25	2.95
2167234	Sunon	ME40101V1-0000-A99	12	40 x 40 x 10	8.0	Vapo	90	1.08	UL/CUL/TUV	32	12"	4.95	4.49	3.95	3.49
1708473	Sunon	KDE1204PFV11.MS.A	12	40 x 40 x 10	9.5	Vapo	150	1.8	UL/CUL/TUV	39	12"	5.95	4.95	4.49	3.95
2162821	Delta	AFB0412HHB	12	40 x 40 x 15	5.7	Ball	200	1.08	UL/CUL/CSA/TUV	35	12"	4.95	4.49	3.95	3.49
2133894	Adda	AD0412HB-D56	12	40 x 40 x 15	9.2	Ball	120	1.44	UL/CUL/TUV/CE	39	11" <sup>1</sup>	4.95	4.49	3.95	3.49
195899	Sunon	KDE1204PKS2	12	40 x 40 x 20	6.5	Sleeve	70	0.9	UL/CSA/TUV	25.5	12"	4.95	4.49	3.95	3.59
2134176	Adda	AD0412LB-C50	12	40 x 40 x 20	7.0	Ball	70	0.84	UL/CUL/TUV/CE	25	11"	5.95	5.39	4.79	4.29
2151021	Sanyo Denki	109P0412H601	12	40 x 40 x 20	8.0	Ball	110	1.3	UL/CSA	33	7" w/ conn <sup>1</sup>	6.95	5.95	4.95	4.49
2133907	Adda	AD0412MB-C50	12	40 x 40 x 20	8.5	Ball	80	0.96	UL/CUL/TUV/CE	28.5	11"	4.95	4.49	3.95	3.49
2082100	Sunon	KDE1204PKBX-8	12	40 x 40 x 20	10	Ball	90	1.1	UL/TUV/CE	29.4	4"	7.95	6.95	6.25	5.59
2202845	Sunon	KDE1204PKBX-8	12	40 x 40 x 20	10	Ball	90	1.1	UL/TUV	29.4	17" w/ conn	9.95	8.95	7.95	6.95
1928118	Adda	AD0412HB-C50	12	40 x 40 x 20	10.5	Ball	110	1.2	UL/CUL/TUV/CE	31.9	12"	8.95	7.95	6.95	6.25
2135380	Adda	AD0412UB-C72GP(P)	12	40 x 40 x 20	10.6	Ball	200	2.4	UL/CUL/TUV/CE	34	12" <sup>2</sup>	9.95	8.95	7.95	6.95

<sup>1</sup> 3 leads; speed sensor

<sup>2</sup> 3 leads; locked rotor protection

(All fans operate to their specs with or without the additional optional wire functions)

<sup>§</sup> DC chip cooler

<sup>†</sup> Blower

For case mounting screws, P/Ns 2188481 or 2188490, page 78



# DC Brushless Tubeaxial Fans



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## DC Brushless Tubeaxial Fans & Blowers (Continued)



★ 12V Web Code: LBJ

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1950446



2210909



2099446

Part No.	Manufacturer	Mfr. Part No.	Voltage (VDC)	Size mm (W x H x D)	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection (Leads)	Pricing			
												1	10	50	100
2186232	Delta	FFB0412HN-5T20	12	40 x 40 x 28	10.6	Ball	110	0.84	UL/CSA/TUV	36	3.5" w/ conn <sup>1</sup>	\$3.95	\$3.49	\$2.95	\$2.49
2082089	Sanyo Denki	109P0412H302	12	40 x 40 x 28	11.3	Ball	195	2.3	UL/CSA/TUV	37	3.75"	5.95	4.95	4.49	3.95
2095349	Adda	AD0512MB-G76	12	50 x 50 x 10	10.5	Ball	120	1.4	UL/CUL/TUV/CE	24	11" <sup>1</sup>	9.95	8.95	7.95	6.95
1950446	Sunon	KD1205PFB1(2)H	12	50 x 50 x 10	11.4	Ball	130	1.6	UL/TUV	34.7	12"	7.95	6.95	6.25	5.59
2202992	Sunon	ME50101V1-000U-A99	12	50 x 50 x 10	13.8	Vapo	110	1.3	UL/CUL/TUV	31	12"	7.95	6.95	6.25	5.95
2134117	Adda	AD5012LX-D70	12	50 x 50 x 15	10.4	Hypro	80	0.96	UL/CUL/TUV/CE	22.7	5.5"	5.95	5.49	4.95	4.49
2203004	Sunon	MB50151V1-000U-A99	12	50 x 50 x 15	17	Vapo	87	1.05	UL/CE/TUV/CUL	33	12"	8.95	7.95	6.95	6.25
139601	Adda	AD0512HS-D71	12	52 x 52 x 15	12	Sleeve	100	1.2	UL/CSA/CE	29	5"	3.95	3.49	2.95	2.49
139602	Adda	AD0512HS-D71-LF	12	52 x 52 x 15	12	Sleeve	100	1.2	UL/CSA/CE	29	6"	8.95	7.95	6.95	6.25
2133991	Adda	AD0612LX-G70	12	60 x 60 x 10	10	Hypro	120	1.44	UL/CUL/TUV/CE	26	11"	6.95	6.25	5.59	4.95
2121332	Adda	AD0612LX-G76(T)	12	60 x 60 x 10	10	Hypro	110	1.32	UL/CUL/TUV/CE	26	11" <sup>1</sup>	6.95	6.25	5.59	4.95
2205499	Adda	AD0612HB-G90	12	60 x 60 x 10	14.06	Ball	140	1.6	UL/TUV/CE	32.8	4.5" w/ conn	6.95	6.25	5.49	4.95
2095357	Adda	AD0612HB-G70	12	60 x 60 x 10	14.5	Ball	150	1.8	UL/CUL/TUV/CE	32	11"	7.95	6.95	6.25	5.95
1946025	Evercool	EC6010M12CA	12	60 x 60 x 10	15.5	Ball	160	1.9	UL/CE/TUV	30	9" <sup>1</sup>	8.95	7.95	6.95	6.25
2217959	Thermactive	RDM6010B1	12	60 x 60 x 10	15.9	Ball	170	2.04	UL/CUL/TUV/CE	31	12"	8.95	7.95	6.95	6.25
2210909	Delta	AFB0612LB-TXNS	12	60 x 60 x 15	11.55	Ball	100	0.84	UL/CSA/CE	24	6" w/ conn	5.95	4.95	4.49	3.95
687771	Sunon	KDE1206PHS1	12	60 x 60 x 15	19	Sleeve	220	0.6	UL/CSA/TUV/CE	36	11"	3.95	3.49	2.95	2.49
2167568	Sunon	ME60151V1-0000-A99	12	60 x 60 x 15	25.2	Vapo	160	1.92	UL/TUV/CE	36.2	12"	6.95	5.95	5.49	4.95
144161	Adda	AD0612LB-C70GL	12	60 x 60 x 20	12.6	Ball	80	1.0	UL/CSA/TUV	22.7	12"	6.95	5.95	4.95	4.49
2133982	Adda	AD0612LS-C70(GL)	12	60 x 60 x 20	13.3	Sleeve	80	0.96	UL/CSA/TUV/CE	21.6	12"	3.95	3.49	2.95	2.49
2134002	Adda	AD0612MS-C70GL	12	60 x 60 x 20	14.5	Sleeve	130	1.56	UL/CSA/TUV/CE	25.7	12"	3.95	3.49	2.95	2.49
2155292	Comair Rotron	GDA6025-12BB	12	60 x 60 x 25	18	Ball	140	1.7	UL/CUL/TUV	26.1	12"	4.95	3.95	3.49	2.95
2162847	NMB	2410ML-04W-B30	12	60 x 60 x 25	19	Ball	117	1.4	UL/CSA/VDE/CE	29	12"	4.95	3.95	3.49	2.95
2205149	Sunon	MB60251V2-000U-G99	12	60 x 60 x 25	19.3	Vapo	74	0.8	UL/CUL/CE/TUV	29	12" <sup>1</sup>	9.95	8.95	7.95	6.95
2217941	Thermactive	RDH6025B-FG	12	60 x 60 x 25	20.3	Ball	140	1.68	UL/CUL/TUV/CE	29	12" <sup>1</sup>	7.95	6.95	6.25	2.59
2150766	Adda	AD0612HB-A72GL	12	60 x 60 x 25	23.2	Ball	230	2.7	UL/CUL/TUV/CE	32.3	12" <sup>2</sup>	7.95	6.95	5.95	4.95
2158451	Sunon	EB60251S1-0000-999	12	60 x 60 x 25	23.5	Sleeve	156	1.6	UL/CUL/TUV	33.5	12"	6.95	6.25	5.49	4.95
2162839	EBM Papst	TYP612	12	60 x 60 x 25	24	Ball	146	1.7	UL/CSA/TUV	40	12"	7.95	6.95	5.95	4.95
2158311	Delta	AFB0612EH-BF00	12	60 x 60 x 25	38.35	Ball	480	5.76	UL/CSA/CE	46.5	8" w/ conn <sup>1</sup>	11.95	10.95	9.95	8.95
2125561	AVC	DE07015R12U	12	70 x 70 x 15	43	Hydraulic	700	8.4	UL/CE/TUV	46	8" w/ conn	5.95	4.95	3.95	2.95
2099446	Adda	AD7512LB (2A) <sup>†</sup>	12	76 x 76 x 30	6.9	Ball	110	1.32	UL/CUL/TUV/CE	29	15" w/ conn <sup>2</sup>	5.95	4.95	3.95	2.95
2192561	Adda	AD0812LB-D70(T)	12	80 x 80 x 15	20	Ball	90	1.08	UL/CSA/TUV/CE	19.6	12"	7.95	6.95	5.95	5.49
2132007	Adda	AD0812HS-D70-LF	12	80 x 80 x 15	38.6	Sleeve	250	3.0	UL/CSA/TUV/CE	33	12"	6.95	6.25	5.59	4.95
2095365	Adda	AD0812XX-D71	12	80 x 80 x 15	39.4	Hypro	350	4.2	UL/CSA/TUV/CE	42	11"	8.95	7.95	6.95	5.95
141921	Adda	AD0812HB-C70	12	80 x 80 x 20	27.3	Ball	240	2.9	UL/CSA/CE	34	12"	10.95	9.95	8.95	7.95
234894	Adda	AD0812LB-A70GL	12	80 x 80 x 25	27	Ball	120	1.44	UL/CSA/TUV/CE	22.5	12"	5.95	5.39	4.79	4.29
688597	NMB	3110GL-B4W-B19-PA1	12	80 x 80 x 25	30	Ball	120	1.2	UL/CSA/TUV/CE	22	12" w/ conn <sup>1</sup>	5.95	5.35	4.79	4.29
2151099	Sunon	KDE1208PTV3.13.MS.A.GN	12	80 x 80 x 25	31	Vapo	70	0.8	UL/CUL/TUV/CE	26	12"	6.95	5.95	4.95	4.49
123530	Adda	AD0812MS-A70GL	12	80 x 80 x 25	32	Sleeve	150	1.8	UL/CSA/TUV	28.3	12"	6.95	5.95	4.95	4.59
1955010	NMB	3110KL-04W-B40	12	80 x 80 x 25	35.3	Ball	200	2.40	UL/CSA/TUV/CE	31	13"	6.95	6.25	5.59	4.95
2135697	Panaflo	FBM-08A12H	12	80 x 80 x 25	39.6	Sleeve	220	2.1	UL/CSA	32	12" w/ conn	4.95	3.95	3.49	2.95
2125835	Globe	B01138812H-3M	12	80 x 80 x 25	39.8	Ball	230	2.76	UL/CSA/TUV/CE	32.6	10" w/ conn <sup>1</sup>	3.95	3.49	2.95	2.49
2205157	ValuePro	RD8025B12N30	12	80 x 80 x 25	40.2	Dual Ball	140	1.7	UL/CUL/TUV	35.4	12"	7.95	6.95	5.95	5.49
2210984	Sunon	EE80251B1-0000-A99	12	80 x 80 x 25	41	Ball	145	1.7	UL/CUL/TUV/CE	33	12"	7.95	7.49	6.95	6.25
323897	Mechatronics	F8025E12BFS	12	80 x 80 x 25	46	Ball	290	3.5	UL/CSA/TUV	32	12"	5.95	4.95	4.49	3.95
2100401	Adda	AD0812US-A70GL	12	80 x 80 x 25	49	Sleeve	300	3.6	UL/CUL/TUV/CE	41	12"	8.95	7.95	6.95	6.25
2081078	Jamicon	JF0825B1UR	12	80 x 80 x 25	52	Dual Ball	370	4.4	UL/CUL/TUV/CE	40	12"	9.95	8.95	7.95	7.49
2210933	Sunon	PF80251V1-0000-A99	12	80 x 80 x 25	60	Vapo	341	4.1	UL/CUL/TUV	46.5	12"	12.95	11.95	10.95	9.95
2209001	Sanyo Denki	9GV0812P4K03	12	80 x 80 x 25	74.8	Ball	870	10.4	UL/CUL/TUV	52	12" <sup>5</sup>	9.95	8.95	7.95	6.95
107406	EBM Papst	8312GHL	12	80 x 80 x 32	39.4	Sleeve	330	4.0	UL/CE/CSA/VDE	43	12"	9.95	8.95	7.95	6.25
1928100	Adda	AD0812XB-A71DS	12	80 x 80 x 38	99	Ball	1000	18.0	UL/CSA/TUV/CE	46	12"	9.95	8.95	7.95	6.95
1952783	Nidec	TA350DC-M34138-34	12	92 x 92 x 25	35	Ball	160	1.92	UL/CSA	26.4	10" w/ conn <sup>3</sup>	3.95	3.49	2.95	2.49
1952257	AVC	C9025S12L	12	92 x 92 x 25	37.2	Sleeve	150	1.8	UL/CUL/TUV/CE	26.2	5.5" <sup>1</sup>	2.95	2.59	2.29	1.95
1952880	Nidec	TA350DC-M33422-57G4	12	92 x 92 x 25	48	Ball	290	3.48	UL/CSA	35	10" w/ conn <sup>4</sup>	4.95	3.95	2.95	2.49
154641	Nidec	TA350DC-M33422-16	12	92 x 92 x 25	48	Ball	290	3.5	UL/CSA	35	12"	9.95	8.95	7.95	6.95
2138994	Adda	AD0912UB-A71GL	12	92 x 92 x 25	60	Ball	390	4.68	UL/TUV/CE	39.4	50"	8.95	7.95	6.95	5.95
2172711	Mechatronics	MC9238X12B-FS	12	92 x 92 x 38	80.5	Ball	720	8.6	UL/CUL/TUV	47.5	12"	8.95	7.95	6.95	5.95

<sup>1</sup> 3 leads; speed sensor    <sup>2</sup> 3 leads; locked rotor protection    <sup>3</sup> 4 leads; wired for Dell proprietary PWM circuit control w/ tach (blue), lock rotor (yellow) & fan guard

<sup>4</sup> Thermocoupler    <sup>5</sup> 4 leads with speed sensor, PWM control    <sup>†</sup> Blower

For case mounting screws, P/Ns 2188481 or 2188490, page 78

Continued on next page

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2217756



2138679



2218046

### mm to Inches Conversion Chart

mm	6	6.8	10	15	20	25	28	30	32	35	38	40	45	51	60	70	75	76	80	92	94	95	97	120	125	126	127	150	172
Inches	0.24	0.27	0.40	0.60	0.80	1.00	1.10	1.18	1.26	1.40	1.50	1.60	1.80	2.00	2.36	2.76	2.95	2.99	3.15	3.63	3.70	3.74	3.82	4.72	4.92	4.96	5.00	5.90	6.77

Fans

Part No.	Manufacturer	Mfr. Part No.	Voltage (VDC)	Size mm (W x H x D)	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection (Leads)	Pricing			
												1	10	50	100
174140	Common Wealth	FP108MS3	12	120 x 120 x 25	62	Sleeve	140	1.7	UL/CSA/TUV/CE	25	12"	\$8.95	\$7.95	\$7.25	\$6.49
227901	Common Wealth	FP-108M-S1-B	12	120 x 120 x 25	88	Ball	360	4.32	UL/CSA/VDE/CE	42	12"	11.95	10.95	9.95	8.95
2170927	Adda	AD1212US-A71GL-LF	12	120 x 120 x 25	98.6	Sleeve	500	6.0	UL/CUL/TUV/CE	43.3	11"	8.95	7.95	7.25	6.49
2134045	Adda	AD1212LB-F51	12	120 x 120 x 38	72.3	Ball	240	2.88	UL/CUL/TUV/CE	32.9	11"	7.95	6.95	5.95	4.95
2211012	EBM Papst	4112GX	12	120 x 120 x 38	94	Sleeve	290	3.5	UL/CSA/CE	44	Terminals	11.95	10.95	9.95	8.95
2217756	Sanyo Denki	109R1212H1D01	12	120 x 120 x 38	102.4	Ball	520	4.7	UL/CSA/TUV	39	12" 1	10.95	9.95	8.95	7.95
2173079	Sunon	EEC0381B2-0000-A99	12	120 x 120 x 38	116	Ball	425	5.1	UL/CUL/TUV/CE	44	12"	14.95	13.95	12.95	11.95
1952791	NMB	4715KL-04W-B46	12	120 x 120 x 38	118	Ball	900	8.4	UL/CSA/TUV/CE	47	7" w/ conn 2	7.95	6.95	6.25	5.59
2197564	T&T	MWP1238M12B	12	120 x 120 x 38	119.6	Dual Ball	700	8.4	UL/TUV	42.6	12" w/ conn	9.95	8.95	7.95	6.95
2138661	Mechatronics	F1238E12B-FS	12	120 x 120 x 38	126	Dual Ball	700	8.5	UL/CUL/TUV	43	12"	10.95	9.95	8.95	7.95
2138679	Mechatronics	F1238E12B2	12	120 x 120 x 38	126	Ball	700	8.5	UL/CUL/TUV	43	12" 2	11.95	10.95	9.95	8.95
2197716	Thermactive	RGH1238-B1-FG	12	120 x 120 x 38	226	Ball	3600	43.2	UL/CUL/TUV/CE	65	12" 1	17.95	15.49	13.95	11.49
2203426	Adda	AD1312UB-F51(CU)	12	127 x 127 x 38	193	Ball	1220	14.6	UL/CUL/CE	56	12"	14.95	13.49	11.95	10.95
2167605	Adda	AD0424HB-G70-LF	24	40 x 40 x 10	6.2	Ball	90	2.16	UL/CUL/TUV/CE	26	12"	9.95	8.95	7.95	6.95
2133931	Adda	AD0424HB-G73	24	40 x 40 x 10	6.7	Ball	90	2.16	UL/CUL/TUV/CE	25	12" 1	10.95	9.95	8.95	7.95
2217924	Thermactive	RDH4010B2	24	40 x 40 x 10	7.6	Ball	90	2.16	UL/CUL/TUV/CE	33	12"	10.95	9.95	8.95	7.95
2158514	Sunon	MB40202V2-0000-A99	24	40 x 40 x 20	7.7	Vapo	33	2.16	UL/CUL/TUV/CE	21	12"	9.95	8.95	7.95	6.95
2217932	Thermactive	RDH4020B2	24	40 x 40 x 20	8.1	Ball	70	1.68	UL/CUL/TUV/CE	31	12"	10.95	9.95	8.95	7.95
2133940	Adda	AD0424UB-CS6	24	40 x 40 x 20	9.6	Ball	90	2.16	CE	37	11" 2	7.95	6.95	5.95	4.95
1708422	Sunon	KDE2406PHS3	24	60 x 60 x 15	15	Sleeve	50	1.2	UL/CUL/TUV/CE	31	12"	7.95	6.95	6.25	5.59
2188588	Sunon	ME60152V2-0000-A99	24	60 x 60 x 15	21.9	Vapo	85	2.04	UL/CUL/TUV	32.5	12"	8.95	7.95	6.95	6.25
2134029	Adda	AD0624MB-C70GL	24	60 x 60 x 20	14.5	Ball	80	1.92	UL/CUL/CE	28	12"	4.95	3.95	3.49	2.95
189861	Jamicon	JF0625B2M-005-065R	24	60 x 60 x 25	19	Ball	130	3.1	UL/TUV/CE	31.3	10"	8.95	7.95	6.95	6.25
1928071	Adda	AD0624HB-A70GL	24	60 x 60 x 25	25	Ball	150	3.6	UL/CSA/TUV/CE	36.9	12"	8.95	7.95	6.95	6.25
212628	Adda	AD0624UB-A71GL	24	60 x 60 x 25	26.9	Ball	160	3.84	UL/CUL/CE	37.9	13"	8.95	7.95	6.95	6.25
290029	Jamicon	JF0825B2M	24	80 x 80 x 25	32.52	Dual Ball	130	3.1	UL/CUL/TUV/CE	27.8	10"	9.95	8.95	7.95	6.95
136161	Jamicon	JF0825B2H	24	80 x 80 x 25	38.74	Dual Ball	150	3.6	UL/CSA/TUV	31	10"	9.95	8.95	7.95	6.95
2158565	Sunon	EE80252B1-0000-A99	24	80 x 80 x 25	41	Ball	75	1.8	UL/CUL/TUV/CE	33	12"	9.95	8.95	7.95	6.95
1928388	Adda	AD0824UB-A72GL	24	80 x 80 x 25	50	Ball	260	6.24	UL/CUL/CE/TUV	41	12" 2	10.95	9.95	8.95	7.95
2134150	Adda	AQ0824UB-A71GL *	24	80 x 80 x 25	50	Ball	260	6.24	CE	41	12"	11.95	10.95	9.95	8.95
2211160	IMC Boxer	3113PL05WB30	24	80 x 80 x 32	28	Ball	130	3.1	UL/CUL	31	12"	8.95	7.95	6.95	6.25
1951051	Mechatronics	E9225L24B1-FS	24	92 x 92 x 25	35	Ball	85	2.04	UL/CUL	27	12" 1	4.95	3.95	2.95	2.49
2203071	NMB	3610PL05WB30	24	92 x 92 x 25	41	Ball	87	2.1	UL	33	11"	7.95	6.95	6.25	5.59
2203080	Nidec	TA350DC-A31394-55	24	92 x 92 x 25	42	Ball	140	3.12	UL/CSA	40	3" w/ conn	4.95	4.49	3.95	3.59
2215751	NMB/IMC	3610PL-05W-B20-100	24	92 x 92 x 25	43	Ball	90	2.2	UL/CUL/TUV	39	12"	5.95	4.95	4.49	3.95
2155065	Delta	AFB0924H-R00	24	92 x 92 x 25	51.2	Ball	200	4.8	UL/CSA/CE	34	12" 2	8.95	7.95	6.95	5.95
2158303	Sunon	EE92252B1-0000-A99	24	92 x 92 x 25	51.5	Dual Ball	87	2.1	UL/CE/TUV	34	12"	10.95	9.95	8.95	7.95
2115557	Sunon	KD2412PTB3-6A.GN	24	120 x 120 x 25	69	Ball	120	2.9	UL/CUL/TUV/CE	35.5	12"	8.95	7.95	6.95	5.95
2121527	Adda	AD1224MB-A71GL	24	120 x 120 x 25	80.5	Ball	170	4.08	UL/CUL/TUV/CE	38	12"	11.95	10.95	9.95	8.95
2218046	Adda	AD1224UB-A70GL	24	120 x 120 x 25	99	Ball	250	6.0	UL/CUL/TUV/CE	43.3	11"	12.95	11.95	10.95	9.95
2197556	Coolmax	1225M24B-ZD1	24	120 x 120 x 25	103.8	Dual Ball	300	7.2	UL/TUV	42.5	6" w/ conn	9.95	8.95	7.95	6.95
2211021	EBM Papst	4124GX	24	120 x 120 x 38	87	Sleeve	138	3.3	UL/CSA/CE	43	Terminals	12.95	11.95	10.95	9.95
694524	Jamicon	JF1238B2MR-R	24	120 x 120 x 38	101.3	Ball	230	5.28	UL/CSA/TUV/CE	39.1	9"	15.95	14.95	13.95	12.49
2134061	Adda	AD1224HS-F51	24	120 x 120 x 38	105	Sleeve	320	7.68	UL/CSA/TUV/CE	40.7	10.5"	8.95	7.95	6.95	5.95
2215478	Conair Rotron	MD24B2	24	120 x 120 x 38	110	Ball	250	6.0	UL/CSA/TUV/CE	50	Terminals	10.95	9.95	8.95	7.95
1809910	Sunon	KD2412PMSX-6A	24	120 x 120 x 38	119	Sleeve	300	7.2	UL/CUL/TUV/CE	45	12"	8.95	7.95	6.95	5.95
2197433	EBM Pabst	4214NHHR	24	120 x 120 x 38	120.7	Ball	313	7.5	UL/CSA/CE	49	12"	12.95	11.49	10.95	9.95
2144761	Mechatronics	F1238X24B-FS	24	120 x 120 x 38	140	Dual Ball	500	12	UL/CUL/TUV	45	12"	15.95	14.49	12.95	11.49
2197724	ThermActive	RGH1238B2-FG	24	120 x 120 x 38	226	Ball	1700	40.8	UL/CUL/CE	65	12" 1	19.95	17.95	16.49	14.95
2197708	ThermActive	RDL1725B2-ST	24	172 (Dia.) x 51 (H)	235	Ball	950	22.8	UL/CUL	56	Terminals	29.95	26.95	23.95	21.95
2121341	Adda	AD0848UB-Y51	48	80 x 80 x 32	55.3	Ball	140	6.72	UL/CUL/TUV/CE	44	12"	9.95	8.95	7.95	6.95
2135371	Adda	AD0948MB-F91DS(M)	48	92 x 92 x 38	93.5	Dual Ball	160	7.6	CE	48.5	12"	12.95	11.49	9.95	8.95
2134192	Adda	AD1248UB-Y51	48	120 x 120 x 32	131	Ball	210	10.08	UL/CUL/TUV/CE	48.4	11"	10.95	9.95	8.95	7.95
689063	EBM Pabst	W2G115-AG75-85	48	127 x 127 x 38	155	Ball	310	15	UL/CUL	52	10" 1	11.95	10.95	9.95	8.95
2134352	Adda	AD1348HB-F53	48	127 x 127 x 38	161	Ball	230	11	UL/CUL/TUV/CE	53	11" 1	9.95	8.95	7.95	6.95
1954711	Delta	EFB1348HHE-SV06	48	127 x 127 x 38	168	Ball	360	20	UL/CSA/VDE/CE	52	26" 1	5.95	4.95	4.49	3.95

1 3 leads; speed sensor 2 3 leads; locked rotor protection (All fans operate to their specs with or without the additional optional wire functions)

For case mounting screws, P/Ns 2188481 or 2188490, page 78

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Part No.	Manufacturer	Mfr. Part No.	Voltage (VAC)	Size mm (W x H x D)	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection	Pricing			
												1	10	50	100
213867	Fulltech	UF60D11BWH	120	60 x 60 x 30	10.2	Ball	35	4	UL/CUL/VDE/CE	28	12" leads	\$17.95	\$16.49	\$15.95	\$14.49
146078	Common Wealth	FP108AX-S1-B	120	80 x 80 x 25	23	Ball	180	14	UL/CE	29	12" leads	15.95	14.49	12.95	11.95
300557	Fulltech	UF80B11SWH	120	80 x 80 x 25	24	Sleeve	140	14	UL/CUL/TUV/CE	35	12" leads	13.95	12.95	11.95	10.95
300600	Fulltech	UF80A11BWH	120	80 x 80 x 38	29	Ball	120	12	UL/CUL/TUV/CE	36	12" leads	15.95	14.49	12.95	11.49
300389	Fulltech	UF80A11BTH	120	80 x 80 x 38	30	Ball	120	12	UL/CUL/TUV/CE	36	Terminals	15.95	14.49	12.95	11.49
2126096	Common Wealth	FP-108B **	120	92 x 92 x 25	22	Ball	60	8	UL/CSA	24	15" leads	9.95	8.95	7.95	6.95
303467	Sunon	SF11592A-1092HBL-GN	120	92 x 92 x 25	37	Ball	110	12	UL/CSA/TUV/CE	40	12" leads	12.95	11.95	10.95	9.95
75460	Sunon	SF11592A-1092HBT-R	120	92 x 92 x 25	37	Ball	110	12	UL/CSA/TUV/CE	40	Terminals	10.95	9.95	8.95	7.95
2135275	Common Wealth	FP-108JC	120	92 x 92 x 38	45	Sleeve	150	10	UL/CSA/CE	37	12" leads	11.95	10.95	9.95	8.95
1810048	Sunon	SP101AT-1122HBL-GN	120	120 x 120 x 25	78	Ball	180	18	UL/CUL/TUV/CE	46	12" leads	16.95	14.95	13.49	11.95
124063	Sunon	SP101AT-1122HBT	120	120 x 120 x 25	78	Ball	180	18	CSA/TUV/CE	46	Terminals	16.95	14.95	13.49	11.95
303361	Fulltech	UF12A11BTL1	120	120 x 120 x 38	64	Ball	80	15	UL/CUL/TUV/CE	37	Terminals	14.95	13.49	11.95	10.95
2205392	Adda	AA1281MB-AW	120	120 x 120 x 38	80	Ball	250	15.8	UL/CUL/TUV/CE	40	12" leads	11.95	10.95	9.95	8.95
2205405	Adda	AA1281MB-AT	120	120 x 120 x 38	80	Ball	250	15.8	UL/CUL/TUV/CE	40	Terminals	11.95	10.95	9.95	8.95
106586	Common Wealth	FP108-1-S1/T	120	120 x 120 x 38	105	Sleeve	180	12	UL/CSA/CE	47	Terminals	12.95	11.95	10.95	9.95
16935	Common Wealth	FP108-1-S1-B/T	120	120 x 120 x 38	105	Ball	200	17	UL/CSA/TUV/CE	47	Terminals	13.95	12.49	11.95	10.49
212600	Fulltech	UF12A11BWH	120	120 x 120 x 38	106	Ball	190	15	UL/CUL/TUV/CE	46	12" leads	15.95	14.49	12.95	11.49
1707163	Sunon	SP101A-1123HBL-GN	120	120 x 120 x 38	107	Ball	180	18	UL/CSA/TUV	50	12" leads	15.95	14.49	12.95	11.49
2197687	ThermActive	SAH1238B3A-L	120	120 x 120 x 38	111	Ball	300	24	UL/CUL/CE	44	12" leads	13.95	12.95	11.49	10.95
2125931	Common Wealth	FP108-1	120	120 x 120 x 38	112	Ball	250	19	UL/CUL/TUV/CE	45	Terminals	13.95	12.95	11.49	10.95
102884	Sunon	SP100A-1123XBT	120	120 x 120 x 38	117	Ball	240	20	UL/CUL/TUV/CE	50	Terminals	17.95	15.95	14.49	12.95
2218038	Common Wealth	FP-108EXM	120	172 x 150 x 38	205	Ball	400	30	UL/CUL/TUV	49	Terminals	34.95	31.95	28.95	24.95
2215700	Adda	AA1751HB-AT	120	172 x 150 x 51	210	Ball	430	36	UL/TUV/CE	53	Terminals	29.95	26.95	23.95	19.95
189684	Fulltech	UF15PC11BTH	120	172 x 150 x 51	226	Ball	250	30	CSA	58	Terminals	36.95	34.95	32.95	29.95
212582	Fulltech	UF15PC11BWH	120	172 x 150 x 51	226	Ball	250	30	UL/CUL/TUV/CE	58	12" leads	36.95	34.95	32.95	29.95
1950956	Arctic	KEST-481BW	120	172 x 150 x 51	260	Ball	620	46	UL/CE/TUV	61	12" leads	34.95	29.95	26.95	24.25
100918	Sunon	SF23080A/2083HSL	220	80 x 80 x 38	30	Sleeve	60	13.5	UL/CSA/TUV/CE	35	12" leads	15.95	13.95	12.49	10.95
355630	Fulltech	UF-80A23-BTH-R	220	80 x 80 x 38	30	Ball	60	12	UL/CSA/VDE/CE	36	Terminals	15.95	14.49	12.95	11.49
2120837	EG&G Rotron	SU3G1	220	80 x 80 x 38	32	Sleeve	70	10	UL/CSA	39	12" leads	12.95	11.95	10.49	8.95
2150918	Mechatronics	UF12B23-BTL	220	120 x 120 x 25	53	Ball	60	14	UL/CSA/CE	33	Terminals	10.95	9.95	8.95	7.95
2217983	ETRI	125XR-0281-001	220	120 x 120 x 38	94	Ball	125	18	UL/CSA	44	Terminals	14.95	13.95	12.95	11.95
2188676	Comair Rotron	GAA1238-230BB	220	120 x 120 x 38	111	Dual Ball	200	10	UL/CUL/TUV/CE	44	Terminals	11.95	10.95	9.95	8.95
303459	Sunon	DP200A-2123XBL	220	120 x 120 x 38	117	Ball	120	21	UL/CSA/TUV/CE	50	12" leads	15.95	14.95	13.95	12.95
102892	Sunon	DP200A-2123XBT	220	120 x 120 x 38	117	Ball	120	21	UL/CSA/TUV/CE	50	Terminals	17.95	15.95	14.49	12.95
2151072	Sunon	SF1212ADBL-GN*	120/220	120 x 120 x 38	95/115	Ball	270	21.5	UL/CUL/CE	47	12" leads	12.95	11.95	10.49	8.95
2205624	Adda	AK1752HB-LF(AT)	220	172 x 150 x 51	210	Ball	160	36.8	UL/CUL/TUV/CE	65	Terminals	49.95	44.95	39.95	34.95

\* 4 wire leads, dual voltage

\*\* 24 AWG quick disconnect terminals

For case mounting screws, P/Ns 2188481 or 2188490, page 78

## Fan Guards & Aluminum Washable Filters

\* Web Code: **UAR**

• Guards and filters fit all fans. Please match by size dimension.

Example: P/N 300557 fan (80mm) matches P/N 31924 metal guard (80mm).

Part No.	mm	Description	Fig.	1	10	50	100
123502	40	Metal (chrome) guard	1	\$ .59	\$ .55	\$ .49	\$ .45
120038	60	Metal (chrome) guard	1	.65	.59	.55	.49
2172851	60	Metal (gold plated) guard	2	.49	.45	.39	.35
687666	60	Metal (black anodized) guard	2	.85	.79	.75	.69
31924	80	Metal (chrome) guard	1	.69	.65	.59	.55
1928433	80	Metal (black anodized) guard	2	.79	.69	.65	.59
2172869	80	Metal (gold plated) guard	2	.55	.49	.45	.39
123511	92	Metal (chrome) guard	1	.75	.69	.65	.59
2135689	92	Metal (black anodized) guard	2	.59	.49	.45	.39
2172877	92	Metal (gold plated) guard	2	.55	.49	.45	.39
25735	120	Metal (chrome) guard	1	.79	.75	.69	.65
695068	120	Metal (black anodized) guard	2	1.09	.99	.89	.79
695076	127	Metal (chrome) guard	1	.89	.79	.69	.59

Fig. 1



Fig. 2



Fig. 3



Part No.	mm	Description	Fig.	1	10	50	100
1811198	172	Metal (chrome) guard	1	\$ .99	\$ .89	\$ .79	\$ .69
1952290	80	Plastic guard only	3	.59	.49	.39	.35
1952661	92	Plastic guard only	3	.69	.59	.55	.49
1952679	120	Plastic guard only	3	.79	.69	.59	.49
1952687	150	Plastic guard only	3	1.09	.99	.89	.79
1952695	40	Plastic guard w/ mesh	4	1.59	1.49	1.35	1.25
1952708	60	Plastic guard w/ mesh	5	1.65	1.49	1.39	1.29
2158135	80	Plastic guard w/ mesh	4	1.49	1.35	1.19	1.09
138562	80	Plastic guard w/ mesh (clip)	5	1.79	1.69	1.59	1.45
229665	92	Plastic guard w/ mesh	4	1.59	1.45	1.29	1.15
196817	120	Plastic guard w/ mesh	4	2.19	2.09	1.95	1.79
138580	80	Alum. washable filter	6	2.25	1.95	1.79	1.59
130105	120	Alum. washable filter	6	3.49	3.15	2.75	2.49

Fig. 4



Fig. 5



Fig. 6



## DC & AC Plug Fan Power Cords

\* Web Code: **GAE**

For Fans with Terminal Connection

Part No.	Description	Fig.	Length	1	10	100	250
28564	Straight pigtail fan cord	1A	24"	\$1.49	\$1.25	\$ .99	\$ .89
2076658	Straight pigtail fan cord	1A	36"	1.75	1.59	1.45	1.29
1952548	45° pigtail fan cord	2A	24"	1.59	1.35	1.09	.99
104192	90° pigtail fan cord	3A	24"	1.59	1.35	1.09	.99
1952572	Straight AC plug fan cord	1B	72"	3.95	3.59	3.19	2.49
1952581	45° AC plug fan cord	2B	72"	4.95	4.59	3.95	3.49

\* For additional products, availability and specifications, visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box.

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# AC-to-AC & AC-to-DC Regulated Switching Wall Adapters

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## AC-to-AC Wall Adapters

Input: 120VAC @ 60Hz



\*Web Code: ABQ



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Part No.	Manufacturer	Product No.	Output Rating		Output Connector ID x OD mm Female/Male	Size (H" x W" x D")	Case Color	Output Cord Length	Wt. (lbs.)	Agency Approvals	Pricing			
			Voltage (VAC)	Current (mA)							1	10	50	100
2082521	Arndt Electronics	5-2634	5	400	1.7mm x 5.5mm right angle F	2.0 x 1.4 x 1.3	White	6'	0.4	UL/CSA	\$2.49	\$1.95	\$1.75	\$1.49
2082530	Arndt Electronics	5-2633	5	400	1.7mm x 5.5mm right angle F	2.0 x 1.4 x 1.3	Black	6'	0.4	UL/CSA	2.49	1.95	1.75	1.49
100061	ReliaPro	ACU090050	9	500	2.1mm x 5.5mm F	2.7 x 1.9 x 1.7	Black	6'	0.6	UL/CUL	8.95	7.95	6.95	5.95
2202773	Bogen	PI-41-43A	9	780	2.1mm x 5.5mm right angle F	2.4 x 2.0 x 1.6	Black	6'	0.6	UL/CSA	8.95	7.95	6.95	5.95
102234	ReliaPro	ACU090100	9	1000	2.1mm x 5.5mm F	2.5 x 2.0 x 1.7	Black	6'	0.6	UL/CUL	9.95	8.95	7.95	6.95
157041	ReliaPro	ACU090100E8942	9	1000	2.5mm x 5.5mm F	2.1 x 2.1 x 1.6	Black	6'	0.6	UL/CUL	9.95	8.95	7.95	6.95
2167648	OEM	AA091A5	9	1500	2.1mm x 5.5mm F	2.4 x 2.4 x 1.9	Black	6'	0.8	UL/CSA	8.95	7.95	6.95	5.95
112336	ReliaPro	ACU090150	9	1500	2.5mm x 5.5mm F	2.5 x 2.2 x 2.0	Black	6'	0.9	UL/CUL	10.95	9.95	8.95	7.95
101258	ReliaPro	ACU120050	12	500	2.1mm x 5.5mm F	2.5 x 2.0 x 1.7	Black	6'	0.6	UL/CUL	8.95	7.95	6.95	5.95
2179614	ReliaPro	ACU120050R	12	500	2.5mm x 5.5mm F	2.5 x 2.0 x 1.7	Black	6'	0.4	UL/CUL	8.95	7.95	6.95	5.95
10081	ReliaPro	AD-1201000AU1	12	1000	2.1mm x 5.5mm F	2.5 x 2.0 x 1.6	Black	6'	0.7	UL/CUL	9.95	8.95	7.95	7.29
100167	ReliaPro	ACU120100D0531	12	1000	2.5mm x 5.5mm F	3.2 x 2.4 x 2.0	Black	6'	0.7	UL/CUL	9.95	8.95	7.95	7.29
10428	ReliaPro	ACU120100Z9121	12	1000	3.5mm M	2.6 x 2.4 x 2.0	Black	6'	0.6	UL/CUL	8.95	7.95	6.95	6.29
2167576	Arndt Electronics	AM-121200A	12	1200	2.1mm x 5.5mm right angle F	3.2 x 2.1 x 1.9	Black	6'	0.9	UL/CSA	7.95	6.95	5.95	5.49
167151	ReliaPro	ADU120150	12	1500	2.1mm x 5.5mm F	3.4 x 2.7 x 2.2	Black	6'	1.5	UL/CUL	11.95	10.95	9.95	8.95
307838	ReliaPro	ADU120160H4120	12	1600	2.5mm x 5.5mm F	2.9 x 2.3 x 1.9	Black	6'	1.0	UL/CUL	12.95	11.95	10.95	9.95
206404	ReliaPro	MGT1220	12	1670	Screw terminals with green LED	3.2 x 2.2 x 1.9	White	—	0.9	UL	9.95	8.95	7.95	7.29
2197581	ReliaPro	GPU48120200WA00	12	2000	2.1mm x 5.5mm F	3.3 x 2.6 x 2.2	Black	6'	1.7	UL/CUL	14.95	13.49	11.95	10.49
2197847	Arndt Electronics	A71235DC	12	3500	Stripped & tinned (Table-Top style)	3.9 x 2.7 x 2.2	Black	6'	2.1	UL/CSA	11.95	10.95	9.95	8.95
2138978	Arndt Electronics	JOD-48U-12A	13.5	1000	1.3mm x 3.5mm F	2.8 x 2.2 x 1.9	Black	6'	0.6	UL/CUL	5.95	4.95	4.49	3.95
2202765	Arndt Electronics	240000000043	13.5	1000	2.1mm x 5.5mm F	2.8 x 2.2 x 1.8	Black	6'	0.6	UL/CUL	5.95	4.95	4.49	3.95
171408	ReliaPro	ACU140050	14	500	2.1mm x 5.5mm F	2.8 x 2.0 x 1.6	Black	6'	0.6	UL/CUL	8.95	7.95	6.95	6.25
318684	ReliaPro	ACU140085	14	850	2.5mm x 5.5mm right angle F	2.5 x 2.0 x 1.7	Black	6'	0.6	UL/CUL	11.95	10.95	9.95	8.95
100108	ReliaPro	ADU160100	16	1000	2.1mm x 5.5mm F	2.5 x 2.2 x 1.9	Black	6'	0.9	UL/CUL	11.95	10.95	9.95	8.95
2217748	Arndt Electronics	ZMCE-014	18	300	Stripped/tinned	2.3 x 1.6 x 1.4	Black	6'	0.5	UL/CUL	6.95	5.95	4.95	4.49
2217916	Arndt Electronics	218054	18	500	2.1mm x 5.5mm F	2.7 x 2.0 x 1.7	Black	6'	0.6	UL/CUL	9.95	8.95	7.95	6.95
2082142	Ault	308-2018	18	900	Screw terminals	1.9 x 2.2 x 2.0	Beige	—	0.7	UL	4.95	4.49	3.95	3.59
121216	ReliaPro	ADU180100	18	1000	2.1mm x 5.5mm F	3.1 x 2.7 x 1.9	Black	6'	1.1	UL/CUL	11.95	10.95	9.95	8.95
2179622	ReliaPro	AFU180200	18	2000	2.1mm x 5.5mm F	3.4 x 2.7 x 2.1	Black	6'	1.7	—	12.95	11.95	10.95	9.95
87581	ReliaPro	ADU240050	24	500	2.1mm x 5.5mm F	2.5 x 2.2 x 1.9	Black	6'	0.9	UL/CUL	9.95	8.95	7.95	6.95
206439	ReliaPro	MGT2420	24	830	Screw terminals with green LED	3.2 x 2.2 x 1.9	White	—	0.9	UL	10.95	9.95	8.95	7.95
140599	ReliaPro	ADU240100D5531	24	1000	2.1mm x 5.5mm F	3.0 x 2.2 x 1.9	Black	6'	1.2	UL/CUL	11.95	10.95	9.95	8.95
2217721	Arndt Electronics	ZMCE-022	24	1000	2.5mm x 5.5mm F	3.2 x 2.2 x 1.9	Black	6'	1.4	UL/CUL	9.95	8.95	7.95	6.95
10102	ReliaPro	ADU240100E0461	24	1000	3.5mm M	3.0 x 2.2 x 1.9	Black	6'	1.2	UL/CUL	11.95	10.95	9.95	8.95
2100195	ReliaPro	GPU572401500WA00	24	1500	2.1mm x 5.5mm F	3.3 x 2.6 x 2.3	Black	6'	1.7	UL/CUL	14.95	13.49	11.95	10.95
2197548	ReliaPro	GPU572402000WA00	24	2000	2.1mm x 5.5mm F	3.3 x 2.6 x 2.2	Black	6'	1.7	UL/CUL	15.95	14.49	12.95	11.49
2205579	Arndt Electronics	MGT2450P	24	2100	Screw terminals	3.2 x 2.2 x 1.9	White	—	0.9	UL/CUL	12.95	11.95	10.95	9.95



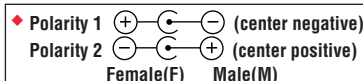
## AC-to-DC Regulated Switching Wall Adapters



\*Web Code: CDZ

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Part No.	Manufacturer	Product No.	Output Rating		Output Connector ID x OD mm Female/Male; Polarity ♦	Input VAC @ Hz	Size (H" x W" x D")	Case Color	Output Cord Length	Wt. (lbs.)	Agency Approvals	Pricing		
			Volt. (VDC)	Current (mA)								1	10	50
2138636	Emerson	SW013US-0500020US*	5	200	USB type-A F	100-240@50-60	2.3 x 1.8 x 0.9	Black	—	0.2	TUV/FCC	\$3.95	\$3.59	\$3.19
2217730	Arndt Electronics	ZMCE-039*	5	1000	Stripped/tinned F 2	100-240@50-60	2.3 x 1.3 x 1.0	Black	6'	0.2	UL/CUL/CEC	6.95	6.25	5.95
2218193	Arndt Electronics	MU05-J050100-A1*	5	1000	1.3mm x 3.5mm F 2	100-240@50-60	2.6 x 1.3 x 1.5	Black	6'	0.2	UL/CUL/CEC	8.95	7.95	6.95
252720	Phihong	PLA05A-050*	5	1000	2.1mm x 5.5mm F 2	100-240@50-60	2.9 x 1.1 x 1.7	Black	6'	0.3	UL/CUL	9.95	8.95	7.95
2201957	Deer Computer	AD1505C	5	1000	2.5mm x 5.5mm F 2	100-240@47-63	2.8 x 1.4 x 2.1	Black	6'	0.3	UL/CUL/CE	7.95	6.95	6.25
2202811	Phihong	PSC11A050	5	2000	1.3mm x 3.5mm F 2	100-240@50-60	2.8 x 1.7 x 1.3	White	6'	0.4	UL/CUL	9.95	8.95	7.95
2209158	CUI Inc	EPAS-101W-05*	5	2000	2.1mm x 5.5mm F 2	100-240@50-60	2.4 x 1.7 x 1.0	Black	6'	0.3	UL/CUL	7.95	6.95	5.95
1940740	Mean Well	GS12U05P1J	5	2000	2.1mm x 5.5mm F 2	90-264@47-63	2.6 x 1.9 x 1.0	Black	4'	0.3	UL/CUL/CEC	9.95	8.95	8.49
2138741	ReliaPro	CP0520	5	2000	2.5mm x 5.5mm F 1	100-240@47-63	3.0 x 1.1 x 1.6	Black	6'	0.4	UL/CUL/TUV	7.95	6.95	5.95
2188537	CUI Inc	EPAS-101W-05*	5	2000	2.5mm x 5.5mm right angle F 2	100-240@50-60	2.4 x 1.7 x 1.0	Black	6'	0.3	UL/CUL	7.95	6.95	5.95
2138724	Jentec	AF1805A*	5	2500	2.1mm x 5.5mm right angle F 2	100-120@50-60	2.4 x 1.9 x 1.1	Black	6'	0.3	UL/CUL/CEC	8.95	7.95	6.95
2158549	ReliaPro	S15AA05025001*	5	2500	2.5mm x 5.5mm right angle F 2	100-240@50-60	3.0 x 2.2 x 1.3	Black	6'	0.3	UL/CUL/CEC	9.95	8.95	7.95
1952863	Mean Well	GS18U05-P1J	5	3000	2.1mm x 5.5mm F 2	90-264@47-63	3.1 x 2.1 x 1.3	Black	4'	0.5	UL/CUL/CEC	11.95	10.95	9.95
2167664	Fairway	WN20U-050	5	3000	2.5mm x 5.5mm F 2	100-240@50-60	2.9 x 2.0 x 1.6	Black	6'	0.4	UL/CUL	7.95	6.95	5.95
2135451	CUI Inc	EPS050400H-P5RP-FL*	5	4000	2.1mm x 5.5mm right angle F 2	90-132@47-63	3.3 x 2.0 x 1.5	Black	6'	0.4	UL/CUL/CEC	9.95	8.95	7.95
379623	Mean Well	GS25U05-P1J	5	4000	2.1mm x 5.5mm F 2	100-240@50-60	3.1 x 2.1 x 1.3	Black	4'	0.5	UL/CUL/CEC	12.95	11.95	10.95
2218206	Arndt Electronics	MU08A9075100-A1*	7.5	1000	1.3mm x 3.5mm F 2	100-240@50-60	2.6 x 1.3 x 1.5	Black	6'	0.2	UL/CUL/CEC	8.95	7.95	6.95
2172931	ReliaPro	EA1006BU*	9	660	2.1mm x 5.5mm F 1	100-240@50-60	2.1 x 1.4 x 1.0	Black	6'	0.1	UL/FCC/CEC	9.95	8.95	7.95

\*Slimline CEC

# AC-to-DC Regulated Switching Wall Adapters

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## AC-to-DC Regulated Switching Wall Adapters (Continued)



\*Web Code: CDZ

Part No.	Manufacturer	Product No.	Output Rating		Output Connector ID x OD mm Female/Male; Polarity	Input VAC @ Hz	Size (H" x W" x D")	Case Color	Output Cord Length	Wt. (lbs.)	Agency Approvals	Pricing		
			Volt. (VDC)	Current (mA)								1	10	50
2203741	Arndt Electronics	CYS24-090100-P*	9	1000	2.5mm x 5.5mm F 2	100-120@50-60	2.4 x 1.9 x 1.3	Black	6'	0.3	UL/CUL/CEC	\$9.95	\$8.95	\$7.95
1940766	Mean Well	GS12U09-P1I	9	1330	2.1mm x 5.5mm F 2	90-264@47-63	2.6 x 1.9 x 1.0	Black	6'	0.3	UL/CUL	9.95	8.95	7.95
1952847	Mean Well	GS18U09-P1J	9	2000	2.1mm x 5.5mm F 2	100-240@50-60	3.1 x 2.1 x 1.3	Black	6'	0.5	UL/CUL/CEC	11.95	10.95	9.95
380140	Mean Well	GS25U09-P1J	9	2780	2.1mm x 5.5mm F 2	90-264@47-63	3.1 x 2.1 x 1.3	Black	6'	0.5	UL/CUL/CEC	12.95	11.95	10.95
2173124	ReliaPro	EA1030U†	9	3000	2.1mm x 5.5mm F 2	100-240@50-60	3.9 x 1.7 x 1.2	Black	6'	0.5	UL/CUL/CEC	13.95	12.49	10.95
2121578	ReliaPro	ST-12500	12	500	Screw terminals	100-240@50-60	3.8 x 2.1 x 1.6	Black	—	0.3	UL/CUL/CEC	8.95	7.95	7.49
2151101	Arndt Electronics	CNR2260	12	500	2.1mm x 5.5mm F 2	100-240@50-60	3.6 x 2.0 x 1.3	Black	6'	0.3	UL/CUL/CEC	6.95	5.95	4.95
2197863	Arndt Electronics	AMS8-1200750SU*	12	750	2.5mm x 5.5mm F 2	100-240@50-60	2.9 x 1.8 x 1.1	Black	6'	0.2	UL/CUL/CEC	7.95	6.95	6.25
2218177	Arndt Electronics	SAL012F1NA*	12	1000	2.1mm x 5.5mm F 2	100-120@47-63	3.1 x 1.3 x 1.8	Black	6'	0.3	UL/CUL/CEC	8.95	7.95	6.95
2215742	Arndt Electronics	T012LF1209*	12	1000	2.1mm x 5.5mm F 2	100-120@50-60	3.0 x 1.6 x 1.4	Black	6'	0.2	UL/CUL/CEC	8.95	7.95	6.95
2210802	Arndt Electronics	HK-AD-120U100-US*	12	1000	2.1mm x 5.5mm F 2	100-120@50-60	2.0 x 1.8 x 1.1	Black	6'	0.2	UL/CUL/CEC	8.95	7.95	6.95
1940774	Mean Well	GS12U12-P1I	12	1000	2.1mm x 5.5mm F 2	90-264@47-63	2.6 x 1.9 x 1.0	Black	6'	0.3	UL/CUL/CEC	10.49	8.95	8.49
2121586	ReliaPro	ST-121A	12	1000	Screw terminals	100-240@50-60	3.8 x 2.1 x 1.6	Black	—	0.3	UL/CUL/CEC	11.95	10.95	9.95
2218185	Arndt Electronics	SAL018F1NA*	12	1500	2.1mm x 5.5mm F 2	100-120@47-63	3.1 x 1.3 x 1.8	Black	6'	0.3	UL/CUL/CEC	9.95	8.95	7.95
2218142	Arndt Electronics	AD817F10*	12	1500	2.1mm x 5.5mm F 2	100-120@50-60	3.0 x 2.0 x 1.4	Black	6'	0.3	UL/CUL/CEC	9.95	8.95	7.95
1952855	Mean Well	GS18U12-P1J	12	1500	2.1mm x 5.5mm F 2	90-264@47-63	3.1 x 2.1 x 1.3	Black	4'	0.2	UL/CUL/CEC	11.95	10.95	10.49
2209166	Arndt Electronics	GIP-650†	12	2000	2.1mm x 5.5mm F 2	100-240@50-60	3.1 x 2.1 x 1.3	Black	6'	0.4	UL/CUL	10.49	9.49	8.95
2082134	ReliaPro	ST-122A	12	2000	Screw terminals	100-240@50-60	3.8 x 2.1 x 1.6	Black	—	0.4	UL/CUL/CEC	14.95	13.49	11.95
380156	Mean Well	GS25U12-P1J	12	2080	2.1mm x 5.5mm F 2	90-264@47-63	3.1 x 2.1 x 1.3	Black	4'	0.5	UL/CUL/CEC	12.95	11.95	10.95
2173116	ReliaPro	EA1036U†	12	3000	2.1mm x 5.5mm F 2	100-240@50-60	3.9 x 1.7 x 1.2	Black	6'	0.6	UL/CUL/CEC	17.95	16.95	15.49
2210811	Arndt Electronics	WAA019*	15	1200	2.5mm x 5.5mm F 2	100-120@50-60	2.8 x 2.0 x 1.5	Black	10'	0.4	UL/CUL/CEC	9.95	8.95	7.95
1952871	Mean Well	GS18U15-P1J	15	1200	2.1mm x 5.5mm F 2	100-240@50-60	3.1 x 2.1 x 1.4	Black	6'	0.4	UL/CUL/CEC	11.95	10.95	10.49
380173	Mean Well	GS25U15-P1J	15	1670	2.1mm x 5.5mm F 2	90-264@47-63	3.1 x 2.1 x 1.3	Black	6'	0.5	UL/CUL/CE	12.95	11.95	10.95
2173108	ReliaPro	EA1030CU†	15	2000	2.1mm x 5.5mm F 2	100-240@50-60	3.9 x 1.7 x 1.2	Black	6'	0.6	UL/CUL/CEC	14.95	13.95	12.49
380191	Mean Well	GS25U18-P1J	18	1380	2.1mm x 5.5mm F 2	100-240@50-60	3.1 x 1.2 x 1.3	Black	6'	0.5	UL/CUL/CEC	12.95	11.95	10.95
1940803	Mean Well	GS12U24-P1I	24	500	2.1mm x 5.5mm F 2	90-264@47-63	2.6 x 1.9 x 1.0	Black	6'	0.3	UL/CUL/CEC	10.95	9.95	8.95
1952898	Mean Well	GS18U24-P1J	24	750	2.1mm x 5.5mm F 2	90-264@47-63	3.1 x 2.1 x 1.3	Black	6'	0.3	UL/CUL/CEC	11.95	10.95	10.49
2121594	ReliaPro	ST-241A	24	1000	Screw terminals	100-240@50-60	3.8 x 2.1 x 1.6	Black	—	0.3	UL/CUL/CEC	12.95	11.95	10.95
1953698	ReliaPro	MPC2400107	24	1000	2.1mm x 5.5mm F 2	100-240@50-60	3.4 x 2.7 x 2.2	Black	6'	0.5	UL/CSA	11.95	10.95	9.95
1953671	ReliaPro	MPC-2400107	24	1000	2.5mm x 5.5mm F 2	120-240@50-60	3.4 x 2.7 x 2.2	Black	6'	0.5	UL/CSA	14.95	13.49	11.95
380202	Mean Well	GS25U24-P1J	24	1040	2.1mm x 5.5mm F 2	100-240@50-60	3.1 x 2.1 x 1.3	Black	6'	0.5	UL/CUL/CEC	12.95	11.95	10.95
2173095	ReliaPro	EA1030DU†	24	1250	2.1mm x 5.5mm F 2	100-240@50-60	3.9 x 1.7 x 1.2	Black	6'	0.6	UL/CUL/CEC	13.95	12.49	10.95
2167613	ReliaPro	ST-242A	24	2000	Screw terminals	100-240@50-60	3.8 x 2.1 x 1.6	Black	6'	0.3	—	15.95	14.95	13.95
380220	Mean Well	GS25U28-P1J	28	890	2.1mm x 5.5mm F 2	100-240@50-60	3.1 x 2.1 x 1.3	Black	6'	0.6	UL/CUL/CEC	12.95	11.95	10.95
2179391	ReliaPro	PA1024-360HU	36	670	2.5mm x 5.5mm F 2	90-264@47-63	2.7 x 1.8 x 1.3	Black	6'	0.3	UL/CUL/CEC	12.95	11.95	11.49
380244	Mean Well	GS25U48-P1J	48	520	2.1mm x 5.5mm F 2	100-240@50-60	3.1 x 2.1 x 1.3	Black	6'	0.5	UL/CUL/CEC	12.95	11.95	10.95

† RFI filter on cord \* Slimline CEC



## AC-to-DC "Slim Line" Regulated Switching Wall Adapters



\*Web Code: CBQ

Output connector: 2.1mm x 5.5mm F2 (center positive)

• 2-wire AC input • Output cord length: 6' • Color: black • Input volt.: 100 – 240VAC @ 47-63Hz • One-year warranty



Part No.	Manufacturer	Output Rating		Size (in.) (H x W x D)	Wt. (lbs.)	Pricing			
		Volt. (VDC)	Current (mA)			1	10	50	100
251565	ReliaPro	3.3	1500	2.5x1.1x1.7	0.2	\$9.95	\$8.95	\$7.95	\$6.95
2173010	Phihong	5	400	1.9x1.4x0.9	0.1	5.95	4.95	4.49	3.95
252701	ReliaPro	5	500	2.9x1.1x1.7	0.3	8.95	7.95	6.95	6.25
2126125	OEM	5	800	1.9x1.6x0.9	0.1	6.95	5.95	5.49	4.95
252720	ReliaPro	5	1000	2.5x1.1x1.7	0.2	9.95	8.95	7.95	7.19
2211098	Phihong	5	1000	2.6x1.4x1.1	0.2	8.95	7.95	6.95	6.25
1940660	Mean Well	5	1000	2.6x1.3x1.9	0.2	11.95	10.95	9.95	8.95
252728	ReliaPro	5	1500	2.5x1.1x1.7	0.2	10.95	9.95	8.95	7.95
210894	ReliaPro	5	2000	2.9x1.4x2.2	0.2	11.95	10.95	9.95	8.95
252736	ReliaPro	5	2500	2.9x1.3x2.2	0.3	12.95	11.95	10.95	9.95
2145078	ReliaPro	6	500	2.5x1.7x1.1	0.3	7.95	6.95	5.95	4.95
1940678	Mean Well	7.5	800	2.6x1.3x1.9	0.2	9.49	8.49	7.95	7.49
252753	ReliaPro	9	500	2.5x1.1x1.7	0.2	10.95	9.95	8.95	7.95
1940686	Mean Well	9	660	2.6x1.3x1.9	0.2	9.49	8.49	7.95	7.49
1950841	ReliaPro	9	1000	2.5x1.1x1.7	0.2	10.95	9.95	8.95	7.95
252779	ReliaPro	9	1200	2.9x1.3x2.2	0.3	11.49	10.25	9.49	8.95

Part No.	Manufacturer	Output Rating		Size (in.) (H x W x D)	Wt. (lbs.)	Pricing			
		Volt. (VDC)	Current (mA)			1	10	50	100
252786	ReliaPro	9	1500	2.9x1.3x2.2	0.3	\$12.95	\$11.95	\$10.95	\$9.95
2173132	ReliaPro	9	2000	2.8x2.0x1.3	0.3	13.95	12.49	11.95	10.95
252795	ReliaPro	12	250	2.5x1.1x1.7	0.2	8.95	7.95	6.95	6.25
2150758	Arndt Electronics	12	500	2.5x1.7x1.1	0.2	7.95	6.95	6.25	5.95
252808	ReliaPro	12	500	2.5x1.1x1.7	0.2	9.95	8.95	7.95	6.95
1940694	Mean Well	12	500	2.6x1.3x1.9	0.2	10.95	9.95	8.95	7.95
252816	ReliaPro	12	600	2.5x1.1x1.7	0.2	9.95	8.95	7.95	6.95
2208999	Arndt Electronics	12	1000	3.0x1.9x1.2	0.3	10.95	9.95	8.95	7.95
252824	ReliaPro	12	1000	2.9x1.3x2.2	0.3	12.95	11.49	9.95	8.95
252833	ReliaPro	12	1250	2.9x1.3x2.2	0.3	13.95	12.95	11.95	10.95
1950497	ReliaPro	12	2000	2.9x2.1x1.3	0.4	15.95	14.49	12.95	11.49
2215726	Arndt Electronics	12	2500	3.0x1.4x2.0	0.3	11.95	10.95	9.95	8.95
254757	ReliaPro	15	800	2.9x1.3x2.2	0.2	10.95	9.95	8.95	8.49
252904	ReliaPro	15	1000	2.9x1.3x2.2	0.3	12.95	11.95	10.95	9.95
252866	ReliaPro	24	500	2.9x1.3x2.2	0.3	11.95	10.95	9.95	8.95
2076341	ReliaPro	24	630	2.9x1.3x2.2	0.3	12.95	11.95	10.95	9.95
2208972	ReliaPro	24	1000	3.5x1.7x1.3	0.3	14.95	13.49	11.95	10.49

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



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# AC-to-DC Regulated Wall Adapters

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



JAMECO ReliaPro

## Energy Star Worldwide Interchangeable AC-to-DC Regulated Switching Wall Adapters

Meets US and European Energy Star compliance. Approved for European high-efficiency power applications.

- Field changeable AC plug clips (**sold separately, unless noted**)
- Regulated output • Double insulated
- Input voltage: 90-264VAC @ 47-63Hz • Power-on LED
- Output connector: **2.1mm x 5.5mm female center positive**; (except where noted, see footnotes \*\*, #, ✓, ## below)
- Load regulation: ±5% • Class B EMI • 6' black cord
- Applications: wireless communications, portable equipment, digital camera, peripherals and networking



★ Web Code: NBH

USA	European (EU)	UK	Australia (AUS)
229155	229163	229171	2081422

Shown w/o AC Plug Clip  
AC Plug Clips Not Included  
Phihong & Mean Well AC Plug Clips (below)

Part No.	Manufacturer	Product No.	Output Volt. (VDC)	Current (A)	Power (W)	Ripple (mVp-p)	Line Regulation	Efficiency (%)	Dimensions (L" x W" x H")	Pricing		
										1	10	50
228785	Phihong	PSA11R-033	3.3	2.0	6	50	±5%	70	3.3 x 1.8 x 1.3	\$10.95	\$9.95	\$8.95
2202888	Phihong	PSA21R-033	3.3	3.0	10	50	±1%	70	3.9 x 2.3 x 1.2	12.95	11.95	10.95
2144809	Phihong	PSA08R-050†#	5	1.0	5	50	±1%	70	2.8 x 1.8 x 1.0	8.95	7.95	6.95
2202829	Phihong	PSA08R-050-1.3**	5	1.0	5	50	±1%	70	2.8 x 1.8 x 1.0	9.95	8.95	7.95
2202790	Cincon	TR10R050-1*	5	1.6	8	50	±1%	65	2.8 x 1.7 x 1.3	10.95	9.95	8.95
2197812	Cincon	TR10R050 ✓*	5	1.6	8	50	±1%	65	2.8 x 1.7 x 1.3	10.95	9.95	8.95
2158240	Phihong	PSM11R-050##	5	2.0	10	100	±5%	70	2.8 x 1.7 x 1.2	7.95	6.95	5.95
2202853	Phihong	PSA10R-090	9	1.1	10	90	±1%	65	3.4 x 2.0 x 1.3	10.95	9.95	8.95
2202896	Phihong	PSA21R-090	9	1.67	15	90	±1%	70	3.9 x 2.3 x 1.2	11.95	10.95	9.95
2082311	Mean Well	GE18I09-P1J	9	2.0	18	100	±5%	75	3.2 x 1.7 x 1.6	12.49	11.49	9.95
2138951	Phihong	PSA11R-120	12	0.83	10	120	±1%	65	2.8 x 1.8 x 1.2	9.95	8.95	7.95
2108656	Phihong	PSC12R-120	12	1.0	12	240	±5%	78	2.8 x 1.8 x 1.2	14.95	13.95	12.95
2154986	ReliaPro	FW75550/12*	12	1.25	15	150	±5%	80	3.5 x 2.0 x 1.3	15.95	14.95	13.95
2210693	Asian Power Devices	WA-18H12§	12	1.5	18	120	±2%	80	3.0 x 1.9 x 1.4	14.95	13.95	12.95
228849	Phihong	PSA21R-120	12	1.67	20	120	±1%	70	3.9 x 2.3 x 1.2	16.95	14.95	13.49
2100179	Phihong	PSAA20R-120	12	1.67	20	120	±5%	81	2.8 x 2.0 x 1.3	17.95	16.95	14.49
228822	Phihong	PSA11R-150	15	.67	10	150	±5%	70	3.4 x 2.0 x 1.3	16.95	14.95	13.49
2102107	Mean Well	GE24I18-P1J	18	1.33	6	180	±1%	80	3.2 x 1.7 x 1.6	14.95	13.49	11.95
2205632	CUI	EMS240025-PSP-SZ*	24	0.25	6	240	±1%	80	2.5 x 1.6 x 1.2	7.95	6.95	5.95
2082345	Mean Well	GE12I24-P1J	24	0.63	15	240	±3%	80	2.8 x 1.6 x 1.5	9.49	8.49	7.95
2192528	Edac	EA1024KR*	24	1.25	30	240	±1%	80	2.8 x 1.6 x 1.3	22.95	19.95	17.95

Input plugs: † Includes US AC plug clip only § Includes US and European plug clips

\*Kit includes US, UK, EU, AUS plugs

Output connectors: \*\* 1.3mm x 3.5mm female plug

# 2.5mm x 5.5mm female plug

✓ 2.5mm x 5.5mm right angle female plug

## Mini USB plug

### Phihong AC Plug Clips (sold separately, required for above adapters)

Part No.	Mfr. P/N	Description (see above for photos)	1	10	50	100
229155	RPA	US AC plug only	\$1.25	\$1.19	\$1.09	\$.99
229163	RPE	European AC plug only	1.25	1.19	1.09	.99
229171	RPK	United Kingdom AC plug only	1.49	1.35	1.19	1.09
2081422	RPS	Australia AC plug only	1.25	1.19	1.09	.99
229181	RPKIT	Kit includes US, EU, UK & AU clips (4)	4.79	4.39	3.95	3.49

### Mean Well AC Plug Clips (sold separately, required for above adapters)

Part No.	Mfr. P/N	Description (see above for photos)	1	10	50	100
2082353	AC-Plug-US	US AC plug only	\$1.19	\$1.09	\$.99	\$.89
2082361	AC-Plug-EU	European AC plug only	1.19	1.09	.99	.89
2082370	AC-Plug-UK	United Kingdom AC plug only	1.39	1.25	1.09	.99
2082388	AC-Plug-AU	Australia AC plug only	1.19	1.09	.99	.89
2082396	AC-Plug-MIX	Kit includes US, EU, UK & AU clips (4)	4.59	4.19	3.79	3.39



## AC-to-DC Regulated Linear Wall Adapters

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We are happy to change any listed DC wall adapter power plug to a connector of your choice (see pg 96) for just \$2.50 each. Overmolding also available @ \$4.00 each. A 100 pc. minimum order applies.



★ Web Code: WAZ

♦ Polarity 1 (+) (center negative)  
Polarity 2 (–) (center positive)  
Female(F) Male(M)

Part No.	Manufacturer	Product No.	Output Rating		Output Connector ID x OD mm Female/Male; Polarity ♦	Input VAC @ Hz	Size (H" x W" x D")	Case Color	Output Cord Length	Wt. (lbs.)	Agency Approvals	Pricing			
			Voltage (VDC)	Current (mA)								1	10	50	100
164101	ReliaPro	GPU41050050WD00	5	500	2.1mm x 5.5mm F 2	120 @ 60	3.1 x 2.1 x 1.7	Black	6'	0.6	UL/CUL	\$10.95	\$9.95	\$8.95	\$7.95
1953612	ReliaPro	DDU050100	5	1000	2.1mm x 5.5mm F 2	120 @ 60	3.2 x 2.2 x 1.8	Black	6'	1.2	UL/CUL	10.95	9.95	8.95	7.95
168605	ReliaPro	DBU0501000	5	1000	2.5mm x 5.5mm F 2	120 @ 60	3.3 x 2.2 x 1.9	Black	6'	1.2	UL/CUL	10.95	9.95	8.95	7.95
190512	ReliaPro	DBU60020-H3570	6	200	2.1mm x 5.5mm F 2	120 @ 60	2.2 x 1.7 x 1.5	Black	6'	0.4	UL/CUL	9.95	8.95	7.95	6.95
283573	ReliaPro	ADR-6V500MA-2.1	6	500	2.1mm x 5.5mm F 2	120 @ 60	3.1 x 2.0 x 1.7	Black	6'	0.6	UL/CUL	10.95	9.95	8.95	7.95
190529	ReliaPro	AD9123	9	250	2.5mm x 5.5mm right angle F 2	120 @ 60	2.5 x 2.0 x 1.6	Black	6'	0.5	UL/CUL	9.95	8.95	7.95	6.95
1953639	ReliaPro	DCU09050	9	500	2.1mm x 5.5mm F 2	120 @ 60	2.4 x 2.0 x 1.6	Black	6'	0.9	UL/CUL	10.95	10.49	9.95	8.95
1953647	ReliaPro	GPU41090050WD00	9	500	2.5mm x 5.5mm F 2	120 @ 60	3.0 x 2.0 x 1.6	Black	6'	0.9	UL/CUL	10.95	10.49	9.95	8.95
220898	ReliaPro	DCU120020	12	200	2.1mm x 5.5mm F 1	120 @ 60	2.5 x 2.0 x 1.7	Black	6'	0.5	UL/CUL	8.95	7.95	6.95	6.25
162996	ReliaPro	DDU120050	12	500	2.1mm x 5.5mm F 2	120 @ 60	3.2 x 2.2 x 1.9	Black	6'	0.9	UL/CUL	11.95	10.95	9.95	8.95
170245	ReliaPro	RDU120100	12	1000	2.1mm x 5.5mm F 2	120 @ 60	3.2 x 2.3 x 2.0	Black	6'	1.2	UL/CUL	14.95	13.49	11.95	10.95
1953663	ReliaPro	DCU1201000	12	1000	2.5mm x 5.5mm F 2	120 @ 60	3.3 x 2.3 x 2.0	Black	6'	1.2	UL/CUL	14.95	13.49	11.95	10.95
174861	ReliaPro	DFU240050	24	500	2.1mm x 5.5mm F 2	120 @ 60	3.4 x 2.7 x 2.2	Black	6'	1.3	UL/CUL	14.95	13.49	11.95	10.95
174879	ReliaPro	DCU090025	24	500	2.5mm x 5.5mm F 2	120 @ 60	3.4 x 2.7 x 2.2	Black	6'	1.3	UL/CUL	14.95	13.49	11.95	10.95

More AC-to-DC Wall Adapters listed on pages 88-89 & 91-92



# AC-to-DC Unregulated Linear Wall Adapters

JAMECO ReliaPro

## AC-to-DC Unregulated Linear Wall Adapters

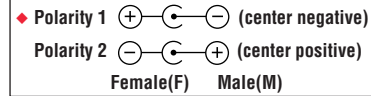
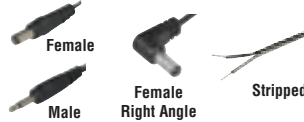


\* Web Code: UAP

Input: 120VAC @ 60Hz

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A 100 pc. minimum order applies.



Part No.	Manufacturer	Product No.	Output Rating		Output Connector ID x OD mm Female/Male; Polarity ◆	Size (H" x W" x D")	Case Color	Output Cord Length	Wt. (lbs.)	Agency Approvals	Pricing			
			Voltage (VDC)	Current (mA)							1	10	50	100
112070	ReliaPro	DBU050022Z5480	5	225	2.5mm x 5.5mm F 2	1.9 x 2.2 x 2.0	Black	7'	0.3	UL/CUL	\$5.95	\$5.49	\$4.95	\$4.49
2179745	DVE	DV-6100-3508	6	100	2.1mm x 5.5mm F 1	2.4 x 1.5 x 1.0	Black	6'	0.3	UL/CUL	3.49	2.95	2.59	1.95
2099551	Fuhue	UE-3560300D	6	300	2.5mm x 5.5mm F 2	2.2 x 1.7 x 1.5	Black	6'	0.4	UL/CUL	5.95	5.49	4.95	4.49
2138716	ReliaPro	D41-06-500R	6	500	2.1mm x 5.5mm F 1	2.6 x 2.0 x 1.5	Black	6'	0.6	UL/CUL	7.95	6.95	6.25	5.49
101266	ReliaPro	DBU060050E3860	6	500	2.1mm x 5.5mm F 2	2.4 x 1.9 x 1.6	Black	6'	0.4	UL/CUL	6.95	6.25	5.59	4.95
147707	ReliaPro	DBU060080C6962	6	800	2.1mm x 5.5mm F 2	2.3 x 2.0 x 1.6	Black	6'	0.6	UL/CUL	8.95	7.95	6.95	5.95
220943	ReliaPro	DCU060120G2401	6	1200	2.1mm x 5.5mm F 1	2.5 x 2.0 x 1.7	Black	6'	0.7	UL/CUL	9.95	8.95	7.95	6.95
2215460	Fujitsu	MA14L-2001-0012	9	200	1.3mm x 3.5mm right angle F 2	2.4 x 1.7 x 1.5	Black	6'	0.4	UL/CSA	5.95	4.95	4.59	3.95
134025	ReliaPro	DBU090020Z6100	9	200	2.1mm x 5.5mm F 1	2.1 x 1.7 x 1.6	Black	6'	0.4	UL/CUL	5.95	5.35	4.79	4.39
100152	ReliaPro	AP2911	9	200	2.1mm x 5.5mm F 2	2.6 x 1.8 x 1.5	Black	6'	0.4	UL/CUL	3.95	3.49	2.95	2.59
100845	ReliaPro	DBU090020E0850	9	200	2.1mm x 5.5mm F 2	2.1 x 1.7 x 1.5	Black	6'	0.4	UL/CUL	6.95	5.95	5.49	4.59
2082556	ReliaPro	5-2616	9	200	2.1mm x 5.5mm right angle F 2	2.2 x 1.4 x 1.4	Black	6'	0.5	UL/CUL	2.95	2.59	2.29	1.95
2138847	ReliaPro	D6300-01	9	200	2.5mm M 2	2.2 x 1.7 x 1.4	Black	6'	0.4	UL/CSA	2.95	2.49	1.95	1.59
133891	ReliaPro	DBU090030C112	9	300	2.1mm x 5.5mm F 2	2.0 x 1.5 x 1.5	Black	6'	0.4	UL/CUL	6.95	5.95	5.49	4.95
189238	ReliaPro	DBU090030H4540	9	300	2.5mm x 5.5mm F 2	2.2 x 1.7 x 1.5	Black	6'	0.4	UL/CUL	6.95	5.95	4.95	4.49
163628	ReliaPro	DCU090050Z7484	9	500	2.1mm x 5.5mm F 1	2.5 x 1.9 x 1.7	Black	6'	0.6	UL/CUL	7.95	6.95	6.25	5.49
100853	ReliaPro	DCU090050E2961	9	500	2.1mm x 5.5mm F 2	2.5 x 1.9 x 1.7	Black	6'	0.6	UL/CUL	7.95	6.95	6.25	5.49
236937	ReliaPro	DCU090050G6440	9	500	2.5mm x 5.5mm right angle F 2	2.5 x 2.0 x 1.7	Black	6'	0.4	UL/CUL	7.95	6.95	6.25	5.49
15561	ReliaPro	DCU090050A2011	9	500	3.5mm M 2	2.5 x 2.0 x 1.6	Black	6'	0.5	UL/CSA	7.95	6.95	6.25	5.49
202180	ReliaPro	DCU090060F2091	9	600	2.1mm x 5.5mm F 2	3.3 x 2.9 x 2.3	Black	6'	0.6	UL/CUL	7.95	6.95	5.95	5.49
100175	ReliaPro	DCU090060Z6652	9	600	2.5mm x 5.5mm F 2	2.7 x 2.0 x 1.7	Black	6'	0.6	UL/CUL	7.95	6.95	5.95	5.49
164929	ReliaPro	DDU090100C2550	9	1000	2.1mm x 5.5mm F 1	2.7 x 2.3 x 1.8	Black	6'	0.9	UL/CUL	9.95	8.95	7.95	6.95
2179542	ReliaPro	ADP2108GT	9	1000	2.1mm x 5.5mm right angle F 2	2.6 x 2.2 x 1.9	Black	6'	0.9	UL/CSA	6.95	6.25	5.49	4.95
421690	AULT	P48091000A010G	9	1000	2.1mm x 5.5mm F 2	3.3 x 2.2 x 2.0	Black	6'	0.9	UL/CSA	8.95	7.95	6.95	6.25
364576	ReliaPro	DDU090100J0490	9	1000	2.1mm x 5.5mm F 2	2.9 x 2.3 x 1.9	Black	6'	0.9	UL/CUL	9.95	8.95	7.95	6.95
2099921	ENG Electric	T48-9-1000D4*	9	1000	2.5mm x 5.5mm F 1 (UK plug)	3.2 x 2.3 x 1.9	Black	6'	0.9	CE/TUV	2.49	1.95	1.59	1.19
127505	ReliaPro	DDU090100	9	1000	2.5mm x 5.5mm F 2	2.6 x 2.4 x 2.0	Black	6'	0.9	UL/CUL	9.95	8.95	7.95	6.95
130526	ReliaPro	DDE090120F3621	9	1200	2.1mm x 5.5mm F 1	2.4 x 2.0 x 1.8	Black	6'	1.0	UL/CSA	8.95	7.95	6.95	5.95
100095	ReliaPro	DBU120020	12	200	2.1mm x 5.5mm F 2	2.1 x 1.8 x 1.5	Black	6'	0.4	UL/CUL	5.95	5.49	4.95	4.49
158043	ReliaPro	DBU120020E2261	12	200	2.1mm x 5.5mm right angle F 2	2.2 x 1.7 x 1.5	Black	6'	0.4	UL/CUL	5.95	5.49	4.95	4.49
2167226	ReliaPro	4292A	12	200	2.5mm x 5.5mm F 2	2.3 x 2.1 x 1.6	Black	6'	0.5	UL/CSA	5.49	4.95	4.49	3.95
127976	ReliaPro	DCU120030D7161	12	300	2.1mm x 5.5mm F 2	2.6 x 1.8 x 1.6	Black	6'	0.7	UL/CUL	7.95	6.95	5.95	4.95
114825	ReliaPro	DCU120050D4740	12	500	Stripped & tinned	2.5 x 2.0 x 1.7	Black	6'	0.6	UL/CUL	7.95	6.95	6.59	5.95
15368	ReliaPro	DCU120050Z8698	12	500	2.1mm x 5.5mm F 1	2.5 x 1.9 x 1.6	Black	6'	0.6	UL/CUL	7.95	6.95	6.59	5.95
102496	ReliaPro	DCU120050E8601	12	500	2.1mm x 5.5mm F 2	2.5 x 1.9 x 1.6	Black	6'	0.6	UL/CUL	7.95	7.29	6.59	5.95
102277	ReliaPro	DCU120050UE2631	12	500	2.5mm x 5.5mm F 2	2.5 x 2.1 x 1.7	Black	6'	0.6	UL/CUL	7.95	7.29	6.59	5.95
17267	ReliaPro	DCU120050Z5391	12	500	3.5mm M 2	2.5 x 1.9 x 1.6	Black	6'	0.6	UL/CUL	5.95	4.95	4.49	3.95
202219	ReliaPro	DCU120070F2142	12	700	2.1mm x 5.5mm F 2	3.3 x 2.9 x 2.3	Black	6'	0.6	UL/CUL	8.95	7.95	7.29	6.49
2188473	Motorola	503913-007	12	750	2.5mm x 5.5mm F 2	2.7 x 1.7 x 1.2	Black	6'	0.2	UL/CUL/CEC	7.49	6.95	6.25	5.49
117479	ReliaPro	DDU120080E6451	12	800	2.1mm x 5.5mm F 2	3.0 x 2.3 x 2.0	Black	6'	0.9	UL/CUL	8.95	7.95	7.49	6.95
2217799	ReliaPro	AD-1280G†	12	800	2.5mm x 5.5mm F 2 (medical grade)	3.2 x 2.2 x 1.9	Black	12'	1.3	UL/CUL	7.95	6.95	6.25	5.95
2158160	Arndt Electronics	GPU481200800WD00	12	800	2.5mm x 5.5mm F 2	2.9 x 2.3 x 1.9	Black	6'	1.0	UL/CUL	7.95	6.95	6.25	5.95
129331	ReliaPro	DDU120080F2412	12	800	2.5mm x 5.5mm F 2	3.0 x 2.3 x 2.0	Black	6'	0.9	UL/CUL	8.95	7.95	7.49	6.95
121232	ReliaPro	DDU120080F2271	12	800	3.5mm M 2	2.6 x 2.4 x 2.0	Black	6'	0.9	UL/CUL	8.95	7.95	7.49	6.95
2215734	Arndt Elect.	MT12-Y120100-A1**	12	1000	2.1mm x 5.5mm F 2	2.7 x 1.5 x 1.3	Black	6'	0.2	UL/CUL/CEC	8.95	7.95	6.95	6.25
2202917	Nite Rider	D12-10-1000	12	1000	2.1mm x 5.5mm F 2	3.3 x 2.4 x 2.0	Black	6'	1.0	UL/CUL	7.95	6.95	6.25	5.59
2197484	ReliaPro	DDU120100	12	1000	2.1mm x 5.5mm F 2	2.6 x 2.3 x 1.9	Black	6'	0.9	UL/CUL	7.95	6.95	6.25	5.95
100870	ReliaPro	DDU120100Z7974	12	1000	2.1mm x 5.5mm F 2	2.9 x 2.3 x 1.9	Black	6'	0.9	UL/CUL	9.95	8.95	7.95	7.29
2211135	Fellows	A-48-628(R2)	12	1000	2.5mm x 5.5mm right angle F 2	3.1 x 2.2 x 1.9	Black	6'	1.1	UL/CUL	6.95	5.95	5.25	4.59
2179770	Westell	MT12-4120100-A1**	12	1000	2.5mm x 5.5mm F 2	2.9 x 1.6 x 1.2	Black	6'	0.2	UL/CEC	7.95	6.95	6.25	5.59
105478	ReliaPro	DDU120100Z2993	12	1000	2.5mm x 5.5mm F 2	3.1 x 2.4 x 2.0	Black	6'	1.0	UL/CUL	9.95	8.95	7.95	7.29
15392	ReliaPro	DDU120100E7302	12	1000	3.5mm M 2	3.3 x 2.4 x 2.0	Black	6'	1.0	UL/CUL	9.95	8.95	7.95	7.29
196779	ReliaPro	DDU120120G0031	12	1200	2.5mm x 5.5mm F 2	3.0 x 2.3 x 1.9	Black	6'	1.0	UL/CUL	10.95	9.95	8.95	7.95
2192747	ReliaPro	MW48-1201250	12	1250	2.1mm x 5.5mm F 2	3.0 x 2.3 x 1.9	Black	6'	1.4	UL/CUL	8.95	7.95	6.95	5.95

\* 240VAC 50Hz

\*\* Slimline

† 3 prong ground

♥ CEC

More AC-to-DC Wall Adapters listed on pages 88-90 & 92

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# AC-to-DC Wall Adapters & Table-Top Power Supplies

3 LEVELS OF SAVINGS		
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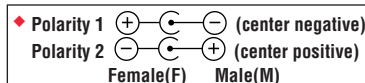
JAMECO ReliaPro

## AC-to-DC Unregulated Linear Wall Adapters (Continued)

Input: 120VAC @ 60Hz

We specialize in Wall Adapters - Call for additional OEM PRICING.

We are happy to change any listed DC wall adapter power plug to a connector of your choice (see pg 96) for just \$2.50 each. Overmolding also available @ \$4.00 each. A 100 pc. minimum order applies.



\*Web Code: UAP



123158

Part No.	Manufacturer	Product No.	Output Rating		Output Connector ID x OD mm Female/Male; Polarity ◆	Size (H" x W" x D")	Case Color	Output Cord Length	Wt. (lbs.)	Agency Approvals	Pricing			
			Voltage (VDC)	Current (mA)							1	10	50	100
203036	ReliaPro	DDU120150H4530	12	1500	2.1mm x 5.5mm F 1	3.3 x 2.2 x 1.9	Black	6'	1.5	UL/CUL	\$12.95	\$11.49	\$9.95	\$8.95
2218118	Netgear	AD661F**	12	1500	2.1mm x 5.5mm F 2	3.0 x 2.0 x 1.4	Black	6'	0.3	UL/CUL/CEC	9.95	8.95	7.95	6.95
136881	ReliaPro	DDU120150K1960	12	1500	2.1mm x 5.5mm F 2	3.4 x 2.7 x 2.2	Black	6'	1.5	UL/CUL	12.95	11.49	9.95	8.95
101291	ReliaPro	DDU120150	12	1500	2.5mm x 5.5mm F 2	3.4 x 2.7 x 2.2	Black	6'	1.5	UL/CUL	12.95	11.49	9.95	8.95
2173028	ENG	57-12-2000D	12	2000	2.1mm x 5.5mm F 2	3.4 x 2.6 x 2.2	Black	6'	1.7	UL/CUL	12.95	11.95	10.49	8.95
308099	ReliaPro	DDU135100H3210	13.5	1000	2.1mm x 5.5mm F 2	2.9 x 2.3 x 1.9	Black	6'	1.0	UL/CUL	10.95	9.95	8.95	7.95
123932	ReliaPro	DDU140070Z7470	14	700	2.1mm x 5.5mm F 2	2.6 x 2.4 x 2.0	Black	6'	1.0	UL/CUL	8.95	7.95	6.95	6.25
2172720	Globtek	WD1G500CCP-N	15	500	2.1mm x 5.5mm F 2	3.2 x 2.3 x 1.9	Black	6'	0.8	UL/CUL	6.95	5.95	5.49	4.95
190001	ReliaPro	DCU150050E3021	15	500	2.1mm x 5.5mm F 2	2.3 x 2.4 x 1.9	Black	6'	0.8	UL/CUL	7.95	6.95	6.25	5.95
189982	ReliaPro	DCU150050E3031	15	500	2.5mm x 5.5mm F 2	2.3 x 2.4 x 1.9	Black	6'	0.8	UL/CUL	8.95	7.95	7.29	6.49
191652	ReliaPro	DDU150100D7051	15	1000	2.1mm x 5.5mm F 2	3.3 x 2.2 x 1.9	Black	6'	1.0	UL/CUL	10.95	9.95	8.95	7.95
2167525	ReliaPro	DDU150100RR2200	15	1000	2.5mm x 5.5mm F 2	3.3 x 2.2 x 1.9	Black	6'	1.0	UL/CUL	8.95	7.95	6.95	6.25
2081713	DVE	DV-1790	17	900	2.5mm x 5.5mm F 2	3.2 x 2.2 x 2.0	Black	6'	1.2	UL/CSA	2.25	1.75	1.49	1.19
2205261	ReliaPro	DDU180100H4550	18	1000	2.1mm x 5.5mm F 2	3.3 x 2.2 x 1.9	Black	6'	1.4	UL/CUL	10.95	9.95	8.95	7.95
206958	ReliaPro	DDU180100H4551	18	1000	2.5mm x 5.5mm F 2	3.3 x 2.2 x 1.9	Black	6'	1.4	UL/CUL	10.95	9.95	8.95	7.95
102285	ReliaPro	DDU240040Z7860	24	400	2.1mm x 5.5mm F 2	3.0 x 2.3 x 2.0	Black	6'	0.9	UL/CUL	8.95	7.95	7.29	6.49
2192510	ReliaPro	DDU240050RS1160	24	500	2.1mm x 5.5mm F 2	2.9 x 2.3 x 1.9	Black	6'	1.0	UL/CUL	8.95	7.95	6.95	6.25
191556	ReliaPro	DDU240050E5852	24	500	2.5mm x 5.5mm F 2	3.1 x 2.3 x 1.9	Black	6'	1.0	UL/CUL	9.95	8.95	7.95	7.29
139088	ReliaPro	DDU240050E9160	24	500	3.5mm M 2	3.1 x 2.3 x 1.9	Black	6'	1.0	UL/CUL	9.95	8.95	7.95	7.29
2192641	Ault	P4824060A030G	24	600	2.1mm x 5.5mm F 2	2.9 x 2.2 x 1.9	Black	6'	1.3	UL/CSA	7.95	6.95	5.95	4.95
168495	ReliaPro	DFU240080J3180	24	800	2.1mm x 5.5mm F 2	2.9 x 1.9 x 1.6	Black	6'	0.4	UL/CUL/TUV	11.95	10.95	9.95	8.95
220960	ReliaPro	DFU240100G2300	24	1000	2.1mm x 5.5mm F 1	3.4 x 2.7 x 2.2	Black	6'	1.6	UL/CUL	14.95	13.49	11.95	9.95
249121	ReliaPro	DFU240120/G8520	24	1150	2.1mm x 5.5mm F 2	3.4 x 2.7 x 2.2	Black	6'	1.7	UL/CUL	12.95	11.95	10.95	9.95
249113	ReliaPro	DFU240120/G8510	24	1150	2.5mm x 5.5mm F 2	3.4 x 2.7 x 2.2	Black	6'	1.7	UL/CUL	13.95	12.49	10.95	9.95
199523	ReliaPro	DDU300050E9340	30	500	2.5mm x 5.5mm F 2	2.9 x 2.3 x 1.9	Black	6'	1.1	UL/CUL	10.95	9.95	8.95	7.95
2167621	Seven Star	SS104*	1.5, 3, 4.5, 6, 7.5, 9, 12	500	0.7x2.3, 1.5x4, 2.1x5, 2.5x5.5 Female 2.5, 3.5 Male (LED indicator)	3.3 x 2.0 x 1.9	Black	6'	0.8	—	4.95	3.95	3.49	2.95
123158	ReliaPro	900-100*	1.5, 3, 4.5, 6, 7.5, 9, 12	1000	1.3x3.5, 2.1x5, 2.5x5.5 Female 2.5, 3.5 Male, 9V battery snap (LED ind.)	3.7 x 2.2 x 2.5	Black	6'	0.9	—	11.95	10.95	9.95	8.95

\*110/220VAC input voltage

\*\*Slimline

## GlobTek® AC-to-DC Medical Table-Top Regulated Switching Power Supplies

\*Web Code: WBM

- 2.5mm x 5.5mm female center positive
- Input voltage: 90-264VAC @ 47-63Hz
- Leakage current: 0.1mA max.
- Regulation (line & load): ±5%
- Isolation voltage: 4,000VAC
- 3-wire AC input
- Ripple & noise: 1% or 100mV, whichever is smaller
- Cord lengths: DC: 6'; AC: not included use P/N 132011, pg 100
- Size: 2.9"L x 2.0"W x 1.6"H



Part No.	Mfr. Part No.	Power (W)	Output VDC/Amps	Pricing		
				1	10	50
2179606	TR9CB2500LCP	15.0	+6/2.5	\$15.95	\$14.49	\$12.95
230683	TR9CE1250CP	15.6	+12/1.3	34.95	29.95	24.95
230798	TR9CI2100LCP	50.4	+24/2.1	59.95	53.95	47.95

\*Interchangeable Power Supplies, Adapters and Tips — Enter Web Code NBH

## Accessory Power Input Cords for Table-Top Power Supplies

\*Web Code: UBF



189587



38050



1951123

Part No.	Ref. No. *	Description	Color	AWG	Certification	Cord Length	Wt. (lbs.)	Cord Type	1	10	50	100
189587	1	2-conductor power cord (Figure 8 style)	Black	18/2	UL/CSA	6'	0.3	SPT	\$2.95	\$2.69	\$2.39	\$2.19
38050	2	3-conductor power cord	Black	18/3	UL/CSA	6'	0.4	SVT	4.95	4.49	3.95	3.59
1953559	3	3-conductor flat power cord (Mickey Mouse™ style)**	Black	18/3	UL/CSA	6'	0.4	SPT-2	2.59	2.25	1.95	1.59
1951123	3	3-conductor round power cord (Mickey Mouse™ style)**	Black	18/3	UL/CSA	6'	0.4	SVT	2.95	2.59	2.29	1.95

\*These reference numbers for "AC cord needed" for Table-Top Power Supplies on pages 93-94

\*\*Ref #3 chose flat or round cable

More Power Cords on page 100

## REGULATED SWITCHING TABLE-TOP POWER SUPPLIES — BEST SELLERS

Part No.	Voltage	Current	Page	Price			Part No.	Voltage	Current	Page	Price
196218	5VDC	2A	93	\$17.95			2205165	12VDC	10A	94	\$39.95
1940408	9VDC	2A	92	11.95			1940619	15VDC	1.66A	92	12.95
2197927	12VDC	3A	92	13.95			2197919	24VDC	1.5A	92	13.95
2218151	12VDC	5A	94	16.95			2218100	48VDC	1.45A	92	16.95

# AC-to-DC Switching Table-Top Power Supplies

Jameco carries the full line of Mean Well Power products. For additional products visit [www.Jameco.com/meanwellproducts](http://www.Jameco.com/meanwellproducts)



## AC-to-DC Unregulated Linear & Regulated Switching Table-Top Power Supplies

We are happy to change the power plug on any listed table-top power supply to a connector of your choice (see pg 96) for just \$2.50 ea. Overmolding also available @ \$4.00 ea. A 100 pc. minimum order applies.

2197898



2099569



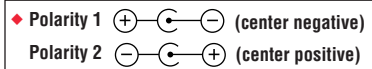
1940299



2155321



309876



Female (F)

Male (M)

DIN (M)

Stripped



See page 99 for International Power Cords

Part No.	Manufacturer	Product No.	Output Volts (VDC)/ Current (A)	Output Connector ID x OD/F = female; M = male; Polarity ⬆	Input VAC@Hz	Output Power (W)	LED Ind.	Size (L" x W" x H")	Cords* (DC/AC)	Wt. (lbs.)	Agency Approvals	Pricing	
												1	10
2-Wire AC Input – Unregulated Linear Table-Top												*Web Code: TBE	
2155006	Lite-On	PB-1090-1L1	+12/0.75	2.5mm x 5.5mm F 2	120@60	9	No	3.2 x 2.2 x 1.9	6/6'	1.1	UL/CUL	\$6.95	\$5.95
2192712	OEM	AD-121ADT	+12/1.0	2.1mm x 5.5mm F 2	120@60	12	No	3.2 x 2.2 x 1.8	6/6'	1.4	UL/CUL	9.95	8.95
2218054	OEM	AD-121ADT-2.5	+12/1.0	2.5mm x 5.5mm F 2	120@60	12	No	3.2 x 2.2 x 1.8	6/6'	1.4	UL/CUL	9.95	8.95
140880	ReliaPro	DC1215ST	+12/1.5	Stripped & Tinned	120@60	18	No	3.1 x 2.1 x 1.9	6/6'	1.5	UL	12.95	11.49
2211178	ReliaPro	SY-12200	+12/2.0	2.5mm x 5.5mm F 2	120@60	24	No	3.8 x 2.6 x 2.1	6/6'	2.1	UL/CUL	10.95	9.95
143722	ReliaPro	DC1220F5	+12/2.0	2.5mm x 5.5mm F 2	120@60	24	No	3.8 x 2.8 x 2.3	6/6'	2.2	UL/CUL	15.95	14.49
2197898	ReliaPro	MKD66123400	+12/3.4	5-pin DIN M	120@60	40	No	5.1 x 3.6 x 2.6	6/6'	3.0	UL/CUL	14.95	13.49
2099569	ReliaPro	57-1607-U4D	+16/0.7	2.5mm x 5.5mm F 2	120@60	19	No	3.6 x 2.7 x 3.6	6/6'	1.3	UL	4.95	4.49
139096	ReliaPro	EHU240120	+24/1.2	2.1mm x 5.5mm F 2	120@60	29	No	4.4 x 3.1 x 2.6	6/6'	2.5	—	15.95	14.49
2197572	ReliaPro	EHU240200	+24/2.0	2.1mm x 5.5mm F 2	120@60	48	No	4.4 x 3.1 x 2.6	6/6'	2.5	—	19.95	17.95
2-Wire AC Input – Regulated Switching Table-Top – Single Output												*Web Code: TTZ	
2179577	Delta	ADP-12GB	+5/2.5	2.5mm x 5.5mm F 2	100-240@50-60	12	No	3.4 x 2.2 x 1.2	6/6'	0.5	UL/CUL	\$10.95	\$9.95
1940299	Mean Well	GS18B05-P1J	+5/3.0	2.1mm x 5.5mm F 2	100-240@50-60	18	Yes	3.1 x 2.1 x 1.3	4/1'	0.5	UL/CUL/TUV/CE	14.95	13.49
2202870	Arndt Electronics	EADP-20NB	+5/4.0	2.1mm x 5.5mm F 2	100-120@50-60	20	No	4.4 x 2.1 x 1.3	6/4'	0.7	UL/CUL/CEC	11.95	10.95
2202626	Arndt Electronics	PS-2.1-5-4DAC#	+5/4.0	2.1mm x 5.5mm F 2	100-120@50-60	20	No	4.4 x 2.1 x 1.3	6/6'	0.7	UL/CUL/CEC	10.95	9.95
1940328	Mean Well	GS18B12-P1JT	+12/1.5	2.1mm x 5.5mm F 2	100-240@50-60	18	No	3.1 x 2.1 x 1.3	6/6'	0.5	UL/CUL/TUV/CE	14.95	13.49
2188570	Arndt Electronics	MPGS-U024120200D2	+12/2.0	2.5mm x 5.5mm F 2	100-240@50-60	24	No	4.2 x 1.7 x 1.2	6/1'	0.5	UL/CUL/FCC	17.95	15.95
2167445	ReliaPro	ADPV16	+12/3.0	2.1mm x 5.5mm F 2	100-240@50-60	36	No	3.6 x 1.6 x 1.1	5/1'	0.4	UL/CUL/CE/CSA	16.95	15.49
2155321	ReliaPro	PA1045-120T2B375-APR2	+12/3.75	2.1mm x 5.5mm F 2	90-264@50-60	45	Yes	4.3 x 2.1 x 1.2	6/1'	0.5	UL/CUL/TUV/CE	22.95	20.95
2214230	Mean Well	GSM60B12-PIJ	+12/5.0	2.1mm x 5.5mm F 2	80-264@47-63	60	Yes	4.9 x 2.0 x 1.2	3/1'	0.7	UL/CUL/TUV/CE	21.95	19.95
2205456	Arndt Electronics	AD7212A	+12/5.0	2.1mm x 5.5mm F 2	100-240@50-60	60	Yes	4.2 x 2.4 x 1.2	7/1'	0.7	UL/CUL/TUV/CE	17.95	15.95
1940521	Mean Well	GS25B15-P1J	+15/1.66	2.1mm x 5.5mm F 2	100-240@50-60	25	No	3.1 x 2.1 x 1.3	6/1'	0.5	UL/CUL/TUV/CE	12.95	11.49
1940547	Mean Well	GS25B24-P1J	+24/1.04	2.1mm x 5.5mm F 2	100-240@50-60	25	Yes	3.1 x 2.1 x 1.3	6/1'	0.5	UL/CUL/TUV/CE	12.95	11.49
221613	Mean Well	P30B-6P2JT	+24/1.12	2.1mm x 5.5mm F 2	100-240@50-60	27	Yes	4.3 x 2.6 x 1.4	6/6'	0.8	UL/CUL/TUV/CE	14.95	13.49
1707139	Mean Well	ES25B48-P1J	+48/0.52	2.1mm x 5.5mm F 2	100-240@50-60	25	Yes	3.1 x 2.1 x 1.3	6/1'	0.4	UL/CUL/TUV/CE	10.95	9.95
*3-9V Web Code: TTF												*12-14V Web Code: TTW	
1955642	Delta	ADP-105B	+5/2.0	2.1mm x 5.5mm F 2	100-240@50-60	10	No	3.3 x 1.9 x 1.2	6/2'	0.3	UL/CUL/CE	\$8.95	\$7.95
309876	Arndt Electronics	GI12-USO520	+5/2.0	2.1mm x 5.5mm F 2	100-240@50-60	10	No	2.6 x 1.9 x 1.3	6/2'	0.4	UL/CUL/TUV/CE	9.95	8.95
196218	GlobTek	GT-21089-1305T3	+5/2.0	2.1mm x 5.5mm F 2	120-240@50-60	10	No	3.4 x 1.9 x 1.3	6/2'	0.4	UL/CUL/TUV/CE	17.95	15.95
2115506	OEM	SYS1089-1305-T3	+5/2.6	2.1mm x 5.5mm F 2	100-240@50-60	13	No	3.4 x 1.8 x 1.3	6/2'	0.3	UL/CUL/CE	6.95	5.95
1940387	Mean Well	GS18A05-P1J	+5/3.0	2.1mm x 5.5mm F 2	90-264@47-63	15	Yes	3.7 x 2.1 x 1.4	4/2'	0.5	UL/CUL/TUV/CE	11.95	10.95
1940571	Mean Well	GS25A05-P1J	+5/4.0	2.1mm x 5.5mm F 2	90-264@47-63	20	Yes	3.7 x 2.1 x 1.4	4/2'	0.5	UL/CUL/TUV/CE	12.95	11.49
1952337	Mean Well	GS40A05-P1J	+5/5.0	2.1mm x 5.5mm F 2	90-264@47-63	25	Yes	4.9 x 2.0 x 1.2	4/2'	0.7	UL/CUL/TUV/CE	16.95	15.49
2202511	Switchbox	UP0301E-05P	+5/6.0	2.5mm x 5.5mm F 2	100-240@47-63	30	No	4.7 x 2.4 x 1.3	6/2'	0.5	UL/CUL/TUV/CE	24.95	22.95
320081	GlobTek	TR9CA6000LCP-Y	+5/6.0	2.5mm x 5.5mm F 2	100-240@50-60	30	Yes	4.7 x 2.4 x 1.3	6/2'	0.7	UL/CUL/TUV/CE	39.95	35.95
2144956	ReliaPro	GQ65-060330-EI	+6/3.3	2.1mm x 5.5mm F 2	100-240@50-60	20	No	3.6 x 2.0 x 1.3	6/3'	0.3	UL/TUV/CE	14.95	13.49
206529	Mean Well	GS40A07-P1J	+7.5/5.34	2.1mm x 5.5mm F 2	90-264@47-63	40	Yes	4.9 x 2.0 x 1.3	4/2'	1.5	UL/CUL/TUV/CE	16.95	15.49
2103118	Mean Well	GS60A07-P1J	+7.5/6.0	2.1mm x 5.5mm F 2	90-264@47-63	45	Yes	4.9 x 2.0 x 1.2	3.3/2'	0.7	UL/CUL/TUV/CE	17.95	15.95
2173036	Phihong	PSA18U-090	+9/2.0	2.1mm x 5.5mm F 2	100-240@50-60	18	No	3.9 x 2.2 x 1.2	5/2'	0.5	UL/CUL/TUV/CE	9.95	8.95
1940408	Mean Well	GS18A09-P1J	+9/2.0	2.1mm x 5.5mm F 2	90-264@47-63	18	Yes	3.7 x 2.1 x 1.4	6/2'	0.6	UL/CUL/TUV/CE	11.95	10.95
2102916	Mean Well	GS40A09-P1J	+9/4.5	2.1mm x 5.5mm F 2	90-264@47-63	40	Yes	4.9 x 2.0 x 1.2	3.3/2'	0.6	UL/CUL/TUV/CE	16.95	15.49
1952361	Mean Well	GS60A09-P1J	+9/6.0	2.1mm x 5.5mm F 2	90-264@47-63	54	Yes	4.9 x 2.0 x 1.3	4/2'	0.7	UL/CUL/TUV/CE	17.95	15.95
2150782	ReliaPro	GQ65-120100EI	+12/1.0	2.1mm x 5.5mm F 2	100-240@50-60	12	No	3.6 x 1.9 x 1.3	6/2'	0.3	TUV(US)/TUV/CE	11.95	10.95
1954244	Mean Well	GS15A-3P1J	+12/1.25	2.1mm x 5.5mm F 2	90-264@47-63	15	No	3.9 x 2.3 x 1.3	6/2'	0.4	UL/CUL/TUV/CE	15.95	14.49
228988	Phihong	PSA18U-120DIN	+12/1.5	3-pin DIN M	100-240@47-63	18	No	3.9 x 2.2 x 1.2	4/2'	0.7	UL/CUL/TUV/CE	19.95	17.95
1940416	Mean Well	GS18A12-P1JU	+12/1.5	2.1mm x 5.5mm F 2	90-264@47-63	18	Yes	3.7 x 2.1 x 1.4	6/6'	0.5	UL/CUL/TUV/CE	14.95	13.49
2135507	SPC Technology	SA121A6F-11	+12/1.6	2.1mm x 5.5mm F 2	100-250@47-63	19	No	3.2 x 2.2 x 1.9	6/2'	0.2	UL/CUL/TUV/CE	8.95	7.95
1940601	Mean Well	GS25A12-P1JU	+12/2.08	2.1mm x 5.5mm F 2	90-264@47-63	25	Yes	3.7 x 2.1 x 1.4	4/6'	0.5	UL/CUL/TUV/CE	14.95	13.49
2154978	ReliaPro	GQ65120250-E1	+12/2.5	2.5mm x 5.5mm F 2	100-240@50-60	30	No	3.6 x 1.9 x 1.3	6/2'	0.5	TUV(US)/CE	14.95	13.49
2197927	ReliaPro	DZ036DL120300G	+12/3.0	2.1mm x 5.5mm F 2	100-240@50-60	36	No	4.3 x 1.9 x 1.3	6/2'	0.5	UL/CUL/CE	13.95	12.49
2129158	Sparkle Power	FSP040-DGAA1	+12/3.33	2.1mm x 5.5mm F 2	100-240@50-60	40	Yes	4.3 x 2.0 x 1.2	5/2'	0.5	UL/CUL/TUV/CE	15.95	14.49
1952345	Mean Well	GS40A12-P1J	+12/3.34	2.1mm x 5.5mm F 2	90-264@47-63	40	Yes	4.9 x 2.0 x 1.3	4/2'	0.7	UL/CUL/TUV/CE	16.95	15.49
2079357	Mean Well	GS40A12-P1M	+12/3.34	2.5mm x 5.5mm F 2	90-264@47-63	40	Yes	4.9 x 2.0 x 1.3	4/2'	0.7	UL/CUL/TUV/CE	16.95	15.49

\* See accessory table-top power cord chart on page 92 when AC cord needed; refer to 1, 2 or 3 in "Cord (DC/AC)" column above for correct power cord

# Attached cord

✓ CEC Equivalent available. Add a "C" before part number for CEC version. CEC

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



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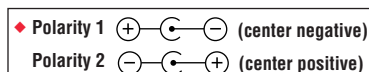
# AC-to-DC Regulated Switching Table-Top Power Supplies



## AC-to-DC Regulated Switching Table-Top Power Supplies

See page 99 for International Power Cords

We are happy to change the power plug on any listed table-top power supply to a connector of your choice (see pg 96) for just \$2.50 ea. Overmolding also available @ \$4.00 ea. A 100 pc. minimum order applies.



2099294



2139006



Part No.	Manufacturer	Product No.	Output Volts (VDC)/ Current (A)	Output Connector ID x OD/F = female; M = male; Polarity	Input VAC@Hz	Output Power (W)	LED Ind.	Size (L" x W" x H")	Cords* (DC/AC)	Wt. (lbs.)	Agency Approvals	Pricing			
												1	10		
* 15-24V Web Code: TTR												3-Wire AC Input – Regulated Switching Table-Top – Single Output (Continued)		* 27-54V Web Code: TTT	
1940272	ReliaPro	GQ65-120416-E1	+12/4.16	2.1mm x 5.5mm F 2	100-240@50-60	50	Yes	4.5 x 1.9 x 1.4	4'/2	0.6	TUV(US)/CE	\$15.95	\$14.95		
2158485	Power-One	3F42050	+12/4.2	2.1mm x 5.5mm F 2	100-240@50-60	50	Yes	4.7 x 2.4 x 1.4	6'/6	—	UL/CUL/CE	11.95	10.95		
2129609	Phihong	PSA65U-120	+12/5.0	2.1mm x 5.5mm F 2	100-240@50-60	60	No	5.9 x 2.8 x 1.5	3.3'/2	1.0	UL/CUL/CE	14.95	13.49		
2208956	ReliaPro	KPL-060F	+12/5.0	2.1mm x 5.5mm F 2	100-240@50-60	60	Yes	4.5 x 2.0 x 1.2	4'/2	0.9	UL/CUL/TUV/CE	15.95	14.49		
1952370	Mean Well	GS60A12-P1J	+12/5.0	2.1mm x 5.5mm F 2	90-264@47-63	60	Yes	4.9 x 1.9 x 1.2	4'/2	0.7	UL/CUL/TUV/CE	17.95	15.95		
2218151	Net Gear	AD8180LF	+12/5.0	2.5mm x 5.5mm F 2	100-240@50-60	60	No	4.6 x 2.4 x 1.4	6'/2	0.6	UL/CUL/CE	16.95	15.49		
2099420	Sparkle Power	AD060DBAEI-J25R	+12/5.0	2.5mm x 5.5mm F 2	100-240@50-60	60	Yes	4.3 x 2.4 x 1.2	5'/2	0.5	UL/CUL/TUV/CE	22.95	20.49		
2078291	Mean Well	GS90A12-P1M	+12/6.67	2.5mm x 5.5mm F 2	90-264@47-63	80	Yes	5.7 x 2.3 x 1.3	4'/2	0.9	UL/CUL/TUV/CE	28.95	25.95		
221429	Mean Well	U6S105-P2JU	+12/6.7	2.1mm x 5.5mm F 2	90-264@47-63	80	Yes	6.6 x 3.1 x 1.8	6'/6	2.0	UL/CUL/TUV/CE	41.95	38.95		
2129211	Mean Well	GS120A12-R7B	+12/8.5	4-pin DIN M	85-264@47-63	102	Yes	6.6 x 2.6 x 1.4	4'/2	1.4	UL/CUL/TUV/CE	42.95	38.95		
2205165	ReliaPro	EA11011H-120	+12/10	4-pin DIN M	100-240@47-63	120	Yes	5.4 x 2.3 x 1.3	4'/2	2.4	UL/CUL/CB/CE	39.95	36.95		
2122183	Mean Well	GS160A12-R7B	+12/11.5	4-pin DIN M	85-264@47-63	138	Yes	6.9 x 2.8 x 1.4	4'/2	0.94	UL/TUV/BSMI/CCC	50.95	45.95		
2099294	Mean Well	GS220A12-R7B	+12/15	4-pin DIN M	90-264/127-370@47-63	180	Yes	8.3 x 3.4 x 1.8	3.3'/2	1.0	UL/CUL/TUV/CE	74.95	67.95		
2139006	ENG Electric	3G-301DN13	+13.5/2.2	4-pin Molex	100-240@50-60	30	No	4.6 x 1.9 x 1.2	2'6"/3'	0.8	UL/CUL	6.25	5.49		
1940619	Mean Well	GS25A15-P1J	+15/1.66	2.1mm x 5.5mm F 2	90-264@47-63	25	Yes	3.7 x 2.1 x 1.4	6'/2	0.5	UL/CUL/TUV/CE	12.95	11.49		
2202554	Phihong	PSA30U-150	+15/2.0	2.1mm x 5.5mm F 2	100-240@47-63	30	No	4.4 x 2.4 x 1.4	6'/2	0.5	UL/TUV/CSA	14.95	13.49		
221577	Mean Well	GS40A15-P1J	+15/2.67	2.1mm x 5.5mm F 2	90-264@47-63	40	Yes	4.9 x 2.0 x 1.3	6'/2	0.8	UL/CUL/TUV/CE	16.95	15.49		
2171559	Mean Well	GS40A15-P1JU	+15/2.67	2.1mm x 5.5mm F 2	90-264@47-63	40	Yes	4.9 x 2.0 x 1.2	3.3'/6'	0.6	UL/CUL/TUV/CE	19.95	17.95		
1954295	Mean Well	GS60A15-P1J	+15/4.0	2.1mm x 5.5mm F 2	90-264@47-63	60	Yes	4.9 x 2.0 x 1.2	4'/2	0.7	UL/CUL/TUV/CE	17.95	15.95		
2078320	Mean Well	GS90A15-P1M	+15/6.0	2.5mm x 5.5mm F 2	90-264@47-63	90	Yes	5.7 x 2.3 x 1.3	3'3"/2	0.8	UL/CUL/TUV/CE	24.95	22.95		
2100785	Mean Well	GS220A15-R7B	+15/13.4	4-pin DIN M	90-264@47-63	201	Yes	8.3 x 3.3 x 1.8	3'/2	0.94	CE/CUL/TUV/UL	74.95	67.95		
2154951	Mean Well	GS60A18-P1JU	+18/3.33	2.1mm x 5.5mm F 2	90-264@47-63	60	Yes	4.9 x 2.0 x 1.2	6'/6	0.8	UL/CUL/TUV/CE	22.95	20.95		
1940635	Mean Well	GS25A24-P1JU	+24/1.04	2.1mm x 5.5mm F 2	90-264@47-63	25	Yes	3.7 x 2.1 x 1.4	6'/6	0.5	UL/CUL/TUV/CE	13.95	12.95		
380577	Mean Well	GS25A24-P1MU	+24/1.04	2.5mm x 5.5mm F 2	90-264@47-63	25	Yes	3.7 x 2.1 x 1.4	6'/6	0.6	UL/CUL/TUV/CE	19.95	17.95		
2172789	ReliaPro	EA1030D1	+24/1.25	2.1mm x 5.5mm F 2	100-240@50-60	30	Yes	3.8 x 1.7 x 1.2	6'/6	0.4	UL/CUL/TUV/CE	11.95	10.95		
2197919	ReliaPro	DZ036DL240150G	+24/1.5	2.1mm x 5.5mm F 2	100-240@50-60	36	No	4.3 x 1.9 x 1.3	6'/2	0.5	UL/CUL/CE	13.95	12.49		
1952353	Mean Well	GS40A24-P1J	+24/1.67	2.1mm x 5.5mm F 2	90-264@47-63	40	Yes	4.9 x 2.0 x 1.2	6'/2	0.7	UL/CUL/TUV/CE	16.95	15.49		
1537256	ReliaPro	OH-1048A2401700U	+24/1.7	2.5mm x 5.5mm F 2	90-264@47-63	40	Yes	4.5 x 2.0 x 1.3	6'/2	0.5	UL/CUL/CE	17.49	15.49		
1942788	ReliaPro	EA1050B-240	+24/2.5	2.1mm x 5.5mm F 2	100-240@50-60	60	Yes	4.8 x 2.4 x 1.4	6'/2	1.8	UL/CUL/TUV/CE	14.95	13.49		
2208948	ReliaPro	KPL-060M	+24/2.5	2.1mm x 5.5mm F 2	100-240@50-60	60	Yes	4.5 x 2.0 x 1.2	4'/2	0.9	UL/CUL/TUV/CE	15.95	14.49		
1952214	Mean Well	GS60A24-P1J	+24/2.5	2.1mm x 5.5mm F 2	90-264@47-63	60	Yes	4.9 x 2.0 x 1.3	6'/2	0.7	UL/CUL/TUV/CE	17.95	15.95		
1950913	ReliaPro	EA1050B-240	+24/2.5	2.5mm x 5.5mm F 2	100-240@50-60	60	Yes	4.8 x 2.4 x 1.4	6'/2	1.8	UL/CUL/TUV/CE	19.95	18.95		
2172746	Cincon	TR70A24	+24/3.0	2.5mm x 5.5mm F 2	100-240@50-60	72	No	5.1 x 2.2 x 1.2	6'/2	0.8	UL/CUL/TUV/PSE	17.95	15.95		
2172797	ReliaPro	EA11001D-240	+24/3.75	2.5mm x 5.5mm F 2	100-240@50-60	90	Yes	5.4 x 2.3 x 0.4	4'/2	0.9	UL/CUL/TUV/CE	27.95	25.49		
2078338	Mean Well	GS90A24-P1M	+24/3.75	2.5mm x 5.5mm F 2	90-264@47-63	90	Yes	5.9 x 2.3 x 1.2	4'/2	0.9	UL/CUL/TUV/CE	28.95	25.95		
2135208	Mean Well	GS120A24-P1M	+24/5.0	2.5mm x 5.5mm F 2	85-264@47-63	120	Yes	6.6 x 2.6 x 1.4	4'/2	1.4	UL/CUL/TUV/CE	42.95	38.95		
2122212	Mean Well	GS160A24-R7B	+24/6.67	4-pin DIN M	85-264@47-63	160	Yes	6.9 x 2.8 x 1.4	4'/2	1.5	UL/CUL/TUV/CE	50.95	45.95		
2099286	Mean Well	GS220A24-R7B	+24/9.2	4-pin DIN M	90-264@47-63	220	Yes	8.3 x 3.4 x 1.8	3.3'/2	2.4	UL/CUL/TUV/CE	74.95	67.95		
1940643	Mean Well	GS25A28-P1J	+28/0.89	2.1mm x 5.5mm F 2	90-264@47-63	25	Yes	3.7 x 2.1 x 1.4	6'/6	0.7	UL/CUL/TUV/CE	12.95	11.49		
1940651	Mean Well	GS25A48-P1J	+48/0.52	2.1mm x 5.5mm F 2	90-264@47-63	25	Yes	3.7 x 2.1 x 1.4	6'/2	0.5	UL/CUL/TUV/CE	12.95	11.49		
1952396	Mean Well	GS60A48-P1JU	+48/1.25	2.1mm x 5.5mm F 2	90-264@47-63	60	Yes	4.9 x 2.0 x 1.2	6'/6	0.7	UL/CUL/TUV/CE	22.95	20.95		
2218100	Netgear	VAN90C-480B	+48/1.45	2.1mm x 5.5mm F 2	100-240@50-60	70	No	5.9 x 2.4 x 1.2	6'/2	0.9	UL/CUL/CE	16.95	15.49		
2122221	Mean Well	GS160A48-R7B	+48/3.34	4-pin DIN M	85-264@47-63	160	Yes	6.9 x 2.8 x 1.4	4'/2	0.94	UL/TUV/BSMI/CCC	50.95	45.95		
3-Wire AC Input – Regulated Switching Table-Top – Double & Triple Output												* Web Code: TTN			
228988	Phihong	PSA18U-120	Din +12/1.5	3-pin DIN M	100-240@50-60	18	No	3.8 x 2.2 x 1.2	5'/2	1.1	UL/CUL/TUV	\$19.95	\$17.95		
2125501	Sunny	SYS2062-3402	+5/2.0, +12/2.0	4-pin mini DIN M	100-240@50-60	34	Yes	4.7 x 2.4 x 1.5	3'/2	0.8	UL/CUL/TUV/CE	22.95	19.95		
196270	ReliaPro	PSU25A13	+5/2.5, +12/1.0	4-pin mini DIN M	100-240@47-63	25	No	4.2 x 2.6 x 1.4	6'/6	1.2	UL/CUL/TUV/CE	34.95	31.49		
2220066	Entone	SPU45E-201	+5/5.0, +12/2.0	4-pin mini DIN M	100-240@47-63	42	Yes	5.7 x 3.0 x 1.7	4'/2	1.1	UL/CUL/TUV/CE	24.95	22.49		
221720	Mean Well	P25A14E-R1BU	+5/2.5, +15/0.3 -15/0.3	5-pin DIN M	100-240@50-60	25	Yes	4.3 x 2.6 x 1.4	6'/6	0.8	UL/CUL/TUV/CE	29.95	26.95		
190960	Mean Well	P25A13D-R1B	+5/2.5, +12/0.8 -12/0.3	5-pin DIN M	90-264@47-63	26	Yes	4.1 x 2.6 x 1.4	6'/2	1.1	CUL/TUV/CE	29.95	26.95		
237367	Mean Well	P50A14E-R1B	+5/3.5, +15/1.2 -15/0.3	5-pin DIN M	90-264@47-63	42	Yes	5.8 x 3.0 x 1.7	4'/2	1.2	UL/CUL/TUV/CE	44.95	39.95		
2217844	Arndt Electronics	T40-9312A	+5/5.0, +12/1.2 -12/0.3	6-pin DIN M	100-240@50-60	43	No	6.0 x 3.3 x 1.9	4'/2	1.2	UL/CUL/TUV/CE	39.95	34.95		
221702	Mean Well	P50A13D-R1BU	+5/4.0, +12/2.0 -12/0.5	5-pin DIN M	90-264@47-63	50	Yes	5.7 x 3.0 x 1.7	4'/6	1.5	UL/CUL/TUV/CE	49.95	44.95		

\* See accessory table-top power cord chart on page 92 when AC cord needed; refer to 1, 2 or 3 in "Cord (DC/AC)" column above for correct power cord

† Right angle

• CEC

# Power Supplies, Wall Adapters & Power Cables

## 10-Watt Switching Wall Adapter

- Output voltage: 3, 4.5, 6, 7.5, 9, 12VDC selectable
- Output connectors: 2.5mm and 3.5mm male, 1mm x 3mm, 1.35mm x 3.5mm, 1.7mm x 4mm, 2.1 x 5mm, 2.5mm x 5.5mm, 1.5mm x 5.5mm female
- Input voltage: 100-230VAC, 50/60Hz
- Output current: 0.8 to 1.5A



Part No.	Mfr. Part No.	Size (L x W x H)	1	10
2137182	PSSMV1USA	2.6" x 1.1" x 2.9"	\$15.95	\$14.49

## 30-Watt Switching Table-Top Power Supply

- Output voltage: 5VDC to 12VDC in 1V increments
- Output connectors: 2.5mm & 3.5mm male, 1mm x 3mm, 1.35mm x 3.5mm, 1.5mm x 5mm, 1.7mm x 4mm, 2.1mm x 5mm & 2.5mm x 5mm female
- Stabilized outputs, low ripple & interference
- High efficiency, low energy consumption
- Short-circuit, overload protection
- Input voltage: 100-240VAC @ 50/60Hz • LED power indicator



Includes: AC power cord

Part No.	Mfr. Part No.	Output Current	Size (L x W x H)	1	5	25
2158354	PSSE13U	1.5A to 4A	3.5" x 1.8" x 1.2"	\$39.95	\$35.95	\$31.95

## Regulated Desktop/Benchtop Power Supply

This is a high powered, regulated power supply that is perfect for hobbyists. Typical applications are model railroads, slot car racing, science projects and other applications requiring 12V @ 24A power source. Features output connections heavy duty binding posts and cigarette lighter plug with a 2.1mm x 5.5mm female plug.



- Input voltage: 100VAC to 240VAC @ 50-60Hz • CUL/UL recognized
- Includes: 6' IEC power cord, 6' coiled cigarette lighter plug cord with a 2.1mm x 5.5mm right angle female plug • Max. output voltage: 12V @ 24A

Part No.	Mfr. Part No.	Size (L x W x H)	Wt. (lbs.)	1	5	25
2197599	PS24B	14.5" x 6" x 3.5"	9.0	\$59.95	\$53.95	\$47.95

## In-Car USB Charger/Adapter

- Input voltage: 12VDC to 24VDC
- Output voltage: 5VDC @ 1A
- Output connector: USB type A
- LED indicator for power • Overall length: 2"
- Compatible with iPhone, iPod, Samsung



Part No.	Cross Ref. No.	Size (L x W x H)	1	10	50
2158320	CC001-BLK	2.1" x 0.9" x 0.8"	\$3.95	\$3.59	\$3.25

## DC Cords with Pigtail – 6' length

- 24 AWG • Color: black

\*Web Code: MFP

Part No.	Cross Ref. No.	Fig.	Description (Barrel)	ID x OD x L (mm)	1	10	100
2114706	6FT#245.5X1.7	1	Plug, 1.7 x 5.5 x 12		\$1.15	\$0.99	\$0.89
2096763	DCCORD2.1	1	Plug, 2.1 x 5.5 x 12		1.95	1.75	1.59
2210925	DCCORD2.1*	1	Plug, 2.1 x 5.5 x 9.5		2.49	1.95	1.59
2096771	DCCORD2.5	1	Plug, 2.5 x 5.5 x 12		1.95	1.75	1.59
2114600	6FT#245.5X2.1	2	Jack, 2.1 x 5.5 x 12		1.95	1.75	1.59
2114597	6FT#245.5X2.5	2	Jack, 2.5 x 5.5 x 12		1.95	1.75	1.59

\*18 AWG wire

## DC Extension Power Cables

Part No.	Mfr.	Cross Ref. No.	Description (Barrel)	ID x OD x L (mm)	AWG	Color	1	10	100
2099147	ValuePro	DCEXTCORD2.1- 3FT	2.1F x 2.1M x 3' cable		18	Black	\$2.49	\$2.25	\$1.95
2099121	ValuePro	DCEXTCORD2.1- 6FT	2.1F x 2.1M x 6' cable		18	Black	2.95	2.59	2.25
2099155	ValuePro	DCEXTCORD2.5- 3FT	2.5F x 2.5M x 3' cable		18	Black	2.49	2.25	1.95
2099139	ValuePro	DCEXTCORD2.5- 6FT	2.5F x 2.5M x 6' cable		18	Black	2.95	2.59	2.25



## USB-A Power Cable w/ Interchangeable Tips

- 4' cable • 26 AWG
- USB-A male connector • UL/CSA approved
- Tips: 1.3mm x 5.5mm, 1.7mm x 4.0mm, 1.7mm x 4.8mm, 2.1mm x 5.5mm, 2.5mm x 5.5mm, 2.9mm x 6.3mm female 3.2mm x 5.0mm and 4.3mm x 6.0mm male
- For use with P/N 2138636 wall adapters (below)



Part No.	Cross Ref. No.	1	10	50	100
2081625	USBAC8	\$5.95	\$5.39	\$4.79	\$4.29

## 5VDC @ 200mA Wall USB Adapter

- Works with digital camera, cell phones, PDA, MP3 and other USB devices • LED indicator
- TUV/FCC approved • Output voltage: 5VDC @ 200mA
- Input volt.: 100-240VAC @ 50/60Hz
- Size: 2.5"H x 1.5"W x 0.8"D
- Cable and tips use P/N 2081625 (right above)



Part No.	Mfr. Part No.	1	10	50	100
2138636	SW013US-0500020US	\$3.95	\$3.59	\$3.19	\$2.79

## 5VDC @ 500 & 1000mA USB Wall Adapters

- Works with digital camera, cell phones, PDA, MP3 and other USB devices
- Flip up prongs
- UL FCC approved
- Input voltage: 100-240VAC @ 50/60Hz
- Cable and tips use P/N 2081625 (above)



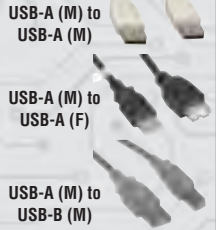
Part No.	Mfr. Part No.	Size (H x W x D)	1	10	50	100
2197644	FEF0500050AIBU*	2.2" x 1.5" x 1.1"	\$4.95	\$4.49	\$3.95	\$3.49
2197652	GFP051-0505-1*	2.5" x 1.9" x 0.9"	4.95	4.49	3.95	3.49
2210888	1128**	2.6" x 1.3" x 1.5"	6.95	6.49	5.95	5.49

\*500mA \*\*1000mA

## USB CABLES – BEST SELLERS

\*Web Code: NAV

Part No.	Description	Lgth (ft.)	Color	1	10	100
222033	A M to M (2.0)	6	Black	2.95	2.59	1.95
326482	A M to F (2.0)	3	Beige	1.95	1.75	1.59
222068	A M to F (2.0)	6	Black	3.25	2.95	2.25
222076	A M to F (2.0)	10	Black	3.49	2.95	2.49
229711	A M to B M (2.0)	3	Beige	1.95	1.75	1.59
222608	A M to B M (2.0)	3	Black	1.95	1.75	1.59
229730	A M to B M (2.0)	6	Beige	2.95	2.49	1.95
222010	A M to B M (2.0)	6	Black	2.95	2.49	1.95
229738	A M to B M (2.0)	10	Beige	3.25	2.95	2.25



## Automobile Fused Power Plugs with Cords

- Accepts .25" x 1.25" fuse
- 115002: Screw assembly with strain relief (no cord)
- 124760: 3' cord with pigtail



Part No.	Fuse	1	10	100
115002	5A/250VAC	\$2.25	\$1.95	\$1.75
124760	3A/250VAC	2.49	2.25	1.95

## Power Cord Adapters

- 2188545: Receptacle IEC plug C14 to Nema 5-15R
- 2188553: Receptacle CEE 7/7 to Nema 5-15R plug

Part No.	Cross Ref. No.	1	10	50
2188545	YL-3215	\$3.95	\$3.59	\$3.29
2188553	YL-2215	3.95	3.59	3.29

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Power Jacks, Plugs & Adapters

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

JAMECO  
ValuePro

## Switchcraft® Male & Female Power Jacks

\*Web Code: BAM

Part No.	Mfr.	Product No.	Description Pin Dia. x OD	Dimensions H x W x D (mm)	Type/ Mount	Circuit/ Terminal			
							1	10	100
101194	ValuePro	PP024	1.3 x 3.5mm male	6.0 x 6.0 x 9.0	1/D	1/B	\$.59	\$.55	\$.45
202909	Arndt	163-0310	1.7 x 4.8mm male	41 x 10.3 Dia.	6/F	3/A	.79	.69	.59
2168114	Adam Tech	ADC-002A-1	2.0 x 6.4mm male	11.0 x 9.0 x 14.3	2/D	1/A	.29	.25	.19
2188625	Arndt	PJ2155	2.1 x 5.5mm male	10.9 x 9.0 x 14.0	2/D	1/A	.35	.29	.25
101178	ValuePro	PP014	2.1 x 5.5mm male	10.9 x 9.0 x 14.5	2/D	1/A	.39	.35	.29
101179	ValuePro	PP014	2.1 x 5.5mm male	10.9 x 9.0 x 14.5	2/D	1/A	.45	.39	.35
137673	ValuePro	PP013	2.1 x 5.5mm male	10.9 x 9.0 x 14.5	3/D	4/A	.45	.39	.35
151590	ValuePro	DPJ-021A	2.1 x 5.5mm male	18.0 x 12.6 Dia.	4/C†	1/A	.89	.79	.69
151555	ValuePro	JX161832	2.1 x 5.5mm male	21.0 x 8.0 Dia.	5/C	1/A	1.75	1.59	1.39
281851	Switchcraft	722A2	2.1 x 5.5mm male	21.0 x 8.0 Dia.	7/C	1/A	4.95	4.49	3.95
159611	ValuePro	PJ1014A	2.1 x 5.5mm male	57.5 x 12.6 Dia.	6/F	3/A	1.75	1.59	1.39
2151136	ValuePro	HD2388C	2.1 x 5.5mm male	12.4 x 7.7 Dia.	8/C*	3/A	1.19	.99	.89
2144690	ValuePro	L5225	2.1 x 5.5mm male	11.0 x 9.1 x 14.7	13/D	1/A	.35	.29	.19
2153908	Velleman	CD021**#	2.1 x 5.5mm male	13 x 14.5 x 40	17/C	4/C	4.95	4.69	4.45
2210677	ValuePro	WTJ-020-37A	2.1 x 6.4mm male	14.5 x 9 x 10.7	3/D	1/B	.69	.65	.55
207714	ValuePro	HEC0470	2.5 x 5.5mm male	11.0 x 9.0 x 14.5	2/D	1/B	.59	.55	.49
101187	ValuePro	PP014A	2.5 x 5.5mm male	11.0 x 9.0 x 14.5	2/D	1/A	.59	.55	.49
151563	ValuePro	DPJ-026A2	2.5 x 5.5mm male	15.1 x 8.0 Dia.	5/E	1/A	1.49	1.35	1.19
159506	ValuePro	PJ1015A	2.5 x 5.5mm male	57.5 x 12.6 Dia.	6/F	3/A	1.49	1.35	1.19
202358	ValuePro	HD2388	2.5 x 5.5mm male	12.4 x 7.7 Dia.	8/C*	3/A	1.19	.99	.89
281842	Switchcraft	712A2	2.5 x 5.5mm male	15.8 x 7.5 Dia.	7/C	1/A	4.95	4.49	3.95
297553	Switchcraft	PC712A2	2.5 x 5.5mm male	23.3 x 11.0 Dia.	9/D	1/A	3.49	2.49	1.95
2144745	Arndt	J25M	2.5 x 5.5mm male	11.1 x 8.9 x 13.4	14/C	1/A	.29	.25	.19
2153887	ValuePro	CD017#	2.5 x 5.5mm male	13 x 14.5 x 40	17/C	4/F	5.49	4.95	4.49
2168122	Adam Tech	ADC-002A-2	2.5 x 6.4mm male	11.0 x 9.0 x 14.3	2/D	1/A	.59	.55	.49
1773996	Switchcraft	MDPC2ARA	2.5mm female	7.9 x 8.7 x 12.7	15/D	4/B	2.49	2.25	1.95
297035	Switchcraft	142A	3.5mm female	11.1 x 9.5 x 15.8	16/C	4/A	2.25	1.95	1.75
101143	ValuePro	PJ03521	3.5mm female	10.0 x 10.0 x 18.5	10/E	2/A	.49	.45	.39
109496	ValuePro	PJ035PM1	3.5mm female	10.5 x 9.0 x 20.0	11/C	2/A	.49	.45	.39
165730	ValuePro	PJ0354R1	3.5mm female	15.5 x 5.9 Dia.	12/C	3/A	.79	.69	.59
2183218	ValuePro	M6HDWR	Additional Panel Mounting Hardware indicated with 1 (pg 78)				.69	.59	.49
281852	Switchcraft	5/16-32HDWR	Additional Panel Mounting Hardware indicated with 2 (pg 78)				.69	.59	.49

† Center offset    \* Plastic    \*\* Screw terminals    # 5 pack

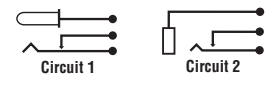
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## Switchcraft® AC/DC Power Plugs & Adapters

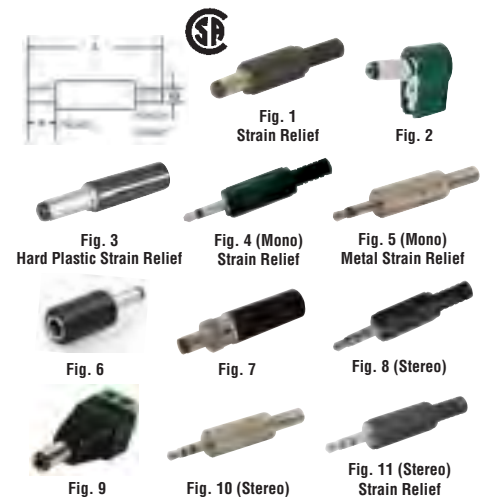
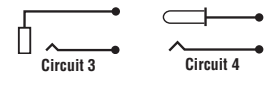
\*Web Code: MFP

Part No.	Mfr.	Product No.	Fig.	Description (Barrel) Plug ID x OD x L (mm)	Strain Relief ID x L (mm)			
						1	10	100
71192	ValuePro	PP137	1	F plug, 1.3 x 3.5 x 9.5	4.1 x 12 (black)	\$.79	\$.69	\$.65
191484	ValuePro	PP049W	1	F plug, 2.1 x 5.5 x 9.0	4.6 x 12.5 (white)	.89	.79	.69
2004890	ValuePro	PP049S	1	F plug, 2.1 x 5.5 x 9.5	4.5 x 12.5 (black)	.89	.79	.69
28760	ValuePro	PP049	1	F plug, 2.1 x 5.5 x 9.5 (P205)	4.1 x 12 (black)	.89	.79	.69
2201990	Arndt	CS1021-HP-12	3	F plug, 2.1 x 5.5 x 12	8.3 x 22 (black)	1.25	1.09	.95
2179358	ValuePro	27-1136A	7	F plug, 2.1 x 5.5 x 9.5 (locking)	6.0 x 25 (black)	2.95	2.49	1.95
2145123	ValuePro	CS1021-A-12MM	1	F plug, 2.1 x 5.5 x 12	4.3 x 12 (black)	.89	.79	.69
138587	ValuePro	PL-007	2	F plug, 2.1 x 5.5 x 12 (right angle)	2.8 x 11 (black)	.89	.79	.65
2153916	Velleman	CD022	9	F plug, 2.1 x 5.5 x 37 (screw term)	—	4.49	4.25	4.05
190538	ValuePro	PP109S	1	F plug, 2.5 x 5.5 x 9.5	4.7 x 13 (black)	.89	.79	.65
281877	Switchcraft	760	3	F plug, 2.5 x 5.5 x 9.5	5.5 x 25 (black)	3.49	3.25	2.95
28768	ValuePro	PP109	1	F plug, 2.5 x 5.5 x 9.5 (P206)	4.7 x 13 (black)	.89	.79	.65
2179366	ValuePro	27-1136B	7	F plug, 2.5 x 5.5 x 9.5 (locking)	6.0 x 25 (black)	2.95	2.49	1.95
2145115	ValuePro	CS1021-B-12MM	1	F plug, 2.5 x 5.5 x 12	4.3 x 12 (black)	.89	.79	.69
168242	ValuePro	PP109N	3	F plug, 2.5 x 5.5 x 14	3.9 x 22 (black)	.89	.79	.69
2099163	ValuePro	PL-008	2	F plug, 2.5 x 5.5 x 9.5 (right angle)	2.8 x 11 (black)	.95	.85	.75
2153895	Velleman	CD018	9	F plug, 2.5 x 5.5 x 37 (screw term)	—	4.49	4.25	4.05
101135	ValuePro	JR-1020	4	M plug, — x 2.5 x 11 (mono)	4.3 x 13 (black)	.59	.49	.39
231176	ValuePro	AP-340	11	M plug, — x 3.5 x 14 (stereo)	4.3 x 13.5 (black)	.79	.69	.55
231167	ValuePro	AP-343	10	M plug, — x 3.5 x 14 (stereo)	4.4 x 13 (metal)	1.49	1.25	.99
231160	ValuePro	PJ1035	5	M plug, — x 3.5 x 14 (mono)	4.8 x 13.5 (metal)	1.49	1.25	.99
101152	ValuePro	PJ1035	4	M plug, — x 3.5 x 14.5 (mono)	4.0 x 13 (black)	.69	.59	.49
2200954	ValuePro	JR1037	8	M plug, — x 3.5 x 14.5 (stereo)	4.5 x 12 (black)	1.95	1.75	1.49
2112989	ValuePro	JP1828C	6	Adapter, 2.1mm M to 1.3mm F (1.3"L)	—	2.25	1.95	1.75
1953591	ValuePro	DCJ2.1-DCP2.5	6	Adapter, 2.1mm M to 2.5mm F (1.4"L)	—	1.49	1.25	1.09
1953604	ValuePro	DCJ2.5-DCP2.1	6	Adapter, 2.5mm M to 2.1mm F (1.4"L)	—	1.49	1.25	1.09

Terminals	Code
Solder eyelet	A
PC board	B
Screw term	C



Mounting	Code
Panel	C
PCB	D
Panel & PCB	E
Cable	F



**Call for additional OEM pricing on Wall Adapters!**

We are happy to change any listed DC wall adapter power plug to a connector of your choice (pg 96) for just \$2.50 each or \$4.00 each molded. A 100 pc. minimum order applies.

Wall Adapters on pages 90-94

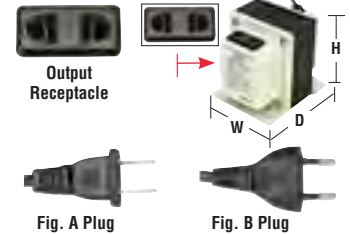


JAMECO ValuePro

## International Step-Up & Step-Down Transformers

\*Web Code: RAL

Part No.	Cross Ref. No.	Fig.	Type	Volt Step	Primary Voltage	Secondary Voltage	Watts (VA)	Dimensions			Wt. (lbs.)	Pricing		
								H"	W"	D"		1	5	25
221331	GIS-500	A	Isolation	—	120VAC	120VAC	500	4.69	3.75	6.00	16.0	\$89.95	\$79.95	\$69.95
85016	GPC1003	B	Auto	Down	220VAC	120VAC	300	3.50	3.05	3.95	4.8	49.95	44.95	39.95
111851	GPC1005	B	Auto	Down	220VAC	120VAC	500	3.99	3.60	4.84	8.5	59.95	54.95	49.95



JAMECO ValuePro

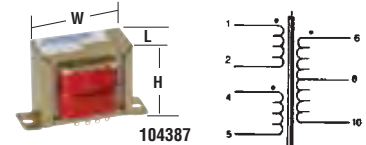
## Quick-Connect Power Transformers

- Input voltage: 120/230VAC, 50-60Hz
- Terminals: quick-connect, solder

\*Web Code: BAN

Part No.	Product No.	Triad Cross*	Input Voltage	Output Voltage	Watts (VA)	Size of Connect	Dimensions			Wt. (lbs.)	Pricing		
							L"	W"	H"		1	10	100
101864	XFR2424Q	FD724	120/230VAC	24VCT @ 2.4A	57.6	0.141"	2.10	2.70	2.29	1.7	\$10.95	\$9.49	\$8.95
104417	XFR3615Q	FD736	120/230VAC	36VCT @ 1.5A	54.0	0.141"	2.30	2.70	2.30	1.8	19.95	18.49	16.95

\*Triad cross is for reference only



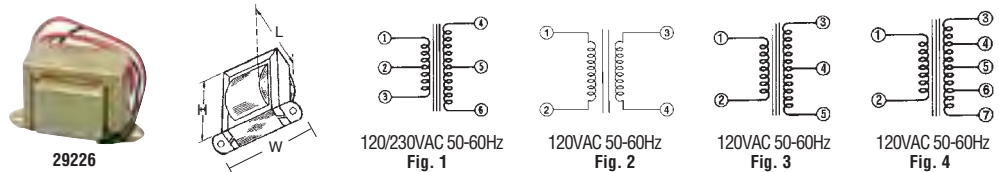
JAMECO ValuePro

## Power Transformers (7.6 Watts to 288 Watts)

\*Web Code: PTL

Power transformers have both single and dual-voltage inputs and center-tapped outputs. This makes them the perfect choice for power supply design or for use in transformer, rectifier and filter circuits.

- Primary: 120VAC or 120/230VAC, 50-60Hz



Part No.	Product No.	Triad Cross <sup>#</sup>	Primary Color Code			Watts (VA)	Secondary				Lead Type	Fig.	Dimensions			Wt. (lbs.)	Pricing		
							Voltage		Color Code				L"	W"	H"		1	10	100
105524	XR082-91-R	—	Black	White <sup>*</sup>	Red	9.0	4.5VCT @ 1A	Blue	Black <sup>*</sup>	Blue	Wire	1	1.82	2.43	1.67	0.7	\$11.95	\$10.95	\$9.95
102163	XFR6102	F314X	Black	Yellow <sup>*</sup>	Red	7.6	6.3VCT @ 1.2A	White	Black <sup>*</sup>	White	Wire	1	1.84	2.40	1.67	0.8	10.95	9.95	8.95
221400	P-8657	F218X	Black	—	Black	24.0	12VAC @ 2A	White	—	White	Wire	2	1.89	2.75	1.99	1.3	11.95	10.95	9.95
221356	P-8658	F219X	Black	—	Black	48.0	12VAC @ 4A	White	—	White	Wire	2	2.25	4.00	2.63	2.3	12.95	11.95	10.95
2188502	53260	—	Red	—	Green	36.0	12/5VCT @ 3A	Purple	Multi	Gray	Wire	4	2.36	2.34	1.94	1.3	8.95	7.95	6.95
104387	XFR1225Q	FD612	—	—	—	31.5	12.6VCT @ 2.5A	—	—	—	—	1	1.75	2.33	2.00	1.3	12.95	11.95	10.95
29226	XFR122	F44X	Yellow	—	Yellow	25.2	12.6VCT @ 2A	Blue	Red <sup>*</sup>	Black	Wire	3	2.41	2.79	1.99	1.5	13.95	12.49	10.95
102155	XFR1220	F344X	Black	Yellow <sup>*</sup>	Red	25.2	12.6VCT @ 2A	White	Black <sup>*</sup>	White	Wire	1	2.35	2.32	1.97	1.5	13.95	12.49	10.95
149771	XFR1240	F3181U	Black	Red <sup>*</sup>	Yellow	50.4	12.6VCT @ 4A	White	Black <sup>*</sup>	White	Wire	1	2.45	3.20	2.25	2.2	14.95	13.49	10.95
102121	XFR124	F181U	Black	—	Black	50.4	12.6VCT @ 4A	White	Black <sup>*</sup>	White	Wire	3	2.45	3.21	2.26	2.7	14.95	13.49	10.95
105532	XFR1810	—	Blue	Red <sup>*</sup>	Black	18.0	18VCT @ 1A	Yellow	Black <sup>*</sup>	Yellow	Wire	1	2.20	2.81	1.99	1.2	11.95	10.95	9.95
149957	XFR1820	—	Black	Red <sup>*</sup>	Yellow	36.0	18VCT @ 2A	White	Black <sup>*</sup>	White	Wire	1	2.25	3.15	2.71	1.8	12.95	11.95	10.95
112513	XFR242N	F229X	Black	—	Black	48.0	24VAC @ 2A	White	—	White	Wire	2	2.33	3.16	2.28	1.8	13.95	12.49	10.95
221382	P8396	—	Black	—	Black	9.6	24VCT @ 0.4A	White	Black <sup>*</sup>	White	Wire	3	1.63	2.80	1.97	0.6	10.95	9.95	8.95
102112	XFR2410	F346X	Black	Yellow <sup>*</sup>	Red	24.0	24VCT @ 1A	White	Black <sup>*</sup>	White	Wire	1	2.41	2.80	1.99	1.5	11.95	10.95	9.95
221373	P-8662	F192X	Black	—	Black	48.0	24VCT @ 2A	White	Black <sup>*</sup>	White	Wire	3	2.44	3.60	2.23	2.3	13.95	12.49	10.95
221365	P-8663 <sup>†</sup>	F193U	—	—	—	96.0	24VCT @ 4A	—	—	—	Lug	3	2.81	2.94	4.00	4.0	25.95	23.95	21.49
99654	XFR242	—	Red	—	Red	49.2	24.6VCT @ 2A	Blue	Yellow <sup>*</sup>	Blue	Wire	3	2.44	3.22	2.30	2.5	11.95	10.95	9.95
149797	XFR2820	F3185U	Black	Red <sup>*</sup>	Yellow	56.0	28VCT @ 2A	White	Black <sup>*</sup>	White	Wire	1	2.45	3.22	2.26	2.3	13.95	12.95	10.95

\*Center tap \* Triad cross is for reference only † Solder terminal

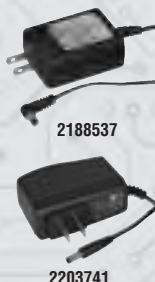
\*Audio Transformers — Enter Web Code SAJ

\*Variable Transformers — Enter Web Code MAR

\*DC Power Plugs & Adapters — Enter Web Code MFP

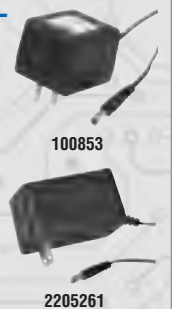
## REGULATED SWITCHING WALL ADAPTERS — BEST SELLERS

Part No.	Description	Page	Price
2188537	5V @ 2.0A	88	\$7.95
2203741	9V @ 1.0A	89	9.95
2151101	12V @ 0.5A	89	6.95
2215726	12V @ 2.5A	89	11.95
2173116	12V @ 3.0A	89	17.95
2173108	15V @ 2.0A	89	14.95
380191	18V @ 1.38A	89	12.95



## UNREGULATED LINEAR WALL ADAPTERS — BEST SELLERS

Part No.	Description	Page	Price
147707	6V @ 0.8A	91	\$8.95
100853	9V @ 0.5A	91	7.95
2158160	12V @ 0.8A	91	7.95
2197484	12V @ 1A	91	7.95
2192747	12V @ 1.2A	91	8.95
2205261	18V @ 1A	92	10.95
191556	24V @ 0.5A	92	9.95
249121	24V @ 1.15A	92	12.95



\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

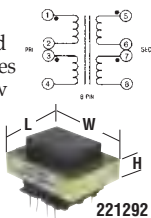
3 LEVELS OF SAVINGS  
NAME BRANDS HOUSE BRANDS SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

## JAMECO ValuePro

Non-concentrically wound w/ primaries & secondaries side-by-side providing low capacitive coupling.

- Primary: 120/230VAC, 50-60Hz
- PC terminal pin spacing for accurate placement



## Split-Bobbin Power Transformers (2.5 to 20VA)

\* Web Code: LBK

Part No.	Cross Ref. No.	Triad Cross *	Input Voltage	Watts (VA)	Individual Output	Parallel Output	Series Output	Dimensions L" W" H"	Wt. (lbs.)	Pricing 1 10 100
221292	DSW-312	FS12200	120/230	2.5	6.3V @ .20A	6.3V @ .40A	12.6VCT @ .20A	1.38 1.13 1.19	0.3	\$6.95 \$6.25 \$5.59
2210941	DSW-612	—	120/230	20	6.3V @ 1.6A	6.3V @ 3.2A	12.6VCT @ 1.6A	2.25 1.88 1.44	0.8	7.95 6.95 5.95
102593	SPW-2304	FS24500	120/230	12	12V @ .50A	12V @ 1.0A	24VCT @ .50A	2.00 2.50 1.06	0.7	6.95 5.95 4.95

\* Triad cross is for reference only

## JAMECO ValuePro

### PC Mount Modem Coupling Transformer

- Core type: EI-14
- Insulation resistance: 100MΩ
- ±20% impedance matching and DC resistance matching
- Hipot tested: 1000VAC • Vacuum wax impregnated

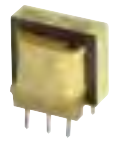


Part No.	Cross Ref. No.	Impedance (Ω) Primary Secondary	Resistance (Ω) Primary Secondary	Pricing 1 10 100
125357	XFR6006A14	600CT 600CT	65 55	\$4.49 \$3.95 \$3.75

## TRIAD

### PC Mount Audio Transformer

- Impedance matching: 10% over frequency range
- 6-pin PC mount • Output: 100mW
- Impedance (Ω): 600CT/600CT
- Primary DC Unbalance: 15mA



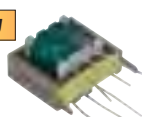
Part No.	Mfr. Part No.	Dimensions (W x D x H)	1 10 100
630459	TY-145P	13/16" x 9/32" x 5/8"	\$5.95 \$5.49 \$4.49



### Audio Transformer

\* Web Code: SAJ

- 300Hz to 3.4kHz
- Primary turns: 11486; Secondary turns: 1
- 200mW power rating



Part No.	Mfr. Part No.	Secondary Impedance	Primary Impedance	1 10 100
2210511	42TM013-RC	8Ω	1kΩ	\$3.95 \$3.59 \$3.29

## JAMECO ValuePro

### Data/Voice Coupling Transformer

- Turns ratio: 1:1 ±2% • DC current: 90mA
- Primary impedance: 600Ω; Secondary impedance: 600Ω
- Operating level: -45dBm to +10dBm



Part No.	Mfr. Part No.	Dimensions (L x W x H)	1 10 100
2210992	TTC-105	21.3mm x 16mm x 19mm	\$4.49 \$3.95 \$3.59

## JAMECO ValuePro

### 500 to 2000VA Variable Transformers

- Input: 110VAC or 220VAC
- Power: 500, 1000 or 2000VA
- Output: 0-240VAC
- Banana/screw input terminals
- Universal US/European output plugs
- Lighted on/off power switch

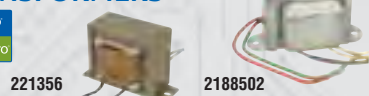


Part No.	Fuse	Size (W" x D" x H")	Wt. (lbs.)
121276	3A/250V (P/N 69439)	5.3 x 7.3 x 7.0	10.4
129008	5A/250V	9.4 x 6.5 x 7.7	14.8
152582	10A/250V (P/N 69462)	9.0 x 7.0 x 7.7	19.8

Part No.	Description	1 5
121276	500VA transformer	\$139.95 \$129.95
129008	1000VA transformer	169.95 154.95
152582	2000VA transformer	224.95 199.95

### TOP SELLING POWER TRANSFORMERS

## JAMECO ValuePro



Part No.	Description	1 10
102163	6.3VCT @ 1.2A	\$10.95 \$9.95
221356	12VAC @ 4A	12.95 11.95
2188502	12VCT @ 3A	8.95 7.95
102112	24VCT @ 1A	11.95 10.95

\* AC Power Cords — Enter Web Code UBF

\* Variable Transformers — Enter Web Code MAR

## JAMECO ValuePro

### 300VA Isolation Transformer 120VAC to 120VAC

- Input connector: 5.5' cord with 2-prong plug
- Output volt.: 120VAC @ 2.5A (isolated)
- Input voltage: 120VAC @ 60Hz
- Size: 3.2"W x 4.6"D x 4.2"H • Weight: 7.0 lbs.



Part No.	Cross Ref. No.	1 5 25
181315	ITR300	\$49.95 \$44.95 \$39.95

## JAMECO ValuePro

### Transformer Isolation

- Output: 120VAC/4A, 60Hz
- Input: 110VAC 60Hz, 1800VA
- Primary: Current: 14 Amps fuse Direct AC#1: 110VAC 60Hz, 900VA Direct AC#2: 110VAC 60Hz, 900VA
- Secondary: Current: 7 Amps fuse Isolated AC#1: 110VAC 60Hz, 450VA Isolated AC#2: 110VAC 60Hz, 450VA
- Dimension: 5"L x 6"W x 9"H



Part No.	Mfr. Part No.	1 5 25
2214336	GRP-1200	\$99.95 \$89.95 \$84.95



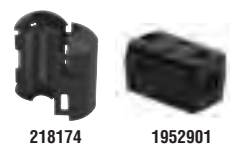
### 6kV-7.4kV High Voltage Power Supply

- Input voltage range: 113VAC to 132VAC
- Input lead wires: 22 AWG UL1015, 7.5"L; AC hot (black), AC COM (white), HV RTN (green) • Output voltage: 6.0kV to 7.4kVA
- Output lead wires: 22 AWG UL3239, 10" (pink)
- UL94V-0 rated encapsulant filled epoxy • Size: 3.0"L x 1.2"W x 1.0"H

Part No.	Mfr. Part No.	Description	1 10 50 100
2100136	CS2080A3	High voltage power supply	\$4.95 \$3.95 \$3.49 \$2.95

### EMI Suppression Cores with Case

Reduce Electromagnetic (EMI) with a snap of these suppression cores around a power cord or data cord. Easy to install and an affordable way to reduce EMI without redesigning your product.



- Impedance at 100MHz between 75-225Ω min.
- Color: black

## JAMECO ValuePro

### Round

Part No.	InDia.	OutDia.	Length	1 10 100
218174	.20"	.64"	1.15"	\$1.25 \$0.99 \$.75
217842	.34"	.78"	1.40"	1.49 1.25 .99
2202600	.38"	.87"	1.34"	1.49 1.25 .99
2081810	.38"	1.0"	0.65"	1.25 .99 .75



### Square

Part No.	InDia.	Width	Height	Length	1 10 100
2094987	.20"	.55"	.59"	1.40"	\$0.79 \$.69 \$.55
1952901	.25"	.70"	.77"	1.30"	.89 .75 .59



# Power Entry Filters & International Power Cords



## EMI Power Entry Filters (IEC Connector), Line Filters & AC Receptacles (IEC 320)



- Rated voltage: 115/250VAC • Operating frequency: 50/60Hz
- Hipot rating (one minute) line to ground: 2250VDC; line to line: 1450VDC

**EMI Power Entry Filter:** Maximum leakage current each line to ground:  
 @ 115VAC 60Hz: 0.20mA @ 250VAC 50Hz: 0.40mA

**EMI Line Filter:** Maximum leakage current each line to ground:  
 @ 115VAC 60Hz: 0.25mA; 1.0mA (10000pF) @ 250VAC 50Hz: 0.45mA; 2.0mA (10000pF)



Part No.	Mfr.	Product No.	Description	Fig.	Current (A)	Hipot (VDC)	Terminals	Terminal Size	Agency Approvals	Dimension (in.)				Pricing		
										A	B	C	D	1	10	100
1951529	Delta	01DEEG3V	Power entry filter, rt. angle (screw flanged)	3	1	2250	Faston	0.25"	UL/CSA/VDE	1.64	1.19	0.87	1.58	\$ .79	\$ .69	\$ .59
1172613	Tyco	1EGG1-2	Pwr entry filter, straight, fused (screw flanged)	1	1	2250	Faston	0.25"	UL/CSA/VDE	1.62	1.29	1.44	1.27	.69	.59	.49
2189599	Adam Tech	PLF-1DZ2KR	Pwr entry filter, w/ fuse & switch (screw flanged)	2	1	250	Faston	0.25"	UL/CSA/DVE	1.97	2.56	1.58	1.58	8.95	7.95	6.95
2178523	Schurter	5110.0343.1	Power entry filter, straight (snap-in)	4	3	2250	Faston	0.25"	UL/CUL	1.42	0.91	1.19	0.80	1.95	1.75	1.49
2114116	Adam Tech	PLF-3PC	Line filter, metal case (PC mount)	5	3	250	Solder	0.039"	UL/CSA/VDE	0.984	0.984	0.787	—	5.95	5.39	4.79
2189581	Adam Tech	PLF-3DZ2KR	Pwr entry filter, w/ fuse & switch (screw flanged)	2	3	250	Faston	0.25"	UL/CSA/DVE	1.97	2.56	1.58	1.58	5.95	5.49	4.95
1954720	Delta	04BEEG3S	Power entry filter, straight, fused (screw flanged)	1	4	2250	Faston	0.25"	UL/CSA/VDE	2.26	1.19	1.26	1.40	1.19	.99	.69
1811391	Delta	06A2D	Power entry module (snap-in)	6	4	2250	Faston	0.25"	UL/CSA/VDE	2.65	2.50	1.06	1.11	4.95	3.95	2.95
1951570	Delta	05DRDG3S (5ER7)†	Power entry filter, 6-32 threaded panel mount	7	5	2250	Faston	0.25"	UL/CSA/VDE	3.15	1.97	1.28	1.58	2.95	2.59	2.29
2114124	Adam Tech	PLF-6DZ2KR	Pwr entry filter, strght, fuse & sw. (screw flngd)	9	6	250	Faston	0.25"	UL/CSA/VDE	1.968	2.559	2.394	1.154	9.95	8.95	7.95
1951588	Delta	06DEEG3V	Power entry filter, right angle (screw flanged)	3	6	2250	Faston	0.25"	UL/CSA/VDE	1.64	1.19	0.87	1.58	1.49	1.25	1.09
2197871	Delta	06BENG3G	Power entry filter, male (snap-in)	8	6	2250	Faston	0.32"	UL/CSA/VDE	0.30	1.90	1.10	1.70	5.95	4.95	3.95
1172672	Corcom	IVB3	Line filter (flange mount)	18	10	2250	1.5" Wire	Wire	UL/CSA/VDE	0.96	1.82	0.66	2.53	4.95	3.95	2.95
2178507	ValuePro	6100-4115	AC power inlet, male (snap-in)	14	10	250	Solder	0.14"	UL/CSA/VDE	1.19	0.91	1.06	0.77	.29	.25	.19
117445	ValuePro	0717#	AC power inlet, male w/ fuse chamber (snap-in)	15	10	250	Faston	0.187"	UL/CSA/VDE	1.18	1.30	1.05	1.20	1.95	1.79	1.59
265528	ValuePro	WS-044#	AC power inlet, male w/ fuse chamber (screw)	16	10	250	Faston	0.187"	UL/CSA/VDE	1.40	1.28	1.06	1.21	1.75	1.49	1.25
2197880	Delta	10DRCS5	Power entry filter (flange mount)	18	10	2250	Threadpost	0.164"	UL/CSA/VDE	3.87	1.52	2.94	1.21	5.95	4.95	3.95
2189521	Adam Tech	IEC-GS-1-150	Pwr entry filter, w/ fuse & switch (snap-in)	19	15	250	Faston	0.187"	UL/CSA/DVE	1.20	1.97	1.06	1.83	2.95	2.75	2.49
2189564	Adam Tech	NEMA-5-1-A	AC pwr inlet, NEMA fem, angled GND pin (snap-in)	10	15	125	Faston	0.25"	UL/CSA/DVE	1.06	1.06	0.70	0.85	.89	.79	.65
2189572	Adam Tech	NEMA-5-1-B	AC pwr inlet, NEMA fem, straight GND pin (snap-in)	10	15	125	Faston	0.25"	UL/CSA/DVE	1.06	1.06	0.70	0.85	.99	.85	.69
2114095	Adam Tech	NEMA-5-2*	AC power outlet, NEMA receptacles (snap-in)	10	15	125	Fork	0.25"	UL/CSA/VDE	1.063	1.063	0.70	0.866	.99	.85	.69
147901	ValuePro	701R	AC power inlet, male (screw flanged)	11	15	250	Faston	0.187"	UL/CSA/VDE	1.97	0.76	1.06	1.58	1.09	.99	.79
16652	ValuePro	JR101	AC power inlet, male (screw flanged)	11	15	250	Faston	0.25"	UL/CSA/VDE	1.97	0.76	1.06	1.58	1.09	.99	.79
2114010	Adam Tech	IEC-A-4	AC pwr inlet, M R/A (screw flanged, PC mount)	12	15	250	Solder	0.071"	UL/CSA/VDE	1.97	0.89	1.06	0.76	.29	.19	.15
2178494	ValuePro	EAC-324	AC power inlet, male, straight (screw flanged)	13	15	250	Solder	0.16"	UL/CSA/VDE	1.96	0.89	1.09	1.09	.39	.35	.29
2178515	Arndt	EAC-409	AC power inlet, male (snap-in)	14	15	250	Solder	0.16"	UL/CSA/VDE	1.22	0.94	1.06	0.78	.59	.49	.39
147109	ValuePro	42R02	AC power inlet, male (snap-in)	14	15	250	Faston	0.25"	UL/CSA/VDE	1.23	0.95	1.04	0.77	.99	.89	.75
2095525	Adam Tech	IEC-GS-1-100#	AC pwr inlet, male w/ sw. & fuse folder (snap-in)	19	15	250	Faston	0.187"	UL/CSA/VDE	1.20	1.97	0.77	1.83	2.95	2.75	2.49
1954640	ValuePro	K2415	AC power inlet, female (snap-in)	20	15	250	Faston	0.187"	UL/CSA/VDE	1.38	0.98	1.26	1.10	.39	.35	.25
1954658	ValuePro	K2414	AC power inlet, female (screw flanged)	21	15	250	Faston	0.187"	UL/CSA/VDE	1.97	1.14	1.26	0.95	1.49	1.35	1.19
2157546	Adam Tech	IEC-GS-1-200	AC pwr fused inlet, male w/ switch (snap-in)	19	15	250	Faston	0.187"	UL/CSA/VDE	1.07	1.97	1.06	1.83	2.95	2.59	2.39

† High Performance; Increased filtering; Added bleed resistor; More safety agencies • For 14-16 AWG wire # Includes spare fuse holder – fuse type 5mm x 20mm (250V)



## International Power Cords

- 3-conductor detachable power cords
- Voltage rating: 300V
- Cord color: black (except P/N 2199105 gray)
- BSI: British Standard Institution
- Cord type: H05VVf
- P/N 2202298/2202301 with RFI filter

Part No.	Cross Ref. No.	Country	Agency Approvals	Plug Fig.	Cord Length	Conductors	Pricing		
							1	10	100
117911	2171H576	Europe	All	1/A	6 ft.	3/0.75mm	\$4.95	\$4.49	\$3.95
2202298	ER71RF1	Europe	All	1/A	10 ft.	3/1.0mm	6.95	6.25	5.59
2199105	H05VV-F	Europe	BSI	2/A	8 ft.	3/1.0mm	4.95	3.95	3.49
174633	21071H5182	UK/Ireland	BSI	2/A	8 ft.	3/1.0mm	6.95	6.25	5.59
2202301	2171RF110	UK/Ireland	BSI	2/A	10 ft.	3/1.0mm	8.95	7.95	6.95



Fig. 1 (Straight)



Fig. A



Fig. 2 (Right Angle, Fused)

### European Agency Approvals

Germany	VDE		France	LCIE	
Austria	DVE		Netherlands	KEMA	
Belgium	CEBEC		Norway	NEMKO	
Denmark	DEMKO		Sweden	SEMKO	
Finland	FIMKO		Switzerland	SEV	

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Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

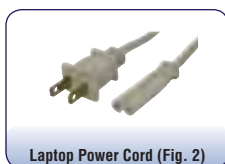


# Power Cords

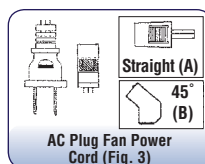
3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



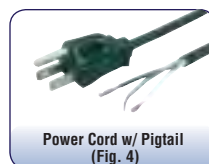
Line Cord w/ Pigtail (Fig. 1)  
w/ Strain Relief (Fig. 1A)



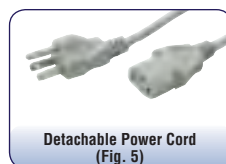
Laptop Power Cord (Fig. 2)



AC Plug Fan Power  
Cord (Fig. 3)



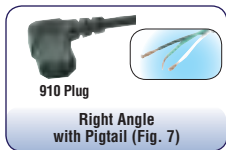
Power Cord w/ Pigtail  
(Fig. 4)



Detachable Power Cord  
(Fig. 5)



Computer Power Supply  
Extension Cord (Fig. 6)



910 Plug

Right Angle  
with Pigtail (Fig. 7)

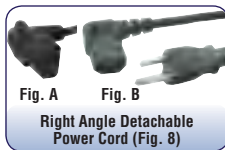
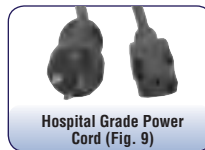
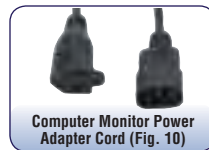


Fig. A Fig. B  
Right Angle Detachable  
Power Cord (Fig. 8)



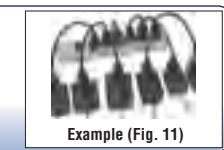
Hospital Grade Power  
Cord (Fig. 9)



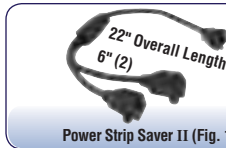
Computer Monitor Power  
Adapter Cord (Fig. 10)



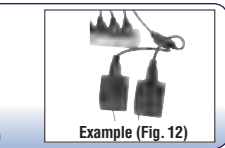
Detachable Power Strip Saver  
(Fig. 11)



Example (Fig. 11)



Power Strip Saver II (Fig. 12)

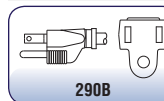


Example (Fig. 12)



Mickey Mouse™ Style  
Power Cord (Fig. 13)

## Plug Detail – Industry Standard Designations



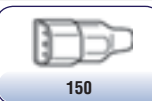
290B



910



386A/386E



150

## JAMECO ValuePro 2 & 3-Conductor Fan, Pigtail, Detachable & Hospital Grade Power Cords

- Molded connectors
- Excellent resistance to jacket abrasion
- Voltage rating: 300 volts
- Temperature: -20°C to +60°C

\*Web Code: UBF



AWG	Volts	Amps	VA
18	125	10	1250
16	125	12	1500
14	125	15	1875

### 2-Conductor Line Cords with Pigtail

Part No.	Product No.	*Mfr.	Wt.	Fig.	Length	Color	AWG/Cond	Cord Type*	Pricing			
									1	10	50	100
124434	ST008	JVP	.16	1	6'	Black	18/2	SPT-2	\$2.49	\$2.25	\$1.95	\$1.75
42042	SY-001-R	JVP	.18	1A	6'	Black	18/2	SPT-2	2.95	2.75	2.49	2.25

### 3-Conductor Detachable Power Cords (Shielded) 290B/386A Plugs

Part No.	Product No.	*Mfr.	Wt.	Fig.	Length	Color	AWG/Cond	Cord Type*	Pricing			
									1	10	50	100
213874	17660BG	JVP	.40	5	6'	Beige	18/3	SVT	\$3.95	\$3.49	\$2.95	\$2.49
161761	17742	JVP	.40	5	6'	Black	18/3	SVT	4.49	3.95	3.59	2.95

### 2-Conductor "8" Style Power Cords for Laptops and Power Supplies

2151195	123855-1	JVP	.15	2	3'	Black	18/2	SPT-2	\$ .95	\$ .85	\$ .75	\$ .65
189587	VW-1	JVP	.30	2	6'	Black	18/2	SPT-2	2.95	2.69	2.39	2.19

### 3-Conductor Computer Power Supply Extension Cords (150/386A/910 Plugs)

206172	PEC-3	JVP	.22	6	3'	Black	18/3	SVT	\$2.49	\$1.95	\$1.75	\$1.49
319804	LR94903	JVP	.82	6	6'	Gray	18/3	SVT	1.75	1.59	1.35	1.09
28468	PEC	JVP	.36	6	6'	Black	18/3	SVT	3.95	3.55	3.19	2.79
2133595	PEC-SJT	JVP	.36	6	6'	Black	18/3	SJT	3.95	3.59	3.29	2.95
420224	10W1-02212	JVP	.53	6	12'	Black	18/3	SVT	5.95	5.39	4.79	4.25

### 2-Conductor AC Plug Fan Power Cords

1952572	FACS	JVP	.40	3A	6'	Black	18/2	SPT-2	\$3.95	\$3.59	\$3.19	\$2.49
1952581	FAC45	JVP	.40	3B	6'	Black	18/2	SPT-2	4.95	4.59	3.95	3.49

### 3-Conductor Power Cord with Pigtail (Shielded) 910 Plug

339995	72WV866SSDI	JVP	.49	7	6 7/8'	Black	18/3	SVT	\$1.49	\$1.25	\$1.09	\$ .95
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### 3-Conductor Right Angle Detachable Power Cords (Unshielded) 290B/910 Plugs

117357	8120-6177	JVP	.41	8B	6'	Gray	18/3	SVT	\$3.95	\$3.55	\$3.19	\$2.79
38077	17250R	JVP	.54	8B	6'	Black	18/3	SVT	3.95	3.55	3.19	2.79
2099999	E88265	JVP	.82	8A	8'	Black	18/3	SVT	1.95	1.75	1.49	1.09
177384	17507	JVP	.28	8B	10'	Black	18/3	SVT	4.95	4.49	3.95	3.49

### 3-Conductor Right Angle Detachable Power Cord (Shielded) 290B/910 Plugs

173252	17745	JVP	.16	8B	6 7/8'	Black	18/3	SVT	\$5.95	\$5.39	\$4.79	\$4.25
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### 3-Conductor Hospital Grade Power Cords (green dot)

2115434	LL39965	JVP	.75	9	10'	Gray	18/3	SJT	\$4.95	\$4.49	\$3.95	\$3.59
132011	17006G	JVP	.82	9	10'	Gray	16/3	SJT	10.95	9.95	8.95	7.95

### 3-Conductor Computer Monitor Power Adapter Cord (150/386 Plugs)

177448	MPC1	JVP	.16	10	1'	Black	18/3	SVT	\$2.95	\$2.69	\$2.39	\$2.19
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### 3-Conductor Detachable Power Cords (Power Strip Saver) 290B/386 Plugs

208339	P55-BR	JVP	.16	11	1'	Beige	18/3	SVT	\$1.95	\$1.75	\$1.49	\$1.25
199778	PSS-1	JVP	.16	11	1'	Black	18/3	SVT	2.95	2.69	2.39	2.15

### 3-Conductor Power Cord ("Y" Type Power Strip Saver II) 290B/386 (2) Plugs

208347	121-2594	ZTK	.38	12	22"	Black	16/3	SJT	\$8.95	\$7.95	\$7.49	\$6.95
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### 3-Conductor "Mickey Mouse" Style Power Supply Cords (2 Prong Plug w/ Ground)

2201560	CMC105	JVP	.40	13	6'	Black	18/3	VCPT	\$1.95	\$1.75	\$1.49	\$1.25
1953559	MMFLAT	MWL	.40	13	6'	Black	18/3	SPT-2	2.59	2.25	1.95	1.59
1951123	MMPC	MWL	.40	13	6'	Black	18/3	SVT	2.95	2.59	2.29	1.95

\*.55" x .62" strain relief †European standard insulation color code \$ RFI filter on cord

\*Thermoplastic Cord Jacket Type: SPT-2 (Flat): Junior duty; SVT (Round): Light service; SJT (Round): Junior service

\* JVP = Jameco ValuePro | MWL = Mean Well | ZTK = Ziotek



## Open-Frame Switching AC-to-DC Power Supplies

- Universal AC input/full range • Two-year warranty • Short-circuit, overload and overvoltage protection
- † PFC Model: • Built-in active Power Factor Correction function, power factor >0.93 • Three-year warranty

Complete specifications available online



NFM-15

EPS-25

Part No.	Manufacturer	Mfr. Part No.	Output		Input (VAC @ Hz)	Size (L"xW"xH")	Mounting Holes (L"xW"xDia.")	Ripple & Noise (mV p-p) *	Load Reg. (±%) *	Line Reg. (±%)	EFF (%)	Certification	Pricing	
			Voltage @ Current (min-max)	Power									1	10
★ 3.3-5.5V Web Code: OFI			★ 7.5-13.8V Web Code: OTW			Single Output			★ 15-24V Web Code: OFT			★ 27-54V Web Code: OFE		
2188692	TDK-Lambda	ZWS5-5	+5V @ 0-1A	5W	85-265 @ 47-440	3.8x1.8x0.8	3.6x1.5x0.1	120	2.0	1.0	67	UL/CSA/TUV/CE	\$8.95	\$7.95
2210722	Phihong	PSA25-105	+5V @ 0-4A	20W	100-240 @ 47-63	4.0x3.0x1.3	3.6x2.6x0.16	50	2.0	1.0	70	UL/CSA/VDE	10.95	9.95
212354	Mean Well	PS-25-5	+5V @ 0-5A	25W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.1x0.1	80	2.0	0.5	74	UL/CUL/TUV/CE	10.95	9.95
217332	Mean Well	PS-45-5	+5V @ 0-8A	40W	90-264 @ 47-440	5.0x3.0x1.1	4.6x2.6x0.2	100	3.0	1.0	74	UL/CUL/TUV/CE	12.95	11.49
392826	Mean Well	PS-25-7.5	+7.5V @ 0-3.3A	24.8W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.1x0.14	80	2.0	0.5	76	UL/TUV/EN	11.95	10.49
2210749	Phihong	PSA15LN3-090	+9V @ 0-1.6A	15W	100-240 @ 50-60	4.3x1.5x1.0	4.0x1.2x0.15	90	2.0	1.0	65	CUL/CE/TUV	11.95	10.95
2188772	UMEC	UP0401S-09	+9V @ 0-4.4A	40W	90-264 @ 47-63	4.0x3.0x1.0	3.6x2.6x0.2	100	1.0	1.0	70	UL/CSA/TUV	12.95	11.49
2105666	Mean Well	PS-15-12	+12V @ 0-1.25A	15W	85-264 @ 47-63	3.7x1.9x1.0	3.4x1.9x0.1	150	0.5	0.5	77	CB/CE	7.95	6.95
148604	Mean Well	PS-25-12	+12V @ 0-2.1A	25.2W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.1x0.1	100	2.0	0.3	78	UL/CUL/TUV/CE	10.95	9.95
213728	Mean Well	PS-45-12	+12V @ 0-3.7A	44.4W	90-264 @ 47-440	5.0x3.0x1.1	4.6x2.6x0.2	100	2.0	1.0	76	UL/CUL/TUV/CE	12.95	11.49
252401	Mean Well	LPS-50-12	+12V @ 0-4.2A	50.4W	90-264 @ 47-63	7.6x2.1x0.9	7.3x1.7x0.1	80	2.0	1.0	82	UL/CUL/TUV/CE	13.95	12.49
2205413	Astrodyne **	ASM60-1380	+12V @ 0-5A	60W	100-240 @ 50-60	4.0x2.0x1.7	3.7x1.7x0.1	100	3.0	1.0	84	UL/CUL/TUV/CE	9.95	8.95
148639	Mean Well	PS-65-12	+12V @ 0-5.2A	62.4W	90-264 @ 47-440	5.0x3.0x1.7	4.5x2.5x0.15	100	2.0	1.0	79	UL/CUL/TUV/CE	13.95	12.49
2099981	ITE	SBU60-105	+12V @ 0-5.25A	63W	90-264 @ 47-63	5.0x3.0x1.1	4.6x2.6x0.15	120	3.0	0.5	80	UL/CUL/CE	7.95	6.95
2164674	Mean Well	EPS-65-12	+12V @ 0-6A	65.04W	90-264 @ 47-63	4.0x2.0x1.1	3.75x1.75x0.13	120	1.0	0.5	86	UL/TUV/EN	13.95	12.49
374089	Mean Well†	PPS-125-12	+12V @ 0-8.5A	102W	90-264 @ 47-63	5.0x3.0x1.4	4.6x2.6x0.14	100	1.0	0.5	80	UL/CUL/TUV/CE	44.95	40.95
213681	Mean Well†	LPP-150-12	+12V @ 0-12.5A	100.8W	85-264 @ 47-63	8.7x2.4x1.6	8.3x2.6x0.15	100	1.0	0.5	79	UL/CUL/TUV/CE	36.95	33.95
374380	Mean Well	PS-65-13.5	+13.5V @ 0-5.4A	63.5W	90-264 @ 47-440	5.0x3.0x1.7	4.6x2.6x0.16	100	2.0	1.0	79	UL/CUL/TUV/CE/CB	13.95	12.49
2210731	Phihong	PSA25-115	+15V @ 0-1.6A	24W	100-240 @ 47-63	4.0x3.0x1.3	3.6x2.6x0.16	150	2.0	1.0	70	UL/CSA/VDE	10.95	9.95
1919019	Mean Well	PS-35-15	+15V @ 0-2.4A	36W	90-264 @ 47-440	4.0x2.0x0.9	3.8x1.8x0.1	150	0.5	0.5	81	UL/CUL/TUV/CE/CB	12.95	11.49
216751	Mean Well	PS-65-15	+15V @ 0-4.2A	63W	90-264 @ 47-440	5.0x3.0x1.7	4.5x2.5x0.2	100	2.0	1.0	79	UL/CUL/TUV/CE	13.95	12.49
216670	Mean Well†	LPP-100-15	+15V @ 0-6.7A	100W	85-264 @ 47-63	8.7x2.4x1.3	8.3x2.0x0.14	100	0.5	0.5	80	UL/CUL/TUV/CE	24.95	22.49
2122491	Mean Well†	PLP-20-24	+24V @ 0-0.8A	19.2W	90-277 @ 47-63	5.5x1.3x0.8	5.2x1.0x0.1	300	10.0	3.0	82	UL/CUL/TUV/CE	10.95	9.95
212346	Mean Well	PS-25-24	+24V @ 0-1A	24W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.1x0.1	240	2.0	0.2	79	UL/CUL/TUV/CE	11.95	10.49
1919035	Mean Well	PS-35-24	+24V @ 0-1.5A	36W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.1x0.1	240	2.0	0.2	85	UL/CUL/TUV/CE	12.95	11.49
148647	Mean Well	PS-65-24	+24V @ 0-2.7A	64.8W	90-264 @ 47-440	5.0x3.0x1.7	4.5x2.5x0.2	100	2.0	1.0	80	UL/CUL/TUV/CE	13.95	12.49
2164691	Mean Well	EPS-65-24	+24V @ 0-3A	65.04W	90-264 @ 47-63	4.0x2.0x1.1	3.75x1.75x0.13	240	1.0	0.5	88	UL/TUV/EN	13.95	12.49
173463	Mean Well†	LPS-100-24	+24V @ 0-4.2A	100.8W	88-264 @ 47-63	8.7x2.4x1.3	8.4x2.1x0.1	150	0.5	0.5	80	UL/CUL/TUV/CE	27.95	25.95
2129684	Elpac **	MSM7524	+24V @ 0-4.6A	110W	100-240 @ 50-60	5.7x3.4x1.6	5.2x3.4x1.5	240	3.0	1.0	80	UL/CUL/CE	11.95	10.95
301429	Mean Well†	PPS-125-24	+24V @ 0-5.2A	124.8W	90-264 @ 47-63	5.0x3.0x1.4	4.6x2.6x0.1	150	1.0	0.5	83	UL/CUL/TUV/CE	42.95	38.95
213672	Mean Well†	LPP-150-24	+24V @ 0-6.25A	150W	85-264 @ 47-63	8.7x2.4x1.6	8.3x2.6x0.2	150	0.5	0.5	83	UL/CUL/TUV/CE	36.95	33.95
1773419	Astec†	LPS175	+24V @ 0-7.5A	175W	85-264 @ 47-63	8.5x4.2x1.5	7.4x2.5x0.1	150	2.0	1.0	75	UL/CSA/CE	44.95	39.95
668730	Mean Well†	PPS-200-24	+24V @ 0-8.3A	199.2W	90-264 @ 47-63	5.0x3.0x1.4	3.7x7.8x0.14	150	1.0	0.5	89	UL/CUL/TUV/CE	54.95	49.95
2164279	Mean Well†	EPP-300-24	+24V @ 0-12.5A	200W	90-264 @ 47-63	5.0x3.0x1.4	3.0x2.6x0.137	150	1.0	0.5	92.5	UL/TUV/EN	62.95	56.95
236882	Mean Well	LPP-100-27	+27V @ 0-3.8A	102.6W	85-264 @ 47-63	8.7x2.4x1.3	8.4x2.4x1.3	150	0.5	0.5	83	UL/CUL/TUV/CE	14.95	13.95
Double Output												★ Web Code: OFX		
2188617	Powdec	CML0522	+5V @ 0-1.5A; +12V @ 0-0.6A	15W	100-240 @ 50-60	3.5x2.3x1.1	3.1x2.0x0.1	50	4.0	2.0	65	UL/CSA/TUV/CE	\$7.95	\$6.95
212338	Mean Well	PD-25A	+5V @ 0.2-2.5A; +12V @ 0.1-1.5A	25W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.08x0.1	50/150	1.0	0.5	71	UL/CUL/TUV/CE	13.95	12.49
212330	Mean Well	PD-25B	+5V @ 0.2-2A; +24V @ 0.1-1A	25.2W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.1x0.1	50/200	1.0	0.5	77	UL/CUL/TUV/CE	13.95	12.49
2215697	Artesyn	NLP40-7629J	+5V @ 4A; +12V @ 0-2A	40W	90-264 @ 47-63	4.2x2.5x1.1	4.0x2.2x0.1	50/120	3.0	1.0	75	UL/CSA/CE	12.95	11.95
194862	Mean Well	PD-45A	+5V @ 0.4-3.2A; +12V @ 0.2-2	40W	90-264 @ 47-440	5.0x2.5x1.5	4.5x2.5x0.2	50/120	3.0	1.0	77	UL/CSA	14.95	13.49
2197741	Skynet	SNP-N563	+5V @ 1.0-8A; +3.3V @ 0.5-6A	60W	85-264 @ 47-63	5.0x3.0x1.1	4.6x2.6x0.2	50	3.0	1.0	70	UL	10.95	9.95
194897	Mean Well	PD-65B	+5V @ 0.4-3.5A; +24V @ 0.2-2A	65.5W	90-264 @ 47-440	5.0x3.0x1.7	4.5x2.5x0.2	50/150	3.0	1.0	81	UL/CUL/TUV/CE	13.95	12.95
148690	Mean Well	PD-2512	+12V @ 0.1-1.2A; -12V @ 0.1-1A	24W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.1x0.1	50	3.0	0.5	74	UL/CUL/TUV/CE	11.95	10.95
2100857	Mean Well	PD-2515	+15V @ 0-1A; -15V @ 0-1A	25W	85-264 @ 47-63	4.2x2.4x1.1	3.7x2.1x0.1	50	3.0	0.5	75	UL/CUL/TUV/CE	13.95	12.49
Triple Output												★ Web Code: OFX		
2129676	Elpac **	MSM40D	+5.1V @ 0-4A; +24V @ 0-1A; -12V @ 0.4A	40W	100-240 @ 50-60	5.0x3.0x1.1	4.6x2.5x0.2	50	5.0	5.0	70	UL/CUL/CSA/CE	\$8.95	\$7.95
2210757	Phihong	PSS-40-304	+5V @ 0-4.5A; +15V @ 0-2A; -15V @ 0.5A	40W	100-240 @ 50-60	4.2x2.5x1.2	4.0x2.2x0.1	50; 150/150	3.0	3.0	70	CUL/CE/NEMKO	14.95	12.95
229122	Phihong	PSA4531	+5V @ 0-4A; +12V @ 0-1.5A; -12V @ 0-0.5A	44W	90-264 @ 47-63	5.0x3.0x1.2	4.6x2.6x0.2	50; 120/120	2.0	1.0	70	UL/CSA/TUV/CE	35.95	33.95
88402	Mean Well	PT-45B	+5V @ 0.4-3A; +12V @ 0.2-2A; -12V @ 0-0.3A	45W	90-264 @ 47-440	5.0x3.0x1.1	4.6x2.6x0.2	50; 120/100	3.0	1.0	75	UL/CUL/TUV/CE	16.95	14.95
216734	Mean Well	PT-65B	+5V @ 0.4-5.5A; +12V @ 0.2-2.5A -12V @ 0-0.5A	63.5W	90-264 @ 47-440	5.0x3.0x1.7	4.6x2.6x0.2	50; 120/100	3.0	1.0	77	UL/CUL/TUV/CE	15.95	14.49
216726	Mean Well	PT-65C	+5V @ 0.4-5.5A; +15V @ 0.2-2A; -15V @ 0-0.5A	65W	90-264 @ 47-440	5.0x3.0x1.7	4.6x2.6x0.2	50; 120/100	3.0	1.0	77	UL/CUL/TUV/CE	15.95	14.49
215707	Mean Well	PT-65D	+5V @ 0.5-5A; +12V @ 0.2-4A; +24V @ 0.2-1.3A	68W	90-264 @ 47-440	5.0x3.0x1.7	4.6x2.6x0.2	50; 100/200	2.0	1.0	79	UL/CUL/TUV/CE	15.95	14.49

\* Primary output \*\* Medical rated § Efficiency

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# Enclosed Switching AC-to-DC Power Supplies

3 LEVELS OF SAVINGS		
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## Enclosed Switching AC-to-DC Power Supplies

- 100% full-load burn-in test
- Wide AC input range
- Manufacturer warranty varies

Complete specifications available online

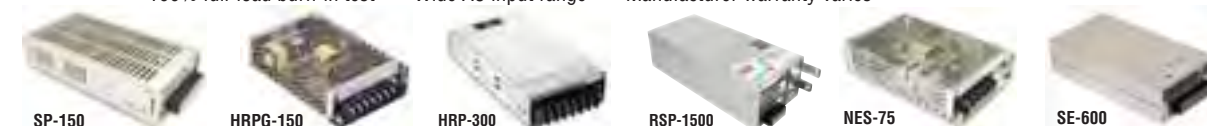


\*2.5-4.2V Web Code: ENT

\*5-9V Web Code: ENF

\*12-13.8V Web Code: ENW

\*15-20V Web Code: ENI



Part No.	Manufacturer	Mfr. Part No.	Output		Size (L" x W" x H")	Ripple & Noise (mV p-p) *	Load Reg. (±%) *	Line Reg. (±%) *	EFF (%) §	PFC	Certification	Pricing	
			Voltage @ Current (min-max)	Power								1	10
Single Output													
2106685	Mean Well	RS-15-3.3	+3.3V @ 0-3A	9.9W	2.5 x 2.0 x 1.1	80	2.0	0.5	72	—	UL/CUL/TUV/CE/CB	\$9.95	\$8.95
693193	Mean Well	RS-25-3.3	+3.3V @ 0-6A	19.8W	3.0 x 2.0 x 1.1	80	2.0	0.5	72	—	UL/CUL/TUV/CE/CB	9.95	8.95
1919043	Mean Well	RS-15-5	+5V @ 0-3A	15W	2.5 x 2.0 x 1.1	80	1.5	0.5	77	—	UL/CUL/TUV/CE/CB	9.95	8.95
323282	Mean Well	RS-25-5	+5V @ 0-5A	25W	3.1 x 2.0 x 1.1	80	1.0	0.5	77	—	UL/CUL/TUV/CE/CB	11.49	10.49
323388	Mean Well	RS-50-5	+5V @ 0-10A	50W	3.9 x 3.8 x 1.4	80	1.0	0.5	78	—	UL/CUL/TUV/CE/CB	15.95	14.49
323708	Mean Well	RS-100-5	+5V @ 0-16A	80W	6.3 x 3.8 x 1.5	80	1.0	0.5	77	—	UL/CUL/TUV/CE/CB	23.95	21.95
194791	Mean Well	SP-100-5	+5V @ 0-20A	100W	7.0 x 3.9 x 1.8	100	1.0	0.5	76	✓	UL/CUL/TUV/CE/CB	39.95	35.95
323821	Mean Well	RS-150-5	+5V @ 0-26A	130W	7.8 x 3.9 x 1.5	80	1.0	0.5	78	—	UL/CUL/TUV/CE/CB	24.95	22.49
123394	Mean Well	S-150-5	+5V @ 0-30A	150W	7.0 x 4.3 x 2.0	150	0.5	0.5	78	—	UL/CUL/TUV/CE/CB	34.95	31.95
201912	Mean Well	SP-150-5	+5V @ 0-30A	150W	7.0 x 3.9 x 2.0	100	1.0	0.5	75	✓	UL/CUL/TUV/CE/CB	42.95	38.95
202042	Mean Well	SP-200-5	+5V @ 0-40A	200W	7.0 x 3.9 x 2.0	100	1.0	0.5	71	✓	UL/CUL/TUV/CE/CB	49.95	44.95
244735	Mean Well	SP-320-5	+5V @ 0-55A at 230VAC; 0-44A at 115VAC	275W	8.5 x 4.5 x 2.0	150	1.0	0.5	79	✓	UL/CUL/TUV/CE/CB	61.95	55.95
2172068	Mean Well	RSP-320-5	+5V @ 0-60A	300W	8.5 x 4.5 x 1.2	150	1.0	0.5	85	✓	UL/CUL/TUV/CB/CE	57.95	53.95
2149562	Mean Well	SE-350-5	+5V @ 0-60A	300W	8.5 x 4.5 x 2.0	150	2.0	0.5	78	—	UL/CUL	44.95	40.95
693644	Mean Well	SP-480-5	+5V @ 0-85A	425W	10.9 x 5.0 x 1.7	80	1.0	0.5	79	✓	UL/CUL/TUV/CE/CB	134.95	119.95
374002	Mean Well	SE-600-5	+5V @ 0-100A	500W	9.7 x 5.0 x 2.5	150	2.0	0.5	78	—	UL/CUL	84.95	77.95
394215	Mean Well	SP-320-7.5	+7.5V @ 0-40A	300W	8.5 x 4.5 x 2.0	150	1.0	0.5	83	✓	UL/CUL/TUV/CE/CB	61.95	55.95
1919051	Mean Well	RS-15-12	+12V @ 0-1.3A	15.6W	2.5 x 2.0 x 1.1	120	0.5	0.5	81	—	UL/CUL/TUV/CE/CB	9.95	8.95
323300	Mean Well	RS-25-12	+12V @ 0-2.1A	25.2W	3.0 x 2.0 x 1.1	120	0.5	0.5	79	—	UL/CUL/TUV/CE/CB	11.49	10.49
123255	Mean Well	S-25-12	+12V @ 0-2.1A	25.2W	3.9 x 3.8 x 1.4	100	0.5	0.5	76	—	UL/TUV/CE	18.95	16.95
323337	Mean Well	RS-35-12	+12V @ 0-3A	36W	3.9 x 3.2 x 1.4	120	0.5	0.5	81	—	UL/CUL/TUV/CE/CB	12.95	11.49
323396	Mean Well	RS-50-12	+12V @ 0-4.2A	50.4W	3.9 x 3.8 x 1.4	120	0.5	0.5	81	—	UL/CUL/TUV/CE/CB	15.95	14.49
123335	Mean Well	S-60-12	+12V @ 0-5A	60W	6.3 x 3.8 x 1.5	120	0.5	0.5	76	—	UL/CUL/TUV/CE/CB	24.95	22.49
323599	Mean Well	RS-75-12	+12V @ 0-6A	72W	5.1 x 3.9 x 1.5	120	0.5	0.5	81	—	UL/CUL/TUV/CE/CB	16.95	15.49
194838	Mean Well	SP-75-12	+12V @ 0-6.3A	75.6W	7.0 x 3.9 x 1.3	80	0.5	0.5	77	✓	UL/CUL/TUV/CE/CB	32.95	29.95
2105017	Mean Well	NES-100-12	+12V @ 0-8.5A	102W	6.3 x 3.8 x 1.5	120	0.5	0.5	83	—	UL/CUL/CE/CB	21.95	19.49
123386	Mean Well	S-100F-12	+12V @ 0-8.5A	102W	7.8 x 3.9 x 1.5	125	0.5	0.5	80	—	UL/TUV/CE/CB	29.95	27.95
323716	Mean Well	RS-100-12	+12V @ 0-8.5A	102W	6.3 x 3.8 x 1.5	120	0.5	0.5	81	✓	UL/CUL/TUV/CE/CB	23.95	21.95
194803	Mean Well	SP-100-12	+12V @ 0-8.5A	102W	7.0 x 3.9 x 1.8	100	0.5	0.5	80	✓	UL/CUL/TUV/CE/CB	39.95	35.95
123423	Mean Well	S-150-12	+12V @ 0-12.5A	150W	7.0 x 4.3 x 2.0	180	0.3	0.3	82	—	UL/CUL/TUV/CE/CB	34.95	31.95
323839	Mean Well	RS-150-12	+12V @ 0-12.5A	150W	7.8 x 3.9 x 1.5	120	0.5	0.5	83	—	UL/CUL/TUV/CE/CB	24.95	22.49
173421	Mean Well	SP-150-12	+12V @ 0-12.5A	150W	7.0 x 3.9 x 2.0	100	0.5	0.5	80	✓	UL/CUL/TUV/CE/CB	44.95	40.95
194774	Mean Well	SP-200-12	+12V @ 0-16.7A	200.4W	7.0 x 3.9 x 2.0	100	0.5	0.5	79	✓	UL/CUL/TUV/CE/CB	52.95	47.95
2101497	Mean Well	SP-240-12	+12V @ 0-20A	240W	7.5 x 3.7 x 2.0	150	0.5	0.3	86	✓	UL/CUL/TUV/CE/CB	52.95	47.95
207204	Mean Well	S-320-12	+12V @ 0-25A	300W	8.5 x 4.5 x 2.0	150	0.5	0.5	82	✓	UL/CUL	59.95	54.95
244743	Mean Well	SP-320-12	+12V @ 0-25A at 230VAC; 0-20A @ 115VAC	300W	8.5 x 4.5 x 2.0	150	0.5	0.3	86	✓	UL/CUL/TUV/CE/CB	66.95	59.95
2102203	Mean Well	HRP-300-12	+12V @ 0-27A	324W	7.8 x 4.1 x 1.6	120	0.5	0.3	88	✓	UL/CUL/TUV/CE/CB	76.95	69.95
2094872	Mean Well	HRPG-300-12	+12V @ 0-27A	324W	7.8 x 4.1 x 1.6	120	0.5	0.3	88	✓	UL/CUL/TUV/CE/CB	79.95	74.95
2149503	Mean Well	SE-350-12	+12V @ 0-29A	348W	8.5 x 4.5 x 2.0	150	1.0	0.5	83	—	UL/CUL	44.95	40.95
2094928	Mean Well	SE-450-12	+12V @ 0-37.5A	450W	8.9 x 4.9 x 2.0	200	1.0	0.5	83	✓	UL/CUL	69.95	63.95
301373	Mean Well	SP-480-12	+12V @ 0-40A at 230VAC; 0-36A @ 115VAC	480W	10.9 x 5.0 x 1.7	120	0.5	0.3	85	✓	UL/CUL/TUV/CE/CB	134.95	119.95
190693	Mean Well	SP-500-12	+12V @ 0-40A at 230VAC; 0-34A @ 115VAC	480W	6.7 x 4.7 x 3.7	240	0.5	0.5	84	✓	UL/CUL/TUV/CE/CB	149.95	134.95
374011	Mean Well	SE-600-12	+12V @ 0-50A	600W	9.7 x 5.0 x 2.5	150	0.5	0.5	83	—	UL/CUL	84.95	77.95
374214	Mean Well	PSP-600-12	+12V @ 0-50A	600W	6.7 x 4.7 x 3.7	240	0.5	0.5	84	✓	UL/CUL/TUV/CE/CB	129.95	119.95
2094961	Mean Well	HRPG-600-12	+12V @ 0-53A	636W	8.6 x 4.1 x 2.5	120	0.5	0.3	88	✓	UL/CUL/TUV/CE/CB	134.95	119.95
2204761	Mean Well**	MSP-600-12	+12V @ 0-53A	636W	8.6 x 4.1 x 1.6	120	0.5	0.3	88	✓	UL/CUL/CB/CE	159.95	144.95
319944	Mean Well	SP-750-12	+12V @ 0-62A	750W	10.9 x 5.0 x 2.5	120	0.5	0.3	85	✓	UL/CUL/TUV/CE/CB	189.95	174.95
2101542	Mean Well	SE-1000-12	+12V @ 0-83.3A	999.6W	10.9 x 5 x 2.5	150	0.5	0.5	85	—	UL/CUL	174.95	159.95
694911	Mean Well	RSP-1500-12	+12V @ 0-125A	1500W	10.9 x 5 x 3.3	150	0.5	0.5	87	✓	EN/TUV/UL	349.95	324.95
202025	Mean Well	S-150-13.5	+13.5V @ 0-11.2A	151.2W	7.0 x 4.3 x 2.0	180	0.3	0.3	77	—	UL/CUL/TUV/CE/CB	34.95	31.95
121410	Mean Well	SP-200-13.5	+13.5V @ 0-14.9A	201.1W	7.0 x 3.9 x 2.0	100	0.5	0.5	80	✓	UL/CUL/TUV/CE/CB	49.95	44.95
693599	Mean Well	SP-320-13.5	+13.5V @ 0-22A	297W	8.5 x 4.5 x 2.0	150	0.5	0.3	86	✓	UL/CUL/TUV/CE/CB	61.95	55.95
2106079	Mean Well	PSP-600-13.5	+13.5V @ 0-44.5A	600W	6.7 x 4.7 x 3.7	240	0.5	0.5	85	✓	UL/CUL/TUV/CE/CB	139.95	124.95
2105439	Mean Well†	AD-155A	+13.8V @ 0-5A 10.5A	151.6W	7.8 x 4.3 x 2.0	150	0.5	0.5	80	✓	UL/CUL/TUV/CE/CB	54.95	48.95
1919060	Mean Well	RS-15-15	+15V @ 0-1A	15W	2.5 x 2.0 x 1.1	120	0.5	0.5	81	—	UL/CUL/TUV/CE/CB	8.95	7.95
323302	Mean Well	RS-25-15	+15V @ 0-1.7A	25.5W	3.0 x 2.0 x 1.1	120	0.5	0.5	82	—	UL/CUL/TUV/CE/CB	11.49	10.49
323345	Mean Well	RS-35-15	+15V @ 0-2.4A	36W	3.9 x 3.2 x 1.4	120	0.5	0.5	83	—	UL/CUL/TUV/CE/CB	12.95	11.49
123343	Mean Well	S-60-15	+15V @ 0-4A	60W	6.3 x 3.8 x 1.5	150	0.5	0.5	79	—	UL/CUL/TUV/CE/CB	24.95	22.49
323602	Mean Well	RS-75-15	+15V @ 0-5A	75W	5.1 x 3.9 x 1.5	120	0.5	0.5	82	—	UL/CUL/TUV/CE/CB	16.95	15.49
194845	Mean Well	SP-75-15	+15V @ 0-5A	75W	7.0 x 3.8 x 1.3	80	0.5	0.5	80	✓	UL/CUL/TUV/CE/CB	33.95	30.95

\* Primary Output    \*\* Medical rated    † UPS function    § Efficiency



# Enclosed Switching AC-to-DC Power Supplies

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## Enclosed Switching AC-to-DC Power Supplies (Continued)

• 100% full-load burn-in test • Wide AC input range • Manufacturer warranty varies



RS-25



\* 15-20V Web Code: ENI

\* 24-30V Web Code: ENE

Part No.	Manufacturer	Mfr. Part No.	Output		Size (L" x W" x H")	Ripple & Noise (mV p-p)*	Load Reg. (±%)*	Line Reg. (±%)*	EFF (%) §	PFC	Certification	Pricing	
			Voltage @ Current (min-max)	Power								1	10
Single Output (Continued)													
323724	Mean Well	RS-100-15	+15V @ 0-7A	105W	6.3 x 3.8 x 1.5	120	0.5	0.5	82	—	UL/CUL/TUV/CE/CB	\$22.95	\$20.95
323847	Mean Well	RS-150-15	+15V @ 0-10A	150W	7.8 x 3.9 x 1.5	120	0.5	0.5	84	—	UL/CUL/TUV/CE/CB	24.95	22.49
123432	Mean Well	S-150-15	+15V @ 0-10A	150W	7.0 x 4.3 x 2.0	180	0.3	0.3	85	—	UL/CUL/TUV/CE/CB	34.95	31.95
173412	Mean Well	SP-150-15	+15V @ 0-10A	150W	7.0 x 3.9 x 2.0	100	0.5	0.5	86.5	✓	UL/CUL/TUV/CE/CB	41.95	37.95
202060	Mean Well	SP-200-15	+15V @ 0-13.4A	201W	7.0 x 3.9 x 2.0	100	0.5	0.5	81	✓	UL/CUL/TUV/CE/CB	49.95	44.95
693610	Mean Well	SP-320-15	+15V @ 0-20A	300W	8.5 x 4.5 x 2.0	150	0.5	0.3	86	✓	UL/CUL/TUV/CE/CB	66.95	59.95
291522	Mean Well	SE-600-15	+15V @ 0-40A	600W	9.7 x 5.0 x 2.5	150	0.5	0.5	84	—	UL/CUL	84.95	77.95
694920	Mean Well	RSP-1500-15	+15V @ 0-100A	1500W	10.9 x 5.0 x 3.3	150	0.5	0.5	87	✓	UL/CUL/TUV/CE/CB	339.95	319.95
1919078	Mean Well	RS-15-24	+24V @ 0-0.625A	15W	2.5 x 2.0 x 1.1	200	0.5	0.5	82	—	UL/CUL/TUV/CE/CB	9.95	8.95
323311	Mean Well	RS-25-24	+24V @ 0-1.1A	26.4W	3.0 x 2.0 x 1.1	120	0.5	0.5	84	—	UL/CUL/TUV/CE/CB	11.49	10.49
123272	Mean Well	S-25-24	+24V @ 0-1.1A	26.4W	3.9 x 3.8 x 1.4	100	0.5	0.5	80	—	UL/TUV/CE	18.95	16.95
323353	Mean Well	RS-35-24	+24V @ 0-1.5A	36W	3.9 x 3.2 x 1.4	120	0.5	0.5	84	—	UL/CUL/TUV/CE/CB	11.95	10.95
123319	Mean Well	S-40-24	+24V @ 0-1.8A	43W	5.1 x 3.9 x 1.5	100	0.5	0.5	78	—	UL/CUL/TUV/CE/CB	19.95	18.95
323417	Mean Well	RS-50-24	+24V @ 0-2.2A	52.8W	3.9 x 3.8 x 1.4	120	0.5	0.5	84	—	UL/CUL/TUV/CE/CB	15.95	14.49
123352	Mean Well	S-60-24	+24V @ 0-2.5A	60W	6.3 x 3.8 x 1.5	150	0.5	0.5	79	—	UL/CUL/TUV/CE/CB	24.95	22.49
323620	Mean Well	RS-75-24	+24V @ 0-3.2A	76.8W	5.1 x 3.9 x 1.5	120	0.5	0.5	85	—	UL/CUL/TUV/CE/CB	16.95	15.49
2104250	Mean Well	NES-75-24	+24V @ 0-3.2A	76.8W	6.3 x 3.8 x 1.5	200	0.5	0.5	86	—	UL/CUL/CE/CB	16.95	15.49
194812	Mean Well	SP-100-24	+24V @ 0-4.2A	100.8W	7.0 x 3.9 x 1.8	150	0.5	0.5	84	✓	UL/CUL/TUV/CE/CB	36.95	34.49
323732	Mean Well	RS-100-24	+24V @ 0-4.5A	108W	6.3 x 3.8 x 1.5	120	0.5	0.5	84	—	UL/CUL/TUV/CE/CB	23.95	21.95
201971	Mean Well	S-100F-24	+24V @ 0-4.5A	108W	7.8 x 3.9 x 1.5	150	0.5	0.5	83	—	UL/TUV/CE/CB	29.95	27.95
155651	Power One	MAP110-1024CM	+24V @ 5A or +28V @ 4.3A	120W	7.0 x 4.3 x 1.8	240	0.5	1.0	75	—	UL/CSA/TUV	19.95	18.95
173404	Mean Well	SP-150-24	+24V @ 0-6.25A	150W	7.0 x 3.9 x 2.0	150	0.5	0.5	83	✓	UL/CUL/TUV/CE/CB	44.95	40.95
123450	Mean Well	S-150-24	+24V @ 0-6.5A	156W	7.0 x 4.3 x 2.0	240	0.2	0.2	85	—	UL/CUL/TUV/CE/CB	34.95	31.95
323855	Mean Well	RS-150-24	+24V @ 0-6.5A	156W	7.8 x 3.9 x 1.5	120	0.5	0.5	86	—	UL/CUL/TUV/CE/CB	24.95	22.49
2101868	Mean Well	HRP-150-24	+24V @ 0-6.5A	156W	6.3 x 3.8 x 1.5	150	0.5	0.2	88	✓	UL/CUL/TUV/CE/CB	54.95	49.95
2094864	Mean Well	HRPG-150-24	+24V @ 0-6.5A	156W	6.3 x 3.8 x 1.5	150	0.5	0.3	87	✓	UL/CUL/TUV/CE/CB	64.95	58.95
194782	Mean Well	SP-200-24	+24V @ 0-8.4A	201.6W	7.0 x 3.9 x 2.0	150	0.5	0.5	83	✓	UL/CUL/TUV/CE/CB	49.95	44.95
2101518	Mean Well	SP-240-24	+24V @ 0-10A	240W	7.5 x 3.7 x 2.0	150	0.5	0.2	87	✓	UL/CUL/TUV/CE/CB	49.95	44.95
196657	Mean Well	S-320-24	+24V @ 0-12.5A	300W	8.5 x 4.5 x 2.0	150	0.5	0.5	86	—	UL/CUL	64.95	59.95
244752	Mean Well	SP-320-24	+24V @ 0-13A	312W	8.5 x 4.5 x 2.0	150	0.5	0.2	87	✓	UL/CUL/TUV/CE/CB	66.95	59.95
2102220	Mean Well	HRP-300-24	+24V @ 0-14A	336W	7.7 x 4.1 x 1.6	150	0.5	0.2	87	✓	UL/CUL/TUV/CE/CB	79.95	72.95
2094881	Mean Well	HRPG-300-24	+24V @ 0-14A	336W	7.8 x 4.1 x 1.6	150	0.5	0.3	87	✓	UL/CUL/TUV/CE/CB	89.95	79.95
2146564	Mean Well	SE-350-24	+24V @ 0-14.6A	350.4W	8.5 x 4.5 x 2.0	150	0.5	0.5	87	—	UL/CUL	44.95	40.95
2101606	Mean Well	SE-450-24	+24V @ 0-18.8A	451.2W	8.9 x 4.9 x 2.0	200	0.5	0.2	86	—	UL/CUL	69.95	63.95
2122335	Mean Well	HRP-450-24	+24V @ 0-18.8A	451.2W	8.6 x 4.1 x 1.6	150	0.5	0.2	88	✓	UL/CUL/TUV/CE/CB	114.95	104.95
301322	Mean Well	SP-480-24	+24V @ 0-20A	480W	10.9 x 5.0 x 1.7	150	0.5	0.2	87	✓	UL/CUL/TUV/CE/CB	129.95	114.95
147054	Mean Well	SP-500-24	+24V @ 0-20A	480W	6.7 x 4.7 x 3.7	240	0.5	0.5	85.5	✓	UL/CUL/TUV/CE/CB	149.95	134.95
2197994	Mean Well	RSP-500-24	+24V @ 0-21A	504W	9.1 x 5.0 x 1.6	150	0.5	0.2	89	✓	UL/CUL/TUV/CE/CB	109.95	99.95
295902	Mean Well	SE-600-24	+24V @ 0-25A	600W	9.7 x 5.0 x 2.5	150	0.5	0.5	87	—	UL/CUL	84.95	77.95
374231	Mean Well	PSP-600-24	+24V @ 0-25A	600W	6.7 x 4.7 x 3.7	240	0.5	0.5	86	✓	UL/CUL/TUV/CE/CB	129.95	119.95
2204787	Mean Well**	MSP-600-24	+24V @ 0-27A	648W	8.6 x 4.1 x 2.5	150	0.5	0.2	88	✓	UL/CUL/CB/CE	159.95	144.95
2100961	Mean Well	HRP-600-24	+24V @ 0-27A	648W	8.6 x 4.1 x 2.5	150	0.5	0.2	88	✓	UL/CUL/TUV/CE/CB	124.95	114.95
320048	Mean Well	SP-750-24	+24V @ 0-31.3A	750W	10.9 x 5.0 x 2.5	120	0.5	0.2	89	✓	UL/CUL/TUV/CE/CB	214.95	194.95
2172121	Mean Well	RSP-750-24	+24V @ 0-31.3A	751.2W	9.8 x 5.0 x 1.6	150	0.5	0.5	90.5	✓	EN/TUV/UL	179.95	164.95
1585717	Mean Well	RSP-1000-24	+24V @ 0-40A	960W	11.6 x 5.0 x 1.6	150	0.5	0.5	88	✓	UL/CUL/TUV/CE/CB	249.95	229.95
2101569	Mean Well	SE-1000-24	+24V @ 0-41.7A	1000.8W	10.9 x 5.0 x 2.5	200	0.5	0.5	88	—	UL/CUL	174.95	159.95
694938	Mean Well	RSP-1500-24	+24V @ 0-63A	1512W	10.9 x 5.0 x 3.3	150	0.5	0.5	90	✓	UL/CUL/TUV/CE/CB	339.95	314.95
2216729	Mean Well	RST-5000-24	+24V @ 0-200A	4800W	18.1 x 8.3 x 3.3	150	0.5	0.5	89	✓	UL/CUL/TUV/CE/CB	1,089.95	999.95
693513	Mean Well	SP-150-27	+27V @ 0-5.6A	151.2W	7.8 x 3.9 x 2.0	15	0.5	0.5	84	—	UL/CUL/CE/CB/PFC	42.95	38.95
693548	Mean Well	SP-200-27	+27V @ 0-7.5A	202.5W	7.0 x 3.9 x 2.0	150	0.5	0.5	83	✓	UL/CUL/TUV/CE/CB	48.95	44.95
693628	Mean Well	SP-320-27	+27V @ 0-11.7A	315.9W	8.5 x 4.5 x 2.0	200	0.5	0.2	88	✓	UL/CUL/TUV/CE/CB	61.95	56.95
2149520	Mean Well	SE-350-27	+27V @ 0-13A	351W	8.5 x 4.5 x 3.3	200	0.5	0.5	88	—	UL/CUL	44.95	40.95
190706	Mean Well	SP-500-27	+27V @ 0-18A	486W	6.7 x 4.7 x 3.7	200	0.5	0.5	86.5	✓	UL/CUL/TUV/CE/CB	159.95	144.95
295911	Mean Well	SE-600-27	+27V @ 0-22.2A	599.4W	9.7 x 5.0 x 2.5	150	0.5	0.5	87	—	UL/CUL	84.95	77.95
374257	Mean Well	PSP-600-27	+27V @ 0-22.2A	600W	6.7 x 4.7 x 3.7	240	0.5	0.5	86	✓	UL/CUL/TUV/CE/CB	134.95	119.95
374038	Mean Well	SP-750-27	+27V @ 0-27.8A	750W	10.9 x 5.0 x 2.5	120	0.5	0.2	89	✓	UL/CUL/TUV/CE/CB	174.95	159.95
1585709	Mean Well	RSP-1000-27	+27V @ 0-37.0A	999W	11.6 x 5.0 x 1.6	150	0.5	0.5	88	✓	UL/CUL/TUV/CE/CB	239.95	214.95
694946	Mean Well	RSP-1500-27	+27V @ 0-56A	1512W	10.9 x 5.0 x 3.3	150	0.5	0.5	90	✓	UL/CUL/TUV/CE/CB	339.95	319.95
2102983	Mean Well	PB-120N-27C#	+27.6V @ 0-4.3A	118.7W	7.1 x 3.8 x 1.9	150	£	£	79	—	UL/CUL/TUV/CE/CB	44.95	39.95
2146118	Mean Well	AD-155B	+27.6V @ 0-5.5A	152W	7.8 x 4.3 x 2.0	150	0.5	0.5	84	—	UL/CUL/TUV/CE/CB	54.95	48.95
2102473	Mean Well	SP-240-30	+30V @ 0-8A	240W	7.5 x 3.7 x 2.0	150	0.5	0.2	88	✓	UL/CUL/TUV/CE/CB	52.95	47.95

\* Primary Output

\*\* Medical rated

# See complete specs on page 109

§ Efficiency

£ Load/line regulation is dependent on battery current requirement

Continued on next page

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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103

# Enclosed Switching AC-to-DC Power Supplies



## Enclosed Switching AC-to-DC Power Supplies (Continued)

- 100% full-load burn-in test
- Wide AC input range
- Manufacturer warranty varies



SP-200



\* 36-54V Web Code: ENH

\* Multiple Output WC: ENM

Part No.	Manufacturer	Mfr. Part No.	Output		Size (L" x W" x H")	Ripple & Noise (mV p-p)*	Load Reg. (±%)*	Line Reg. (±%)*	EFF (%)§	PFC	Certification	Pricing	
			Voltage @ Current (min-max)	Power								1	10
Single Output (Continued)													
2102730	Mean Well	SP-320-36	+36V @ 0-8.8A	316.8W	8.5 x 4.5 x 2.0	220	0.5	0.2	87	✓	UL/CUL/TUV/CE/CB	\$66.95	\$59.95
693206	Mean Well	RS-25-48	+48V @ 0-0.57A	27.4W	3.1 x 2.0 x 1.1	200	0.5	0.5	85	—	UL/CUL/TUV/CE/CB	11.49	10.49
693249	Mean Well	RS-50-48	+48V @ 0-1.1A	52.8W	3.9 x 3.8 x 1.4	200	0.5	0.5	86	—	UL/CUL/TUV/CE/CB	15.95	14.49
693290	Mean Well	RS-100-48	+48V @ 0-2.3A	110.4W	6.3 x 3.8 x 1.5	200	0.5	0.5	84	—	UL/CUL/TUV/CE/CB	23.95	21.95
167346	Mean Well	S-150-48	+48V @ 0-3.2A	153.6W	7.0 x 4.3 x 2.0	240	0.2	0.2	83	—	UL/CUL/TUV/CE/CB	32.95	29.95
201930	Mean Well	SP-150-48	+48V @ 0-3.2A	153.6W	7.0 x 3.9 x 2.0	250	0.5	0.5	83	✓	UL/CUL/TUV/CE/CB	44.95	40.95
323863	Mean Well	RS-150-48	+48V @ 0-3.3A	158.4W	7.8 x 3.9 x 1.5	200	0.5	0.5	87	—	UL/CUL/TUV/CE/CB	24.95	22.49
202068	Mean Well	SP-200-48	+48V @ 0-4.2A	201.6W	7.0 x 3.9 x 2.0	250	0.5	0.5	84	✓	UL/CUL/TUV/CE/CB	49.95	44.95
2102481	Mean Well	SP-240-48	+48V @ 0-5A	240W	7.5 x 3.7 x 2.0	150	0.5	0.2	89	✓	UL/CUL/TUV/CE/CB	52.95	47.95
244770	Mean Well	SP-320-48	+48V @ 0-6.7A	321.6W	8.5 x 4.5 x 2.0	240	0.5	0.2	89	✓	UL/CUL/TUV/CE/CB	66.95	59.95
2149554	Mean Well	SE-350-48	+48V @ 0-7.3A	350W	8.5 x 4.5 x 2.0	240	0.5	0.5	87.5	—	UL/CUL	44.95	40.95
2105164	Mean Well	SE-450-48	+48V @ 0-9.4A	451.2W	8.9 x 4.9 x 2.0	200	0.5	0.2	88	—	UL/CUL	69.95	63.95
161796	Mean Well	SP-500-48	+48V @ 0-10A	480W	6.7 x 4.7 x 3.7	300	0.5	0.5	87	✓	UL/CUL/TUV/CE/CB	159.95	144.95
301402	Mean Well	SP-480-48	+48V @ 0-11A	480W	10.9 x 5.0 x 1.7	240	0.5	0.2	89	✓	UL/CUL/TUV/CE/CB	144.95	129.95
295929	Mean Well	SE-600-48	+48V @ 0-12.5A	600W	9.7 x 5.0 x 2.5	200	0.5	0.5	88	—	UL/CUL	84.95	77.95
374249	Mean Well	PSP-600-48	+48V @ 0-12.5A	600W	6.7 x 4.7 x 3.7	240	0.5	0.5	87	✓	UL/CUL/TUV/CE/CB	134.95	119.95
2101577	Mean Well	SE-1000-48	+48V @ 0-20.8A	998.4W	10.9 x 5.0 x 2.5	200	0.5	0.5	89	—	UL/CUL	184.95	169.95
1585725	Mean Well	RSP-1000-48	+48V @ 0-21.0A	1008W	11.6 x 5.0 x 1.6	150	0.5	0.5	90	✓	UL/CUL/TUV/CE/CB	239.95	219.95
694954	Mean Well	RSP-1500-48	+48V @ 0-32.0A	1536W	10.9 x 5.0 x 3.3	200	0.5	0.5	91	✓	UL/CUL/TUV/CE/CB	374.95	349.95
2106722	Mean Well	RSP-2400-48	+48V @ 0-50A	2400W	10.9 x 7.0 x 2.5	200	0.5	0.5	91.5	✓	EN/TUV/UL	489.95	439.95
2108921	Mean Well	RSP-3000-48	+48V @ 0-62.5A	3000W	10.9 x 7.0 x 2.5	200	0.5	0.5	90.5	✓	UL/CUL/TUV/CE/CB	524.95	474.95
Double Output													
323362	Mean Well	RD-35A	+5V @ 0.3-4A; +12V @ 0.2-1A	32W	3.9 x 3.2 x 1.4	80	0.5	0.5	79	—	UL/CUL/TUV/CE/CB	\$14.49	\$13.49
323380	Mean Well	RD-35B	+5V @ 0.3-4A; +24V @ 0.2-1.3A	51.2W	3.9 x 3.2 x 1.4	80	0.5	0.5	82	—	UL/CUL/TUV/CE/CB	14.49	13.49
323433	Mean Well	RD-50B	+5V @ 0.3-6A; +24V @ 0.2-2A	53.6W	3.9 x 3.8 x 1.4	80	0.5	0.5	80	—	UL/CUL/TUV/CE/CB	23.95	21.49
323425	Mean Well	RD-50A	+5V @ 0.3-6A; +12V @ 0.3-3A	54W	3.9 x 3.8 x 1.4	80	0.5	0.5	79	—	UL/CUL/TUV/CE/CB	23.95	21.49
323505	Mean Well	RD-65A	+5V @ 0.3-8A; +12V @ 0.2-4A	66W	5.1 x 3.9 x 1.5	80	0.5	0.5	79	—	UL/CUL/TUV/CE/CB	19.95	18.49
323513	Mean Well	RD-65B	+5V @ 0.3-8A; +24V @ 0.2-3A	68W	5.1 x 3.9 x 1.5	80	0.5	0.5	78	—	UL/CUL/TUV/CE/CB	19.95	18.49
323628	Mean Well	RD-85A	+5V @ 2.0-10A; +12V @ 0.3-5A	88W	6.3 x 3.8 x 1.5	80	1.0	0.5	78	—	UL/CUL/TUV/CE/CB	37.95	33.49
132397	Mean Well	D-120B	+5V @ 2.0-6A; +24V @ 0.4-4A	126W	7.0 x 3.9 x 2.0	60	0.5	0.5	78	—	UL/CUL/TUV/CE/CB	39.95	36.95
323741	Mean Well	RD-125A	+5V @ 2.0-15A; +12V @ 0.5-10A	130.9W	7.8 x 3.9 x 1.5	80	3.0	1.0	82	—	UL/CUL/TUV/CE/CB	32.95	29.95
2106124	Mean Well	RD-125-1224	+12V @ 1.0-3.7A; +24V @ 0.4-3.7A	133.2W	7.8 x 3.9 x 1.5	120	1.0	0.5	85	—	UL/CUL/TUV/CE/CB	32.95	29.95
323759	Mean Well	RD-125B	+5V @ 2.0-10A; +24V @ 0.4-5A	133.4W	7.8 x 3.9 x 1.5	80	3.0	1.0	82	—	UL/CUL/TUV/CE/CB	32.95	29.95
Triple Output													
323460	Mean Well	RT-50B	+5V @ 0.5-5A; +12V @ 0.2-2.5A; -12V @ 0.1-1A	50W	3.9 x 3.8 x 1.4	80	1.0	0.5	77	—	UL/CUL/TUV/CE/CB	\$20.95	\$19.49
323468	Mean Well	RT-50C	+5V @ 0-5A; +15V @ 0.2-2A; -15V @ 0.1-1A	50W	3.9 x 3.8 x 1.4	80	1.0	0.5	78	—	UL/CUL/TUV/CE/CB	20.95	19.49
323476	Mean Well	RT-50D	+5V @ 0.5-5A; +12V @ 0.1-1A; +24V @ 0.2-1.5A	51W	3.9 x 3.8 x 1.4	80	1.0	0.5	80	—	UL/CUL/TUV/CE/CB	20.95	19.49
123482	Mean Well	T-60B	+5V @ 0.5-5A; +12V @ 0.2-2.5A; -12V @ 0-0.5A	61W	6.3 x 3.8 x 1.5	100	1.0	0.5	72	—	UL/CUL/TUV/CE/CB	29.95	26.95
323540	Mean Well	RT-65B	+5V @ 0.5-8A; +12V @ 0.2-3.5A; -12V @ 0-1A	64.6W	5.1 x 3.9 x 1.5	80	1.0	0.5	77	—	UL/CUL/TUV/CE/CB	23.95	21.49
323548	Mean Well	RT-65C	+5V @ 0.5-8A; +15V @ 0.2-3A; -15V @ 0-1A	65.5W	5.1 x 3.9 x 1.5	80	1.0	0.5	78	—	UL/CUL/TUV/CE/CB	23.95	21.49
323555	Mean Well	RT-65D	+5V @ 0.5-8A; +12V @ 0.1-1A; +24V @ 0.2-2A	68W	5.1 x 3.9 x 1.5	80	1.0	0.5	79	—	UL/CUL/TUV/CE/CB	21.95	19.95
323775	Mean Well	RT-125B	+5V @ 2-15A; +12V @ 0.5-6A; -12V @ 0.1-1A	132W	7.8 x 3.9 x 1.5	80	1.0	0.5	80	—	UL/CUL/TUV/CE/CB	34.95	31.49
323783	Mean Well	RT-125C	+5V @ 2-15A; +15V @ 0.5-6A; -15V @ 0.1-1A	132.5W	7.8 x 3.9 x 1.5	80	1.0	0.5	81	—	UL/CUL/TUV/CE/CB	34.95	31.49
323792	Mean Well	RT-125D	+5V @ 2-15A; +12V @ 0.1-2A; +24V @ 0.4-4A	136W	7.8 x 3.9 x 1.5	80	1.0	0.5	82	—	UL/CUL/TUV/CE/CB	34.95	31.49
Quad Output													
323484	Mean Well	RQ-50B	+5V @ 0.5-6A; +12V @ 0.2-1.5A; -5V @ 0-1A; -12V @ 0-1A	45.5W	3.9 x 3.8 x 1.4	80	0.5	0.5	74	—	UL/CUL/TUV/CE/CB	\$21.95	\$19.95
323564	Mean Well	RQ-65B	+5V @ 0.5-8A; +12V @ 0.2-3A; -5V @ 0.1-1.5A; -12V @ 0-1A	62.5W	5.1 x 3.9 x 1.5	80	0.5	0.5	76	—	UL/CUL/TUV/CE/CB	20.95	19.95
323572	Mean Well	RQ-65D	+5V @ 0.5-8A; +12V @ 0.2-3A; +24V @ 0.1-1.5A; -12V @ 0-1A	68W	5.1 x 3.9 x 1.5	80	0.5	0.5	78	—	UL/CUL/TUV/CE/CB	20.95	19.95
323695	Mean Well	RQ-85D	+5V @ 2-10A; +12V @ 0.3-4A; +24V @ 0.1-1.5A; -12V @ 0-1A	84W	6.3 x 3.8 x 1.5	80	1.0	0.5	78	—	UL/CUL/TUV/CE/CB	31.95	29.95
323803	Mean Well	RQ-125B	+5V @ 2-12A; +12V @ 0.5-4.5A; -5V @ 0.1-1A; -12V @ 0-1A	120W	7.0 x 3.9 x 2.0	80	0.5	0.5	79	—	UL/CUL/TUV/CE/CB	36.95	33.95
323812	Mean Well	RQ-125D	+5V @ 2-12A; +12V @ 0.5-4A; +24V @ 0.1-2.5A; -12V @ 0-1A	124W	7.8 x 3.9 x 1.5	80	1.0	0.5	82	—	UL/CUL/TUV/CE/CB	39.95	35.95
213648	Mean Well	QP-150F	+5V @ 3-15A; +15V @ 0-5A; +24V @ 0.4-3A; -15V @ 0-1A	152W	7.8 x 3.9 x 1.5	120	2.0	1.0	78	✓	UL/CUL/TUV/CE/CB	86.95	79.95
213752	Mean Well	QP-200D	+5V @ 3-20A; +12V @ 0-6A; +24V @ 0.4-5A; -12V @ 0-1A	204.9W	7.8 x 3.9 x 2.0	100	2.0	1.0	75	✓	UL/CUL/TUV/CE/CB	99.95	89.95
668764	Mean Well	QP-320D	+5V @ 2.5-20A; +12V @ 0-10A; +24V @ 0.2-5A; -12V @ 0.2-2A	316W	8.5 x 4.5 x 2.0	100	2.0	1.0	83	✓	UL/CUL/TUV/CE	119.95	108.95

\* Primary Output

§ Efficiency

# LED Enclosed Power Supplies

Jameco carries the full line of Mean Well Power products. For additional products visit [www.Jameco.com/meanwellproducts](http://www.Jameco.com/meanwellproducts)



## LED Enclosed Power Supplies For Indoor and Outdoor Applications

- Suitable for LED lighting and moving sign application
- 100% full-load burn-in test
- Cooling by free air convection
- UL1310 class 2 power unit
- Short-circuit/overload/overvoltage/overtemperature protection
- Universal AC input/full range



CLG Series

FEATURES	Series					
	APV	CLG	ELN/LPC/LPV/PLN	HLG	LPF	PLC
Case	Plastic	Metal	Plastic	Metal	Plastic	Plastic
Working Temperature (°C)	-30 to 70	-30 to 70	-30 to 50	-30 to 70	-35 to 70	-30 to 50
Voltage (CV or AV) \$	CV	AV	CV	AV	CV	AV
Current (CC or AC) \$	AC	AC	CC	CC	CC	AC
Inrush Current (A/VAC)	70/230	40/230	40/230	75/230	45/230	40/230
PFC Function	—	✓	—	✓	✓	✓
Warranty	2 Year	3 Year	2 Year	3 Year	5 Year	2 Year

\$ CV: constant voltage; AV: adjustable voltage; CC: constant current; AC: adjustable current

\* 2-14.5V Web Code: LTW

\* 15-23V Web Code: LTF

\* 24-35V Web Code: LTR

\* 36-45.6V Web Code: LTS

\* 48-216V Web Code: LFE



Part No.	Manufacturer	Mfr. Part No.	Output		Input Voltage (VAC @ Hz)	Size (L" x W" x H")	Enclosure Rating	Load Reg. (±%) *	Line Reg. (±%) *	Certification	Pricing	
			Voltage @ Current (min-max)	Power (W)							1	10
2101315	Mean Well	LPC-60-1400	+9-42V @ 0-1.4A	59.5	90-264 @ 47-63	6.4 x 1.7 x 1.3	IP67	2.0	1.0	EN/IP/TUV/UL	\$17.95	\$15.95
2142061	Mean Well	APV-12-12	+12V @ 0-1A	12	90-264 @ 47-63	3.0 x 1.6 x 1.1	—	2.0	1.0	CE	5.95	5.25
2102596	Mean Well	LPV-20-12	+12V @ 0-1.67A	20	90-264 @ 47-63	4.6 x 1.4 x 1.0	IP67	2.0	1.0	UL/CUL/TUV/CSA/CE	10.49	9.49
2103142	Mean Well	LPV-35-12	+12V @ 0-3A	36	90-264 @ 47-63	5.8 x 1.6 x 1.2	IP67	2.0	1.0	UL/CUL/TUV/CSA/CE	14.95	13.49
2103169	Mean Well	LPV-60-12	+12V @ 0-5A	60	90-264 @ 47-63	6.4 x 1.7 x 1.3	IP67	2.0	1.0	UL/CUL/TUV/CSA/CE	16.95	15.49
2105308	Mean Well	ELN-60-12†	+12V @ 0-5A	60	90-264 @ 47-63	7.1 x 2.4 x 1.4	IP64	2.0	1.0	UL/CUL/TUV/CSA/CE	24.95	21.95
1918913	Mean Well	PLN-60-12	+12V @ 0-5A	60	90-295 @ 47-63	7.1 x 2.4 x 1.4	IP64	5.0	3.0	UL/CUL/TUV/CE/PFC	31.95	28.95
1585805	Mean Well	CLG-100-12	+12V @ 0-5A	60	90-295 @ 47-63	8.7 x 2.7 x 1.5	IP67	2.0	1.0	UL/CUL/TUV/CSA/CE/PFC	47.95	44.95
2148105	Mean Well	HLG-120H-12B	+12V @ 0-10A	120	90-305 @ 47-63	8.7 x 2.7 x 1.5	IP67	2.0	0.5	UL/CUL/TUV/CE/PFC	56.95	53.95
2215259	Mean Well	LPV-150-12	+12V @ 0-10A	120	180-305 @ 47-63	7.5 x 2.5 x 1.5	IP67	2.0	1.0	UL/CUL/CE	39.95	36.95
2105050	Mean Well	CLG-150-12C	+12V @ 0-11A	132	90-295 @ 47-63	8.7 x 2.7 x 1.5	IP67	1.0	0.5	UL/CUL/TUV/CE/PFC	39.95	35.95
1954877	Mean Well	CLG-150-12A	+12V @ 0-11A	132	90-295 @ 47-63	8.7 x 2.7 x 1.5	IP65	1.0	0.5	UL/TUV/CE	49.95	44.95
2108699	Mean Well	CLG-150-12†	+12V @ 0-11A	132	90-295 @ 47-63	8.7 x 2.7 x 1.5	IP67	1.0	0.5	UL/CUL/TUV/CE/PFC	49.95	44.95
2137609	Mean Well	HLG-150H-12A	+12V @ 0-12.5A	150	90-305 @ 47-63	9.0 x 2.7 x 1.5	IP65	2.0	0.5	UL/CSA/EN/IP/TUV	59.95	56.95
2102158	Mean Well	HLG-240H-12A	+12V @ 0-16A	192	90-305 @ 47-63	9.6 x 2.7 x 1.5	IP65	2.0	0.5	UL/TUV/EN/IP	79.95	72.95
2141780	Mean Well	HLG-320H-12A	+12V @ 0-22A	264	90-305 @ 47-63	9.9 x 3.5 x 1.7	IP65	2.0	0.5	UL/CUL/TUV/CB/CE/PFC	109.95	99.95
2102609	Mean Well	LPV-20-15	+15V @ 0-1.33A	20	90-264 @ 47-63	4.6 x 1.4 x 1.0	IP67	2.0	1.0	UL/TUV/CE	3.95	3.49
2102617	Mean Well	LPV-20-24	+24V @ 0-0.84A	20.2	90-264 @ 47-63	4.6 x 1.4 x 1.0	IP67	2.0	1.0	UL/CUL/CE	10.49	9.49
2102799	Mean Well	LPV-35-24	+24V @ 0-1.5A	36	90-264 @ 47-63	5.8 x 1.6 x 1.2	IP67	2.0	1.0	UL/CUL/TUV/CE	15.95	14.49
2123004	Mean Well	PLN-45-24	+24V @ 0-1.9A	45.6	90-295 @ 47-63	7.1 x 2.4 x 1.4	IP64	5.0	3.0	UL/TUV/EN/CAN/CSA/IP	19.95	17.95
2102801	Mean Well	LPV-60-24	+24V @ 0-2.5A	60	90-264 @ 47-63	6.4 x 1.7 x 1.3	IP67	2.0	1.0	UL/CUL/TUV/CE	16.95	15.49
2105252	Mean Well	ELN-60-24	+24V @ 0-2.5A	60	90-264 @ 47-63	7.1 x 2.4 x 1.4	IP64	2.0	1.0	UL/CUL/TUV/CSA/CE	25.95	23.49
1919027	Mean Well	CLG-60-24	+24V @ 0-2.5A	60	90-295 @ 47-63	7.7 x 2.4 x 1.5	IP67	5.0	3.0	UL/CUL/TUV/CE	36.95	33.95
2103871	Mean Well	PLC-100-24	+24V @ 0-4A	96	90-264 @ 47-63	7.9 x 2.7 x 1.4	—	2.0	1.0	UL/CUL/TUV/CSA/CE/PFC	42.95	38.95
1585872	Mean Well	CLG-100-24	+24V @ 0-4A	96	90-295 @ 47-63	8.7 x 2.7 x 1.5	IP67	2.0	1.0	UL/CUL/TUV/CE/PFC	47.95	44.95
2103433	Mean Well	CLG-150-24	+24V @ 0-6.3A	151.2	90-295 @ 47-63	8.7 x 2.7 x 1.5	IP67	0.5	0.5	UL/CUL/TUV/CE/PFC	48.95	45.95
1954885	Mean Well	CLG-150-24A	+24V @ 0-6.3A	151.2	90-295 @ 47-63	8.7 x 2.7 x 1.5	IP65	1.0	0.5	UL/TUV/CE	48.95	45.95
2136737	Mean Well	HLG-185H-24B	+24V @ 0-7.8A	187.2	90-305 @ 47-63	9.0 x 2.7 x 1.5	IP67	0.5	0.5	UL/CULus/TUV/CE/IP	69.95	63.95
2102174	Mean Well	HLG-240H-24A	+24V @ 0-10A	240	90-305 @ 47-63	9.6 x 2.7 x 1.5	IP65	0.5	0.5	UL/CUL/TUV/CE/PFC	77.95	69.95
2115127	Mean Well	HLG-240H-24B	+24V @ 0-10A	240	90-305 @ 47-63	9.6 x 2.7 x 1.5	IP67	0.5	0.5	UL/CUL/TUV/CE/PFC	77.95	69.95
2147903	Mean Well	HLG-320H-24	+24V @ 0-13.3A	319.2	90-305 @ 47-63	9.9 x 3.5 x 1.7	IP67	0.5	0.5	UL/CUL/TUV/CB/CE/PFC	114.95	104.95
2141819	Mean Well	HLG-320H-24A	+24V @ 0-13.34A	320	90-305 @ 47-63	9.9 x 3.5 x 1.7	IP65	0.5	0.5	UL/CUL/TUV/CE/CB	114.95	104.95
2148009	Mean Well	HLG-150-30B**	+30V @ 0-5A	150	90-277 @ 50-60	8.7 x 2.7 x 1.5	IP67	0.5	0.5	UL/TUV/CE/PFC	64.95	58.95
2140859	Mean Well	LPF-90-24	+34V @ 0-3.75A	90	90-305 @ 47-63	6.3 x 2.4 x 1.4	IP67	0.5	0.5	UL/EN/IP/TUV	42.95	38.95
2165888	Mean Well	LPF-25D-36	+36V @ 0.7A	25.2	90-305 @ 47-63	5.8 x 1.6 x 1.3	IP67	0.5	0.5	UL/CSA/EN/IP/TUV	26.95	24.95
2148025	Mean Well	HLG-150H-36B	+36V @ 0-4.2A	151.2	90-305 @ 47-63	9.0 x 2.7 x 1.5	IP67	0.5	0.5	UL/CUL/TUV/CE/PFC	65.95	59.95
2140710	Mean Well	LPF-60-42	+42V @ 0-1.43A	60.06	90-305 @ 47-63	6.4 x 1.7 x 1.3	IP67	0.5	0.5	UL/EN/IP/TUV	29.95	27.95
2101121	Mean Well	LPC-20-350	+48V @ 0-0.35A	16.8	90-264 @ 47-63	4.6 x 1.4 x 1.0	IP67	2.0	1.0	UL/CUL	11.95	10.95
2210773	Mean Well	LPF-60D-48	+48V @ 0-1.25A	60	90-277 @ 47-63	6.4 x 1.7 x 1.3	IP67	0.5	0.5	UL/CUL/TUV/CE/CB	29.95	26.95
2100591	Mean Well	PLN-60-48	+48V @ 0-1.3A	62.5	90-295 @ 47-63	7.1 x 2.4 x 1.4	IP64	5.0	3.0	UL/CUL/TUV/CSA/CE/PFC	29.95	27.95

\* Primary output

† Dimmable options

\*\* Dimmable options

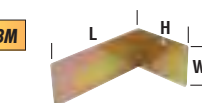


## Mounting Brackets & Accessories for Mean Well Enclosed Switching AC-to-DC Power Supplies

All brackets use metric screws: 2-F3 x 6, 2-F4 x 6, 2-T3 x 6, 2-T4 x 6 and 8-T4 x 6 (not included)

\* Web Code: MBM

Part No.	Mfr. P/N	For Models	1	10
222122	DRL-01	S-25/40, RS-25/35	\$ .99	\$ .89
222131	DRL-02	S-50/60/100/150, SP-100/150/200, D-120	1.25	1.09
222148	DRL-03	S-240/320, SP-320	1.49	1.25
222165	DRP-02	S-15/25, SP-75/100/150/200	1.49	1.35
222173	DRP-03	All Models	1.49	1.25
222182	MHS012	S-320/350, SP-100/150/200/320	.49	.39
248736	2094.0	DR, DRH, DRP, DRT, MDR	8.95	7.95
2150379	TBC-07	D/D, NED, RD, NES, RS, T, S, SD, HRP, SC	.35	.29



222122 4.35"L x 1.73"W x 2.52"H  
222148 7.875"L x 2.48"W x 1.80"H



222165 3.2"L x 2.0"W x 0.3"H



222173 1.75"L x 1.97"W x 0.34"H



222182 .767"L x .60"W x .625"H

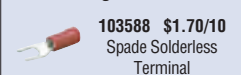


248736 (Slotted)  
DIN Mounting Rail  
Length: 1 meter



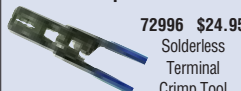
2150379 2.25"L x 0.4"W

### Mating Connector



103588 \$1.70/10  
Spade Solderless  
Terminal

### Crimp Tool



72996 \$24.95  
Solderless  
Terminal  
Crimp Tool

Pricing & specs on page 63

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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## DIN-Rail Switching Power Supplies



- Short-circuit, overload, overvoltage protection
- Low cost, high reliability
- 100% full-load burn-in test
- For DIN mounting rail, see page 105

**UL-508**

- For DIN-Rail terminal blocks see pg 62
- Universal AC input range
- Soft-start circuit, limiting AC surge current
- Rail not included

**\*5-13.8V Web Code: DTW**

**\*15-24V Web Code: DTF**

**\*27.6-48V Web Code: DFO**



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13



Fig. 14

Part No.	Mfr. Part No.	Fig.	Output Volts @ Curr.	Pwr (W)	Input Voltage (VAC @ Hz/VDC)	Input Current @ Max Load	Size (L" x W" x H")	Wt. (lbs.)	Certification	1	10
2103978	MDR-10-5	2	5VDC @ 2A	10	88-264 @ 47-63	0.33A(115V)/0.21A(230V)	3.5 x .89 x 3.9	0.4	UL/CUL/TUV/CB/CE	\$13.95	\$12.49
2101243	DR-15-5	9	5VDC @ 2.4A	12	85-264 @ 47-63/120-370	0.88A(115V)/0.48A(230V)	1.0 x 3.7 x 2.2	0.2	UL/CUL/TUV/CE	13.95	12.49
1943300	MDR-20-5	2	5VDC @ 3A	15	85-264 @ 47-63/120-370	0.55A(115V)/0.35A(230V)	3.9 x 0.9 x 3.5	0.4	UL/CUL/TUV/CE	14.95	13.49
212303	DR-4505	3	5VDC @ 5A	25	85-264 @ 47-63/120-370	1.5A(115V)/0.75A(230V)	3.0 x 2.6 x 3.6	0.9	UL/CUL/TUV/CE	19.95	17.95
1943393	MDR-40-5	4	5VDC @ 6A	30	85-264 @ 47-63/120-370	1.1A(115V)/0.7A(230V)	3.9 x 1.6 x 3.5	0.6	UL/CUL/TUV/CE	20.95	18.95
1943449	MDR-60-5	4	5VDC @ 10A	50	85-264 @ 47-63/120-370	1.8A(115V)/1.0A(230V)	3.9 x 1.6 x 3.5	0.7	UL/CUL/TUV/CE	21.95	19.95
1952978	MDR-10-12	2	12VDC @ 0.84A	10	85-264 @ 47-63/120-370	0.33A(115V)/0.21A(230V)	3.9 x 0.9 x 3.5	0.4	UL/CUL/TUV/CE	13.95	12.49
2094952	DR-15-12	9	12VDC @ 1.25A	15	85-264 @ 47-63/120-370	0.88A(115V)/0.48A(230V)	3.7 x 1.0 x 2.2	0.2	UL/CUL/TUV/CE	13.95	12.49
1943334	MDR-20-12	2	12VDC @ 1.67A	20	85-264 @ 47-63/120-370	0.55A(115V)/0.35A(230V)	3.9 x 0.9 x 3.5	0.4	UL/CUL/TUV/CE	14.95	13.49
373182	DR-30-12	1	12VDC @ 2A	24	85-264 @ 47-63/120-370	1.1A(115V)/0.6A(230V)	3.1 x 3.7 x 2.2	0.6	UL/CUL/TUV/CE	16.95	15.49
1943406	MDR-40-12	4	12VDC @ 3.33A	40	85-264 @ 47-63/120-370	1.1A(115V)/0.7A(230V)	3.9 x 1.6 x 3.5	0.6	UL/CUL/TUV/CE	20.95	18.95
192699	DR-4512	3	12VDC @ 3.5A	42	85-264 @ 47-63/120-370	1.5A(115V)/0.75A(230V)	3.0 x 2.6 x 3.6	0.7	UL/CUL/TUV/CE	19.95	17.95
373230	DR-60-12	1	12VDC @ 4.5A	54	85-264 @ 47-63/124-370	1.8A(115V)/1.0A(230V)	3.1 x 3.7 x 2.2	0.7	UL/CUL/TUV/CE	23.95	21.95
1943457	MDR-60-12	4	12VDC @ 5A	60	85-264 @ 47-63/120-370	1.8A(115V)/1.0A(230V)	3.9 x 1.6 x 3.5	0.7	UL/CUL/TUV/CE	21.95	19.95
212291	DR-75-12	6	12VDC @ 6.3A	75	85-264 @ 47-63/120-370	2.0A(115V)/1.2A(230V)	3.9 x 2.1 x 4.9	1.2	UL/CUL/TUV/CE	31.95	28.95
1943511	DR-100-12	1	12VDC @ 7.5A	90	85-264 @ 47-63/124-370	3.0A(115V)/1.6A(230V)	3.9 x 3.7 x 2.2	0.8	UL/CUL/TUV/CE	31.95	28.95
1943481	MDR-100-12	5	12VDC @ 7.5A	90	85-264 @ 47-63/120-370	1.3A(155V)/0.8A(230V)	3.9 x 2.2 x 3.5	0.9	UL/CUL/TUV/CE	39.95	35.95
212274	DR-120-12	7	12VDC @ 10A	120	88-132/176-264* @ 47-63	2.8A(115V)/1.7A(230V)	2.6 x 3.9 x 4.9	1.4	UL/CUL/TUV/CE	39.95	35.95
2099366	SDR-120-12†	8	12VDC @ 10A	120	88-264/124-370 @ 47-63	1.4A(115V)/1.0A(230V)	4.5 x 1.6 x 4.9	1.5	UL/CUL/TUV/CE	64.95	58.95
2101391	DR-15-15	9	15VDC @ 1A	15	88-264 @ 47-63	0.88A(115V)/0.48A(230V)	3.7 x 1.0 x 2.2	0.2	UL/CUL/TUV/CB/CE	13.95	12.49
1943342	MDR-20-15	2	15VDC @ 1.24A	20	85-264 @ 47-63/120-370	0.55A(115V)/0.35A(230V)	3.9 x 0.9 x 3.5	0.4	UL/CUL/TUV/CE	14.95	13.49
373238	DR-60-15	1	15VDC @ 4A	60	85-264 @ 47-63/124-370	1.8A(115V)/1.0A(230V)	3.1 x 3.7 x 2.2	0.7	UL/CUL/TUV/CE	21.95	20.95
1952986	MDR-10-24	2	24VDC @ 0.42A	10	85-264 @ 47-63/120-370	0.33A(115V)/0.21A(230V)	3.9 x 0.9 x 3.5	0.4	UL/CUL/TUV/CE	13.95	12.49
2100873	DR-15-24	9	24VDC @ 0.63A	15.2	85-264 @ 47-63/120-370	0.88A(115V)/0.48A(230V)	2.2 x 1.0 x 3.7	0.2	UL/CUL/TUV/CE	13.95	12.49
1943385	MDR-20-24	2	24VDC @ 1A	24	85-264 @ 47-63/120-370	0.55A(115V)/0.35A(230V)	3.9 x 0.9 x 3.5	0.4	UL/CUL/TUV/CE	14.95	13.49
373203	DR-30-24	1	24VDC @ 1.5A	36	85-264 @ 47-63/120-370	1.1A(115V)/0.6A(230V)	3.1 x 3.7 x 2.2	0.6	UL/CUL/TUV/CE	16.95	15.49
1943422	MDR-40-24	4	24VDC @ 1.7A	40.8	85-264 @ 47-63/120-370	1.1A(115V)/0.7A(230V)	3.9 x 1.6 x 3.5	0.6	UL/CUL/TUV/CE	20.95	18.95
192681	DR-4524	3	24VDC @ 2A	48	85-264 @ 47-63/120-370	1.5A(115V)/0.75A(230V)	3.0 x 2.6 x 3.6	0.7	UL/CUL/TUV/CE	19.95	17.95
1943465	MDR-60-24	4	24VDC @ 2.5A	60	85-264 @ 47-63/120-370	1.8A(115V)/1.0A(230V)	3.9 x 1.6 x 3.5	0.7	UL/CUL/TUV/CE	21.95	20.95
373246	DR-60-24	1	24VDC @ 2.5A	60	85-264 @ 47-63/124-370	1.8A(115V)/1.0A(230V)	3.1 x 3.7 x 2.2	0.7	UL/CUL/TUV/CE	21.95	20.95
212282	DR-75-24	6	24VDC @ 3.2A	75	85-264 @ 47-63/120-370	2.0A(115V)/1.2A(230V)	3.9 x 2.1 x 4.9	1.2	UL/CUL/TUV/CE	31.95	28.95
2190320	SDR-75-24	13	24VDC @ 3.2A	76.8	88-264 @ 47-63	1.4A(115V)/0.85A(230V)	4.0 x 1.25 x 4.9	0.4	UL/CUL/TUV/CE	36.95	33.95
1943490	MDR-100-24	5	24VDC @ 4A	90	85-264 @ 47-63/120-370	1.3A(155V)/0.8A(230V)	3.9 x 2.2 x 3.5	0.9	UL/CUL/TUV/CE	39.95	35.95
1943537	DR-100-24	1	24VDC @ 4.2A	100	88-264 @ 47-63/124-370	3.0A(115V)/1.6A(230V)	2.2 x 3.9 x 3.7	0.8	UL/CUL/TUV/CE	31.95	28.95
212266	DR-120-24	7	24VDC @ 5A	120	88-132/176-264* @ 47-63	2.8A(115V)/1.7A(230V)	2.6 x 3.9 x 4.9	1.4	UL/CUL/TUV/CE	39.95	35.95
1953727	DRH-120-24	7	24VDC @ 5A	120	340-550 @ 47-63/480-780	0.65A(400V)/0.6A(500V)	3.9 x 2.6 x 4.9	1.7	UL/CE	59.95	54.95
2099374	SDR-120-24†	8	24VDC @ 5A	120	88-264/124-370 @ 47-63	1.4A(115V)/1.0A(230V)	4.5 x 1.6 x 4.9	1.5	UL/CUL/TUV/CE	64.95	58.95
2123055	WDR-120-24	14	24VDC @ 5A	120	180-550 @ 47-63	0.55A(400V)/1.2A(230V)	4.5 x 1.6 x 4.9	0.4	UL/CUL/CB/CE	64.95	58.95
221892	DRP-240-24†	10	24VDC @ 10A	240	85-264 @ 47-63/120-370	2.8A(115V)/1.4A(230V)	3.9 x 4.9 x 4.9	2.4	UL/CUL/TUV/CE	59.95	53.95
373123	DRT-240-24	10	24VDC @ 10A	240	3-phase 340-550 @ 47-63/480-780	0.95A(400V)/0.75A(500V)	3.9 x 4.9 x 4.9	2.9	UL/CUL/TUV/CE	74.95	67.95
2081086	SDR-240-24†	8	24VDC @ 10A	240	88-264 @ 47-63/124-370	2.6A(115V)/1.3A(230V)	2.5 x 4.9 x 4.5	2.5	UL/CUL/TUV/CE	104.95	94.95
252663	DRP-480-24†	11	24VDC @ 20A	480	180-264 @ 47-63/250-370	4.0A(230V)	8.9 x 3.9 x 4.9	4.6	UL/CUL/TUV/CE	104.95	94.95
295938	DRP-480S-24†	11	24VDC @ 20A	480	90-132/180-264* @ 47-63/254-370	11.0A(115V)/4.0A(230V)	8.9 x 3.9 x 4.9	4.6	UL/CUL/TUV/CE	119.95	109.95
372577	DRT-480-24	11	24VDC @ 20A	480	3-phase 340-550 @ 47-63/480-780	1.7A(400V)/1.3(500V)	8.9 x 5.0 x 3.9	5.5	UL/CUL/TUV/CE	124.95	114.95
2094944	SDR-480-24†	12	24VDC @ 20A	480	88-264 @ 47-63/124-370	2.6A(115V)/1.3A(230V)	4.9 x 3.4 x 5.0	4.9	UL/CUL/TUV/CE	159.95	144.95
373131	DRT-960-24	11	24VDC @ 40A	960	340-550 @ 47-63	2A(400V)/1.6A(500V)	10.9 x 3.9 x 4.9	7.3	UL/CUL/TUV/CE	229.95	204.95
1943473	MDR-60-48	4	48VDC @ 1.25A	60	85-264 @ 47-63/120-370	1.8A(115V)/1.0A(230V)	3.9 x 1.6 x 3.5	0.7	UL/CUL/TUV/CE	21.95	19.95
221866	DR-75-48	6	48VDC @ 1.6A	75	85-264 @ 47-63	2A(115V)/1.2A(230V)	3.9 x 2.2 x 4.9	1.7	UL/CUL/TUV/CE	31.95	28.95
221904	DR-120-48	7	48VDC @ 2.5A	120	88-132/176-264* @ 47-63	2.8A(115V)/1.7A(230V)	2.6 x 3.9 x 4.9	1.4	UL/CUL/TUV/CE	39.95	35.95
2107338	SDR-120-48	8	48VDC @ 2.5A	120	88-264 @ 47-63	1.4A(115V)/0.7A(230V)	4.9 x 1.6 x 4.5	1.5	UL/CUL/TUV/CB/CE	64.95	58.95
221883	DRP-240-48†	10	48VDC @ 5A	240	85-264 @ 47-63/120-370	3.5A(115V)/1.8A(230V)	3.9 x 4.9 x 4.9	2.4	UL/CUL/TUV/CE	59.95	53.95
2094936	SDR-240-48†	8	48VDC @ 5A	240	88-264 @ 47-63/120-370	2.6A(115V)/1.3A(350V)	2.5 x 4.9 x 4.5	2.5	UL/CUL/TUV/CE	104.95	94.95
252655	DRP-480-48†	11	48VDC @ 10A	480	180-264 @ 47-63/250-370	4.0A(230V)	8.9 x 3.9 x 4.9	4.6	UL/CUL/TUV/CE	104.95	94.95
301306	DRP-480S-48†	11	48VDC @ 10A	480	90-132/180-264* @ 47-63/254-370	11.0A(115V)/4.0A(230V)	8.9 x 3.9 x 4.9	4.6	UL/CUL/TUV/CE	119.95	109.95
2107346	SDR-480-48	12	48VDC @ 10A	480	90-264 @ 47-63	5A(115V)/2.5A(230V)	4.9 x 3.4 x 5.1	3.5	UL/CUL/TUV/CB/CE	159.95	144.95

\*Switch selectable †With Power Factor Correction

# DIN-Rail Power Supplies & DC-to-DC Power Converters

Jameco carries the full line of Mean Well Power products. For additional products visit [www.Jameco.com/meanwellproducts](http://www.Jameco.com/meanwellproducts)



## 40A DC DIN-Rail UPS Module & 20A Power Supply Redundancy Module

★ Web Code: DTF

Part No.	Mfr. Part No.	Description	DC Input/DC BUS	Output Voltage @ Current	Charge Current	Certification	1	10
2103273	DR-UPS40	Battery controller for UPS	24-29V @ 40A	21-29VDC @ 0-40A	2A	CE	\$42.95	\$38.95
2105009	DR-RDN20	2-input redundancy module	21-28V @ 20A	30V @ 20A	—	CE	25.95	23.49



2103273  
(Rail not included)



## 15 to 350-Watt Enclosed Converters

★ 5-9V Web Code: IDF

★ 12V Web Code: IDW

★ 15-24V Web Code: IDR

★ 30-48V Web Code: IDO

- 2:1 wide input range
- 100% burn-in tes
- Working temp.: -10°C to +60°C
- Protection: short-circuit, overload and overvoltage

**SD-15 Series** • Built-in EMI filter, low ripple noise • One-year warranty

**SD-25/SD-50/SD-150 Series**

• Isolation voltage: 1500VDC

• Built-in EMI filter, low ripple noise

• One-year warranty

**SD-200 Series** • Isolation volt.: 1500VDC

• Cooling by free air convection

• Fixed switching freq @ 83kHz

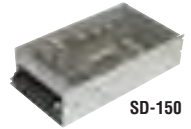
• **SD-200:** One-year warranty; **SD-350:** Two-year warranty

**SD-500 Series** • Isolation voltage: 2000VAC • DC input active surge current limiting

• Wide 4:1 ~ 2:1 SC input range

• Forced air cooling by built-in DC fan w/ fan speed control function

• Three-year warranty



SD-150

Part No.	Mfr. Part No.	Input Range	Output		Size (L" x W" x H")	Pins	Line Reg. (±%)	Load Reg. (±%)	Ripple & Noise (mV p-p)	Certification	Pricing	
			Voltage @ Current	Power (W)							1	10
1953778	SD-15A-5	9.2-18V	+5V @ 3.0A	15	3.1 x 2.0 x 1.1	5	0.5	0.5	100	CE	\$12.95	\$11.49
1953786	SD-15B-5	18-36V	+5V @ 3.0A	15	3.1 x 2.0 x 1.1	5	0.5	0.5	100	CE	12.95	11.49
175662	SD-25A-5	9-18V	+5V @ 5.0A	25	3.9 x 3.8 x 1.4	5	0.5	0.5	100	CE	17.95	15.95
212549	SD-50A-5	9-18V	+5V @ 10A	50	6.3 x 3.8 x 1.5	5	0.5	0.5	100	CE	27.95	25.95
1953823	SD-15B-12	18-36V	+12V @ 1.25A	15	3.1 x 2.0 x 1.1	5	0.3	0.3	120	CE	12.95	11.49
1953840	SD-15C-12	36-72V	+12V @ 1.25A	15	3.1 x 2.0 x 1.1	5	0.3	0.3	120	CE	12.95	11.49
175805	SD-25A-12	9-18V	+12V @ 2.1A	25.2	3.9 x 3.8 x 1.4	5	0.3	0.3	120	CE	21.95	19.95
1537483	SD-50A-12	9.2-18V	+12V @ 4.2A	50.1	6.3 x 3.8 x 1.5	5	0.3	0.3	120	CE	27.95	25.95
212531	SD-50B-12	19-36V	+12V @ 4.2A	50.4	6.3 x 3.8 x 1.5	5	0.3	0.3	120	CE	27.95	25.95
212506	SD-50C-12	36-72V	+12V @ 4.2A	50.4	6.3 x 3.8 x 1.5	5	0.3	0.3	120	CE	27.95	25.95
217270	SD-150B-12	19-36V	+12V @ 12.5A	150	7.8 x 4.3 x 2.0	7	0.5	0.5	120	CE	46.95	42.95
1953920	SD-200C-12	36-72V	+12V @ 16.7A	200.4	8.5 x 4.5 x 2.0	9	0.5	1.0	120	CE	71.95	64.95
1954033	SD-500L-12	19-72V	+12V @ 40A	480	8.5 x 4.5 x 2.0	7	0.5	0.5	150	CE	139.95	124.95
175813	SD-25A-24	9-18V	+24V @ 1.1A	26.4	3.9 x 3.8 x 1.4	5	0.2	0.2	150	CE	21.95	19.95
2107266	SD-50A-24	9.2-18V	+24V @ 2.1A	50.4	6.3 x 3.8 x 1.5	5	0.2	0.2	150	CE	27.95	25.95
212514	SD-50B-24	19-36V	+24V @ 2.1A	50.4	6.3 x 3.8 x 1.5	5	0.2	0.2	150	CE	27.95	25.95
2107039	SD-100C-24	36-72V	+24V @ 4.2A	100.8	7.8 x 3.9 x 1.6	7	0.2	0.2	150	CE	34.95	31.95
2107098	SD-150C-24	36-72V	+24V @ 6.3A	151.2	7.8 x 4.3 x 2.0	7	0.3	0.3	150	CE	46.95	42.95
2107119	SD-150D-24	72-144V	+24V @ 6.3A	151.2	7.8 x 4.3 x 2.0	7	0.3	0.3	150	TUV/CE	43.95	39.95
1953954	SD-200B-24	19-36V	+24V @ 8.4A	201.6	8.5 x 4.5 x 2.0	9	0.5	1.0	150	CE	79.95	72.95
1953911	SD-200B-48	19-36V	+48V @ 4.2A	201.6	8.5 x 4.5 x 2.0	9	0.5	1.0	150	CE	79.95	72.95
1953989	SD-350B-48	19-36V	+48V @ 7.3A	350.4	8.5 x 4.5 x 2.0	9	0.3	1.0	120	CE	94.95	84.95

## Encapsulated DC-to-DC Converters

★ 3.3-9V Web Code: IEF

★ 12-13.5V Web Code: IEW

★ 15-24V Web Code: IEO

- 1000VDC I/O isolation
- Shield metal case
- Short-circuit/overload protection
- 2:1 wide input range
- Cooling by free air convection
- One-year warranty



SLW05



SKE10



DKE10

Part No.	Mfr. Part No.	Input Range	Output		Size (L" x W" x H")	Pins	Line Reg. (±%)	Load Reg. (±%)	Ripple & Noise (mV p-p)	Certification	Pricing	
			Voltage @ Current	Pwr (W)							1	10
1953313	SCW05B-05*	18-36V	+5V @ 1A	5	1.25 x 0.8 x 0.48	8	0.5	0.5	50	CE	\$9.49	\$8.49
216937	SLW05B-05*	18-36V	+5V @ 1A	5	2.0 x 1.0 x 0.44	5	1.0	0.2	100	CE	10.95	9.95
213234	SLW05C-05*	36-72V	+5V @ 1A	5	2.0 x 1.0 x 0.44	5	1.0	0.2	100	CE	12.95	11.95
216962	SKE10A-05*	9-18V	+5V @ 2A	10	2.0 x 1.0 x 0.44	5	0.3	1.0	50	CE	18.95	16.95
155716	SKE15A-05*	9-18V	+5V @ 3A	15	2.0 x 2.0 x 0.43	5	0.3	0.5	50	CE	18.95	16.95
155708	SKE15A-12*	9-18V	+12V @ 1.25A	15	2.0 x 2.0 x 0.43	5	0.3	0.5	60	CE	16.49	15.49
155695	SKE15A-24*	9-18V	+24V @ 0.625A	15	2.0 x 2.0 x 0.43	5	0.3	0.5	80	CE	18.95	16.95
161702	DCW03A-12**	9-18V	±12V @ 0.125A	3	1.25 x 0.8 x 0.48	10	1.0	0.5	100	CE	9.95	8.95
217092	DKE10A-12**	9-18V	±12V @ 0.42A	10	2.0 x 1.0 x 0.44	5	0.3	0.5	60	CE	18.95	17.49
217112	DKE10A-15**	9-18V	±15V @ 0.333A	10	2.0 x 1.0 x 0.44	5	0.3	0.5	60	CE	18.95	17.49

\*Single output

\*\*Double output

## BEST SELLER POWER SUPPLIES AND CONVERTER



Rail not included

DIN-Rail Power Supply  
P/N 2103273 \$42.95



Enclosed Power Supply  
P/N 1953840 \$12.95



Encapsulated Converter  
P/N 161702 \$9.95

★ For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Batteries & Rechargeable Battery Pack

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## Lithium, NiCd, NiMH, Li-Ion & LiFePO4 Batteries

Applications: personal computers, workstations, test equipment, feature telephones, copiers, fax machines, video scramblers/descramblers and remotes.

### Lithium – Non-rechargeable

#### Coin Cell

\* Web Code: LBT

Part No.	Product No.	Mfr.	Fig.	Size	Volts	mAh	Dimensions	1	10	25
2123784	CR1220	Evergreen	1	CR1220	3	40	0.49"Dia. x 0.77"Thick	\$ .85	\$ .75	\$ .65
2210010	CR1220-LEADS	ReliaPro	2	CR1220	3	40	0.49"Dia. x 0.77"Thick	.89	.79	.69
2119865	CR1632	Evergreen	1	CR1632	3	120	0.63"Dia. x 0.13"Thick	.99	.89	.79
2167509	CR2025-2*	Energizer	1	CR2025	3	162	0.79"Dia. x 0.10"Thick	1.19	.99	.89
14162	CR2032	Renata	1	CR2032	3	180	0.79"Dia. x 0.13"Thick	1.09	.99	.85
11789	CR2325	ReliaPro	1	CR2325	3	165	0.91"Dia. x 0.13"Thick	1.79	1.59	1.45
2119216	CR2450	Evergreen	1	CR2450	3	550	0.95"Dia. x 0.20"Thick	1.29	1.15	.99
2158231	CR927	ReliaPro	1	CR927	3	30	0.37"Dia. x 0.10"Thick	.45	.39	.35

\*Sold in multiple of 2 \$ 2" wire leads

#### Pressure Fit

Part No.	Product No.	Mfr.	Fig.	Size	Volts	mAh	Dimensions	1	10	25
126754	TL-5101S	Tadiran	3	1/2 AA	3.6	950	0.95"L x 0.56"Dia.	\$4.95	\$4.49	\$4.09
240266	ER14250	ReliaPro	3	1/2 AA	3.6	1000	1.00"L x 0.55"Dia.	3.55	3.25	2.95
2188561	LS14250	Saft	3	1/2 AA	3.6	1200	1.00"L x 0.56"Dia.	3.95	3.59	3.45
146114	TL-5104/S	Tadiran	4	AA	3.6	2100	1.91"L x 0.56"Dia.	6.95	6.25	5.65
240258	CR123A	Evergreen	5	CR123A	3	1300	1.36"L x 0.65"Dia.	2.75	2.49	2.25

#### Axial Leads

Part No.	Product No.	Mfr.	Fig.	Size	Volts	mAh	Dimensions	1	10	25
33371	TL-5101P	Tadiran	6	1/2 AA	3.6	950	0.93"L x 0.56"Dia.	\$6.25	\$5.65	\$4.95
263898	ER14250	ReliaPro	6	1/2 AA	3.6	1000	1.00"L x 0.55"Dia.	4.75	4.25	3.85
33398	TL-5104/P	Tadiran	7	AA	3.6	2100	1.88"L x 0.56"Dia.	7.49	6.95	6.49

## NiCd – Rechargeable – Pressure Fit

\* Web Code: GCF

Part No.	Product No.	Mfr.	Fig.	Size	Volts	mAh	Dimensions	1	10	25
261657	AA-700-CT	ReliaPro	4	AA	1.2	700	1.90"L x 0.55"Dia.	\$1.69	\$1.49	\$1.35
244515	AA-1000-CT	ReliaPro	4	AA	1.2	1000	1.90"L x 0.55"Dia.	2.75	2.49	2.25
244574	SC-1500	ReliaPro	8	Sub-C	1.5	1500	1.70"L x 0.89"Dia.	2.75	2.49	2.25

## NiMH – Rechargeable

\* Web Code: GCF

Part No.	Product No.	Mfr.	Fig.	Size	Volts	mAh	Dimensions	1	10	25
231095	10405	Tenergy	9	AAA	1.2	1000	1.70"L x 0.40"Dia.	\$3.49	\$3.15	\$2.79
231087	AA-1800NM	Dantona	4	AA	1.2	1800	1.90"L x 0.55"Dia.	3.49	3.15	2.79
2197492	AA2500-4*	Powerizer	4	AA	1.2	2500	1.90"L x 0.55"Dia.	8.95	7.95	6.49
2127777	AA-2500CT	Tenergy	4	AA	1.2	2500	1.90"L x 0.55"Dia.	3.95	3.55	3.19
244620	10005	Tenergy	10	9V	8.4	200	1.94"L x 0.65"Dia.	8.95	7.95	6.95

\*Pack of 4

#### PC Pin (2 & 3 pin)

Part No.	Product No.	Mfr.	Fig.	Size	Volts	mAh	Dimensions	1	10	25
2137473	NHB60H3A2H	Evergreen	11	2 pin	3.6	80	0.72"L x 0.61"Dia.	\$4.95	\$4.49	\$3.95
2129342	COMP-16-3NMH	Dantona	11	3 pin	3.6	80	0.72"L x 0.61"Dia.	5.49	4.95	4.49

## Li-Ion – Rechargeable – Pressure Fit

\* Web Code: LII

Part No.	Product No.	Mfr.	Fig.	Size	Volts	mAh	Dimensions	1	10	25
2144286	30201	Tenergy	5	RCR123A	3	900	1.26"L x 0.63"Dia.	\$4.95	\$4.69	\$4.49
2140349	30006	Tenergy	12	18650	3.7	2600	2.56"L x 0.72"Dia.	9.95	9.49	8.95

## LiFePO4 – Rechargeable

#### Pressure Fit

\* Web Code: LIF

Part No.	Product No.	Mfr.	Fig.	Size	Volts	mAh	Dimensions	1	10	25
2144227	30225	Tenergy	4	14500	3.2	400	1.91"L x 0.56"Dia.	\$2.25	\$1.95	\$1.75
2144278	30200	Tenergy	5	RCR123A	3.2	900	1.26"L x 0.63"Dia.	2.95	2.65	2.39



Fig. 1

Fig. 2



Fig. 3

Fig. 4

Fig. 5



Fig. 6

Fig. 7



Fig. 8

Fig. 9

Fig. 10



Fig. 11

Fig. 12

## 12V Lithium-Ion Rechargeable Battery Pack

High-powered, ultra-compact, covert battery pack with charger. Provides the same power as larger batteries at a fraction of the size and weight.

- Charging adapter included
- On/Off switch
- LED indicators
- 18" power cord
- Input: 110-230VAC 50/60Hz
- Output: 12.6VDC, 350mA
- 4500 mAh
- Connection: 2.1mm female output, 2.1mm male input
- Size: 3.0"L x 2.0"W x 0.75"H
- Weight: 0.58 lbs.
- Initial charge should be 24 hours before use



Part No.	Description	1	10
2129351	LBP-124500	\$49.95	\$44.95

## USB Li-Ion/LiPoly Charger

- Assembled. Includes bonus 2-pin JST cable
- For 3.7/4.2V (not compatible with 3.6/4.1V cells)
- Connect via USB mini-B
- 500mA default fast-charge current
- Battery and USB cable sold separately
- 0.1" breakouts for battery, DC and status LEDs
- Size: 1.3"L x 1.4"W x 0.3"H



Part No.	Mfr. Part No.	1	5
2144366	259	\$17.95	\$15.95



# Batteries & Battery Chargers

EVERGREEN

DURACELL

## Evergreen, Energizer® & Duracell® Alkaline Batteries



215845



198731



198791



2112461



198707



2112444



2158493



198715



2112436



\* Web Code: NBF

Part No.	Mfr.	Size	1	10
215845	Energizer	1.5V - D	\$1.39	\$1.25
198731	Energizer	9V	2.25	1.95
198791	Duracell	9V	2.65	2.39

Part No.	Mfr.	Size	Min.	1	20	100
198707	ENG	1.5V - AA	4	\$.79	\$.69	\$.65
2112444	EVG	1.5V - AA	4	.45	.39	.35
2158493	MIC	1.5V - AA*	2	.35	.29	.22
198715	ENG	1.5V - AAA	4	.79	.69	.65
2112436	EVG	1.5V - AAA	2	.49	.45	.39
2112428	EVG	1.5V - C	2	1.19	1.09	.99
2112461	EVG	9V	2	1.49	1.35	1.09

\* Cadmium

\* ENG = Energizer | EVG = Evergreen | MIC = Micropower

EVERGREEN

## Silver Oxide and Zinc Chloride Batteries

**Applications:** Personal computers, workstations, test equipment, feature telephones, copiers, fax machines, video scramblers / descramblers and remotes.

\* Web Code: XAB



140783



151095



2183699

Part No.	Cross Ref.	Description	1	10
140783	357	Silver oxide, button, 1.55V, 175mAh	\$1.39	\$1.25
2119822	ER03MSG	Zinc chloride, 1.5V, AAA	.49	.45
151095	GF6F22	Zinc chloride, 9V	1.29	1.15
2183699	4R25-EV	Zinc chloride, 6V, 7400mAh	3.49	2.95

TENERGY

## Smart Balancing Battery Charger

For Li-Ion / Li-PO / LiFePO4

\* Web Code: LAC

- Protective circuitry to control charging process and auto power cut-off
- Built-in balancer automatically balances batteries during charging, ensuring full charge
- Advanced individual charging method can charge each cell individually and safely • Output: 3.6V-16.2V @ 1A
- Compatible battery size: 1S-4S battery packs with XH connector



Part No.	Mfr. Part No.	1	5	25
2144315	01267	\$27.95	\$24.95	\$22.49

DANTONA

## Universal NiCd/NiMH Charger

\* Web Code: LAC

- Fast charging in the specified period with an automatic switch for trickle charge
- Built-in IC timer control



Part No.	Mfr. Part No.	Compatible Battery	1	10	25
231132	CHG-6P	AAA, AA, C, D, 9V	\$22.95	\$19.95	\$17.95

## Wall Type NiMH/NiCd Battery Charger

- Input voltage: 120VAC @ 60Hz • Output power: 1.2VA
- 2 individual charging channels • Retractable AC prongs
- LED indicator and reverse polarity protection



Part No.	Mfr. Part No.	Description	1	10	25
2197505	KN-101	AA/AAA/9V charger	\$4.95	\$4.49	\$3.95

WADAN

## Self-Charge 12-Volt Auto Battery Jumper/Back-Up Power

Safe, fast, easy and no hassle. Just plug the auto jumper into the cigarette lighter socket and in 10 minutes, you're ready to go! It also includes fuse protection and is designed to recharge 12V batteries with a low voltage between 10.4 to 10.5 volts.



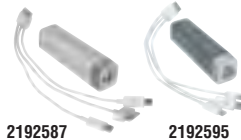
NEW  
MARKED IN PINK

Part No.	Mfr. Part No.	Size (L" x W" x H")	1	10	25
2203531	2045	8.5 x 2.25 x 2.0	\$19.95	\$17.95	\$15.95

## Portable Li-Ion Power Banks

Recharge the power bank via 5V USB micro-B. 4-in-1 multi-use USB cable included to charge iPhone/iPod/iPad, iPhone5/iPad (Lightning) and USB micro-B.

\* Web Code: LII



Part No.	Mfr. Part No.	Output	mAh	Color	Price
2192587	KSLP26-WT	5V @ 1A	2600	White	\$14.95
2192595	KSLP26-BK	5V @ 1A	2600	Black	14.95
2205376	PWUSB002	4-in-1 cable	—	White	9.95

MW

## 120-Watt Single Output Battery Charger

- Current detecting battery charger for lead-acid batteries
- Voltage range: 88-132VAC/176-264VAC (47-63Hz) selected by switch • Power: 118.7W; 27.6V @ 4.3A
- Short circuit, overload, over-voltage, over-temp. protection
- Output conn.: 3-pin male XLR, see pg 48 for mating connector
- 3 pole AC inlet with fuse holder • Two-year warranty
- Complete specifications on page 103



\* Web Code: LAC

Part No.	Mfr. Part No.	Size (L" x W" x H")	Wt. (lbs.)	1	5
2102983	PB-120N-27C	7.09 x 3.78 x 1.93	2.4	\$44.95	\$39.95

5/6

## 13.5VDC @ 2.2A Switching Table-Top Adapter

- Input voltage: 100 to 240VAC @ 50-60Hz
- Output voltage: 13.5V @ 2.2A
- Output connector: 30" cable with 4-position (2 x 2 grid) Molex Mini-Fit Jr. 5559 series connector (39-01-2041)
- UL/CUL listed • Can be used as battery charger



Includes: 5' 3-prong Mickey Mouse type power cord

Part No.	Mfr. Part No.	Size (L" x W" x H")	1	10	25
2139006	3G-301DN13	7.09 x 3.78 x 1.93	\$6.25	\$5.49	\$4.69

ING

## Auxiliary Power Supply/Charger

This power supply /charger provides 6VDC or 12VDC at 1.5A output for powering alarm devices. Voltage is user selectable by positioning the output jumper to the desired voltage. Green LED remains on as long as AC power is connected to the terminal strip and red LED remains on as long as DC power is available at the terminal strip



- Power supply output (to power supply back-up battery, 12V mode charging voltage 13.6VDC at 130mA max)
- Power supply output to load: 13.6VDC at 1.5A max. (without battery backup)
- Recommended back-up battery: standard 4AH, sealed acid type
- Includes adhesive strips for mounting

Part No.	Mfr. Part No.	Size (L" x W" x H")	1	10	25
2197821	MG1261.5A	4.0 x 2.0 x 1.6	\$6.95	\$6.25	\$5.59

## BATTERY & CHARGING SYSTEM TESTER

- Measures the battery's state of charge
- Simulates cranking load and evaluates the battery's ability
- Color-coded copper-plated clamps w/ a powder coated case
- Tests 6/12V batteries and charging system tests up to 16V
- Color coded analog display and includes user's manual



Part No.	Mfr. Part No.	Size (L" x W" x D")	1	5
2205878	38050	11.5 x 4.5 x 2.5	\$14.95	\$13.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

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109

# Battery Holders

3 LEVELS OF SAVINGS  
NAME BRANDS HOUSE BRANDS SPECIAL BUY

## JAMECO ReliaPro Coin Cell, Single and Dual-Sided Battery Holders

KEYSTONE Eagle

\*Web Code: UAB

NEW  
MARKED IN PINK

Eliminate battery mounting problems in portable DC power applications and products. These holders are made from special materials that maintain retention properties longer than conventional holders. They can come with leads, tabs or snaps.

Part No.	Cross Ref. No.	*Mfr.	Fig.	No. of Cells	Conn. (L")	Sides	Features*	1	10	100	500
216283	BH-421-1A	JRP	1	2-AAA	Wires, 5.5	Single	26 AWG	\$.79	\$.75	\$.65	\$.55
2197935	BC-0302	JRP	26	1-AA/AAA	PC mount	Single	.3" (2mm) spacing	.29	.25	.19	.17
2222133	209.	KEY	31	1-A,AA,CR2,CR123A	Solder lugs	Single	Metal contact	.29	.25	.19	.15
2222150	204	KEY	31	1-AAA,AAAA,N,A23,A27	Solder lugs	Single	Metal contact	.29	.25	.19	.15
216292	SBH-421-AS*	JRP	1	2-AAA	Wires, 5.5	Single	w/ cover&sw, 26 AWG	1.39	1.19	.99	.85
216303	BH-431-1A	JRP	2	3-AAA	Wires, 5.5	Single	26 AWG	1.19	.99	.75	.69
216312	SBH-431-1AS*	JRP	2	3-AAA	Wires, 6.0	Single	w/ cover&sw, 26 AWG	1.19	.99	.75	.69
216339	SBH-441-AS*	JRP	3	4-AAA	Wires, 5.5	Single	w/ cover&sw, 26 AWG	1.39	1.19	.99	.85
216072	BH-311-2A	JRP	4	1-AA	Wires, 5.5	Single	26 AWG	.75	.65	.49	.45
2222125	628	KEY	35	1-AA,2/3A	Snaps	Single	Metal contact	.79	.69	.59	.49
2222230	590	KEY	34	1-A,AA,CR2,CR123A,9V	Snaps	Single	Metal contact	.25	.19	.15	.12
216081	BH-321-2A	JRP	1	2-AA	Wires, 5.5	Single	26 AWG	.75	.65	.49	.45
216099	BH-321-4A	JRP	1	2-AA	Wires, 5.5	Single	w/ mnt. tabs, 26 AWG	.65	.59	.55	.49
216102	SBH-321-2A	JRP	5	2-AA	Wires, 5.5	Single	w/ cover, 26 AWG	1.29	1.09	.89	.75
216120	SBH-321-1AS*	JRP	5	2-AA	Wires, 5.5	Single	w/ cover&sw, 26 AWG	1.49	1.29	1.09	.99
2151224	140	KEY	22	2-AA	Solder lugs	Single	Metal holder	1.95	1.75	1.49	1.25
2222176	5212	KEY	33	2-AA	Screwable	Single	Metal contact	.49	.39	.29	.25
2222184	2462	KEY	37	2-AA	PC mount	Single	—	1.39	1.19	.99	.85
2222192	2468	KEY	37	2-AAA	PC mount	Single	—	1.09	.95	.79	.65
216136	BH-331-A	JRP	2	3-AA	Wires, 5.5	Single	26 AWG	1.19	.99	.75	.69
216144	SBH-331-AS*	JRP	6	3-AA	Wires, 6.0	Single	w/ cover&sw, 26 AWG	1.39	1.19	.99	.85
2207013	4XAA-2.1	JRP	26	4-AA	Plug, 5.0	Single	2.1mm plug, 22 AWG	2.95	2.59	2.29	1.95
216152	BH-341-2A	JRP	7	4-AA	Wires, 5.5	Single	26 AWG	1.19	.99	.75	.69
105858	BH-PC \$	JRP	8	4-AA	Wires, 5.5	Single	w/ conn., 26 AWG	.79	.69	.59	.49
216179	BH-343-1A	JRP	9	4-AA	Wires, 5.5	Dual	26 AWG	.89	.79	.65	.55
2191883	12BH341-GR	EAG	23	4-AA	Snaps	Dual	—	.99	.85	.65	.55
216187	SBH-341-1AS*	JRP	3	4-AA	Wires, 6.0	Single	w/ cover&sw, 26 AWG	1.49	1.29	1.09	.99
2095453	SBH-341-1A	JRP	3	4-AA	Wires, 5.5	Single	w/ cover, 26 AWG	1.35	1.19	.99	.85
216223	BH-364-A	JRP	10	6-AA	Wires, 5.5	Single	26 AWG	1.39	1.25	1.05	.89
2207021	6XAA-2.1	JRP	10	6-AA	Plug, 3.5	Single	2.1mm plug, 22 AWG	3.95	3.49	3.19	2.79
216240	BH-383-A	JRP	11	8-AA	Wires, 5.5	Dual	26 AWG	1.59	1.39	1.19	1.09
216267	BH-383-B	JRP	11	8-AA	Snaps	Dual	—	1.55	1.35	1.15	.99
216259	BH-382-B	JRP	12	8-AA	Snaps	Dual	—	1.29	1.09	.89	.75
216347	BH-211-A	JRP	4	1-C	Wires, 5.5	Single	24 AWG	.79	.69	.59	.49
216363	BH-242-1A	JRP	13	4-C	Wires, 5.5	Single	24 AWG	1.49	1.29	1.09	.99
216371	BH-111-1A	JRP	4	1-D	Wires, 5.5	Single	26 AWG	.69	.65	.59	.49
216390	BH-121-1A	JRP	1	2-D	Wires, 5.5	Single	24 AWG	1.39	1.19	.99	.85
216401	BH-142-A	JRP	13	4-D	Wires, 5.5	Single	24 AWG	1.39	1.19	.99	.85
2208243	12BH1/2AA-2P-GR	EAG	27	1- 1/2 AA	PC mount	Single	.8mm, 29mm apart	.99	.89	.79	.69
2128067	SBH-9VAS*	JRP	5	1-9V	Wires, 5.5	Single	w/ cover&sw, 26 AWG	1.39	1.25	1.05	.89
2207030	1X9V-2.1	JRP	14	1-9V	Plug, 5.0	Single	2.1mm plug, 22 AWG	2.95	2.59	2.29	1.95
2207048	1X9V-2.1 CS	JRP	28	1-9V	Plug, 5.0	Single	2.1mm plug, 22 AWG	3.95	3.55	3.19	2.89
216427	BH-9V-A	JRP	14	1-9V	Wires, 5.5	Single	26 AWG	.79	.69	.59	.49
11280	A104-R	JRP	15	1-9V	Wires, 2.5	Single	26 AWG, snaps	.39	.35	.29	.25
2191891	12BH079-GR	EAG	16	1-9V	Screwable	Single	Metal holder, flat	.39	.35	.29	.25
105794	GBH-1009-R	JRP	16	1-9V	Screwable	Single	Metal holder, side	.49	.45	.35	.29
2191904	121-0426/1M-GR \$	EAG	24	1-9V	Wires, 4.0	Single	w/ conn., 26 AWG	.59	.49	.39	.35
1949488	BAT-SNAP-4	JRP	17	1-9V	Wires, 3.5	Single	26 AWG, snaps	.29	.26	.23	.19
109154	BC6-R	JRP	17	1-9V	Wires, 5.5	Single	26 AWG, snaps	.29	.26	.23	.19
216452	SBS-IR-1-R	JRP	17	1-9V	Wires, 5.5	Single	26 AWG, snaps	.39	.35	.32	.29
101470	A102-R	JRP	17	1-9V	Wires, 10.0	Single	26 AWG, snaps	.35	.32	.29	.25
2207056	1X9V-2.1 SNAP	JRP	15	1-9V	Plug, 5.5	Single	2.1mm plug, 24 AWG	1.95	1.75	1.59	1.39
2203899	9VSNAP06B	JRP	25	1-9V	Snaps	Single	PCB mount	.59	.49	.39	.35
2146231	BH-18650-2S	JRP	20	2-18650	Wires, 6.0	Single	26 AWG	1.95	1.75	1.59	1.39
236996	103	JRP	19	1-0.79"Dia. max	PC mount	Coin cell	CR2032 battery	1.69	1.39	1.19	.99
38543	2S2325	JRP	19	1-0.85"Dia. max	PC mount	Coin cell	CR2325 battery	.79	.65	.45	.39
355434	17002-00603	JRP	21	1-0.79"Dia. max	PC mount	Coin cell	CR2325 battery	.79	.69	.59	.55
2222109	228	KEY	32	1-A,AA,CR2,CR123A	Solder lugs	Single	Metal contact	.25	.19	.15	.12
2222117	52	KEY	29	1-A,AA,CR2,CR123A	Snaps	Single	Metal contact	.29	.25	.19	.15
2222141	82	KEY	30	1-AAA,N,A23	Snaps	Single	Metal holder	.29	.25	.19	.15
2222168	1065	KEY	36	1-20mm size	PC mount	Coin cell	—	1.89	1.59	1.29	1.15
2222205	3003	KEY	38	1-20mm size	PC mount	Coin cell	Metal contact	.55	.49	.39	.35
2222248	1025	KEY	19	1 or 2-1.09"Dia. max	PC mount	Coin cell	CR2450, DL2450 bat.	1.79	1.55	1.35	1.09

\$ 2 pin connector \* SW = switch

\* JRP = Jameco ReliaPro | EAG = Eagle Plastics | KEY = Keystone



# Lead Acid Batteries, Chargers & Data Loggers



## Lead Acid Batteries

- Use with UPS backup systems, security fire alarms, wheel chairs, scooters
- Sealed • UL approved • Rechargeable
- One-year manufacturer warranty



\* Web Code: LBR

Part No.	Mfr. Part No.	Nominal Voltage	Amp-Hrs.	Cross Reference				Terminal Size	Size (L" x W" x H")	Wt. (lbs.)	Pricing	
				Panasonic	YUASA	Eagle Picher	Tempest				1	10
2151996	TY-6-1.2	6	1.2	—	—	—	—	Quick connect 0.187"	3.8 x 1.0 x 2.1	0.7	\$8.95	\$7.95
264014	TY-6-4.5	6	4.5	LCR6VP	NP4-6	CF16V4	TR-4-6	Quick connect 0.187"	2.8 x 1.9 x 4.0	1.9	11.95	10.95
318844	LA-TY-12-1.2	12	1.2	—	—	—	—	Quick connect 0.187"	3.8 x 1.7 x 2.1	1.3	15.95	13.95
264031	TY-12-2.3	12	2.3	LCR12V2.2P	NP2.3-12	CF12V1.5	TR2.3-12	Quick connect 0.187"	7.0 x 1.3 x 2.4	2.1	22.95	20.95
318924	LA-TY-12-3.4	12	3.4	—	—	—	—	Quick connect 0.187"	5.3 x 2.7 x 2.4	3.1	22.95	20.95
264049	TY-12-5	12	5.0	—	—	—	—	Quick connect 0.187"	3.5 x 2.7 x 3.9	3.6	22.95	20.95
264057	TY-12-7.5	12	7.5	LCR12V7.2BP	NP712	CFM12V65	TR7.5-12	Quick connect 0.187"	5.9 x 2.6 x 3.7	5.6	26.95	23.95
264065	TY-12-12	12	12.0	PS12120	—	CFM12V12	TR12-12	Quick connect 0.187"	5.9 x 3.9 x 3.7	9.0	49.95	44.95
264073	TY-12-18	12	18.0	LCR12V17BP	NPG18-12	CF12V18	TR18-12	Quick connect 0.472"	7.1 x 3.0 x 6.6	13.3	54.95	49.95
318852	LA-TY-12-35	12	35.0	—	—	—	—	Nut and bolt	7.6 x 5.1 x 6.3	27.6	109.95	99.95
2170290	LFP128075	12.8	7.5	—	—	—	—	Quick connect 0.25"	5.9 x 2.6 x 3.9	2.66	109.95	99.95
2170329	LFP128198	12.8	19.8	—	—	—	—	Nut and bolt	7.1 x 3.0 x 6.5	6.84	279.95	259.95



## 360 & 1000-Watt Single Output Lead Acid Battery Chargers

\* Web Code: LAC

- Input: 115VAC/230VAC @ 47-64Hz (switch-selectable)
- Fan on/off control (depending on charging current)
- Overload, short-circuit, reverse polarity, over voltage, over temperature protection
- Charger for lead acid batteries
- 1952417: Built-in passive PFC function
- 1954316: Size: 10.0"L x 5.3"W x 1.9"H, Weight: 3.3 lbs.
- 1952417/1954308: Size: 9.3"L x 5.3"W x 1.9"H, Weight: 3.3 lbs.



Part No.	Mfr. Part No.	Watts	Boost Charge Voltage	Float Charge Voltage	Recommended Battery Capacity (AMP Hours)	Pricing	
						1	10
1952417	PB-360P-12	360	14.4	13.6	80-200	\$99.95	\$89.95
1954308	PB-360N-12	360	14.4	13.6	80-200	89.95	80.95
1954316	PB-360N-24	360	28.8	27.2	40-125	89.95	79.95

## Portable Environment Data Loggers

- Store 65,520 samples with time stamp
- High and low alarm with dedicated LED
- Micro-USB connection for data upload
- 1.3"L x 0.6"W x 2.1"H
- Uses CR2450 battery



2213801

2213798

Part No.	Mfr. Part No.	Description	Price
2213801	Minnow 1.0T	Temp: 5° to 60°C ±3°C	\$49.95
2213798	Minnow 1.0TH	Temp: 5° to 60°C ±3°C, RH: 20-80% ±3%	69.95



## Serial Data Logger Module

\* Web Code: DLG

- Use for data logging (GPS, space/aircraft vehicle telemetry, industrial environment sensors, weather station data)
- Store script/code for MCU sequencing • 3V-5V operation
- Support SD/SDHC/MMC/TF flash memory upto 32GB
- Interface with any MCU (PIC, AVR, 8051, Arduino, etc.)
- Store images and telemetry for robotics • 2400-460800 bps serial



Part No.	Mfr. Part No.	Description	1	5
2135769	DS-MMC	Serial data logger module	\$59.95	\$53.95



## Environmental Data Loggers

\* Web Code: DLG

### USB Data Loggers

Measure and record temperature, humidity, voltage and current with EasyLog® USB data loggers. Connect directly into the USB port of a PC, choose a logger name, sample rate, alarm levels and start mode before recording. After data has been collected, it can be graphed or exported to Excel for further analysis. Free Windows software downloadable from [www.easylogusb.com](http://www.easylogusb.com) allows setup and data download. Units store up to 32,000+ readings with typical battery life of one year.



2075997

Part No.	Mfr. Part No.	Type	Price
2075989	EL-USB-1	Temperature	\$54.95
2219209	EL-USB-1-LCD	Temp. with LCD	81.95
2075997	EL-USB-2	Temp. & humidity	74.95
2076367	EL-USB-2-LCD	Temp. & humidity w/ LCD	109.95
2076383	EL-USB-3	Voltage, 0-30VDC	69.95
2076391	EL-USB-4	Current loop, 4-20mA	69.95
2076412	EL-USB-TC-LCD*	Thermocouple w/ LCD	109.95
2116672	K-TYPE PROBE 1MS	K-type thermocouple probe	14.95
2213827	EL-USB-TP-LCD	Thermistor probe w/ LCD	124.95

\* Includes K-type probe (P/N 2116672)

### Data Loggers with Graphics LCD

The EasyLog® GFX range brings a more advanced feature set to the monitoring of temperature and humidity. The GFX products feature an increased memory capacity (250,000 readings per channel), 0.1 digit resolution across all parameters, as well as a graphics display which shows real-time trend graphs and data summaries. An on-screen menu provides the capability for users to start, stop and restart the data logger in the field.



2218863

Part No.	Mfr. Part No.	Type	Price
2219217	EL-GFX-1	Temperature	\$134.95
2219225	EL-GFX-2	Temp. & humidity	149.95
2218863	EL-GFX-TC*	Thermocouple	154.95
2219233	EL-GFX-DTC*	2-ch thermocouple	184.95
2219241	EL-GFX-TP	Temperature probe	154.95
2219250	EL-GFX-DTP	2-ch thermistor probe	184.95

\* Includes K-type probe (P/N 2116672)

### WiFi Data Loggers

The WiFi range of temperature and humidity data loggers provides the capability to remotely monitor an environment. Data is uploaded periodically using a standard WiFi network without the need to physically collect and connect the units to a PC. Data can be collected on a host PC or uploaded to Lascar's Files Thru The Air™ Cloud Service. This allows them to be managed and monitored over the Internet from any location in the world. Users can interact with their sensors via a Web based interface allowing them to monitor multiple WiFi sensors in any number of locations.



2180156

Part No.	Mfr. Part No.	Type	Price
2219268	EL-WIFI-T	Temperature	\$149.95
2180156	EL-WIFI-TH	Temp. & humidity	184.95
2219276	EL-WIFI-TC*	Thermocouple	184.95
2219284	EL-WIFI-TP	Thermistor probe	149.95
2213691	EL-WIFI-ALERT	Monitoring system	184.95

\* Includes K-type probe (P/N 2116672)

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



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Digital Multimeters & Displays

See [www.Jameco.com](http://www.Jameco.com) for complete specifications

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Digital Multimeters & Panel Meters


 <b>DT830B</b>  P/N 1928476 <b>\$8.95</b>	 <b>MN35</b>  P/N 645618 <b>\$24.95</b>	 <b>MAS830L</b>  P/N 220759 <b>\$16.95</b>	 <b>MAS838</b>  P/N 220741 <b>\$19.95</b>	 <b>DDM230B</b>  P/N 2206053 <b>\$69.99</b>	 <b>EX330</b>  P/N 645626 <b>\$64.95</b>	 <b>EX430</b>  P/N 1581177 <b>\$99.95</b>	 <b>115</b>  P/N 1537328 <b>\$189.95</b>	 <b>117</b>  P/N 1537336 <b>\$209.95</b>	 <b>DVM890F</b>  P/N 645571 <b>\$44.95</b>	 <b>MN26T</b>  P/N 211650 <b>\$49.95</b>	 <b>87-5</b>  P/N 2173634 <b>\$499.95</b>	 <b>175</b>  P/N 192655 <b>\$269.99</b>	 <b>DDM645</b>  P/N 2208462 <b>\$54.95</b>	 <b>179</b>  P/N 185535 <b>\$319.95</b>
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All meters come with probes/leads		★ Web Code: HBK		Basic Measurement Functions											Test Functions				Special Functions				★ Web Code: HBK			
Jameco Part No.	Manufacturer Part No.	No. of Functions	Display Count	Resolution (max DC)	DC Voltage Ranges (V)	AC Voltage Ranges (V)	DC Current Ranges (A)	AC Current Ranges (A)	Resistance Ranges (Ω)	Capacitance Ranges (F)		Frequency Ranges (Hz)	Temperature Range		Diode Test	Battery Test	Continuity Test	Transistor hFE Test	Autorange	Analog Bargraph	RS-232 PC Interface	True RMS	Size (H" x W" x D")	Jameco Part No.	Pricing	
													°C	°F											1	5
1928476	Vastech DT830B	4	1999	1V	200mV - 1000V	200V - 750V	200μA - 10A	—	200Ω - 2MΩ	—		—	—	—	✓	✓	✓	✓					5.5 x 3.1 x 1.6	1928476	\$8.95	\$7.95
645618	Extech MN35	5	2000	100μV	200mV - 600V	200mV - 600V	200mA - 10A	—	200Ω - 20MΩ	—		—	-20 to 750	-200 to 1400	✓		✓						5.4 x 3.0 x 1.5	645618	24.95	22.49
355207	Velleman DVM850BL	6	2000	100μV	200mV - 100V	200V - 600V	200μA - 10A	—	200Ω - 2MΩ	—		—	—	—	✓		✓	✓					5.4 x 2.7 x 1.2	355207	19.95	17.95
2131127	Velleman DVM810	7	2000	1V	200mV - 500V	200mV - 500V	200μA - 10A	—	200Ω - 2MΩ	—		—	—	—	✓			✓					3.6 x 1.8 x 1.0	2131127	10.95	9.95
220759	Mastech MAS830L	7	2000	100μV	200mV - 600V	200V - 600V	200μA - 10A	—	200Ω - 2MΩ	—		—	—	—	✓		✓						5.7 x 3.0 x 1.4	220759	16.95	14.95
2113471	Fluke-87-5	7	6000	10uV	0 - 1000V	0 - 1000V	0 - 10A	0 - 10A	0 - 50M	0 - 9999μF	↔	0 - 200K	-200 to 1090	-328 to 1994	✓		✓			✓		✓	7.4 x 3.4 x 1.3	2113471	419.95	399.95
220741	Mastech MAS838	8	2000	100μV	200mV - 600V	200V - 600V	.2mA - 10A	—	200Ω - 2MΩ	—		—	-20 to 1000	—	✓		✓						5.7 x 3.0 x 1.4	220741	19.95	17.95
2206061	Dawson DDM640	8	2000	0.1mV	200mV - 1000V	200mV - 750V	20μA - 10A	20μA - 10A	200Ω - 200MΩ	—		—	—	—	✓	✓	✓	✓					7.7 x 3.7 x 2.2	2206061	34.95	31.95
2206053	Dawson DDM230B	9	4000	0.1V	0 - 600V	0 - 600V	0 - 10A	0 - 10A	0 - 10MΩ	0 - 100μF		0 - 5M	—	—	✓		✓		✓				5.8 x 3.0 x 1.6	2206053	69.99	63.95
645626	Extech EX330*	9	4000	100μV	.1mV - 1000V	.1mV - 750V	.1μA - 10A	.1μA - 10A	.1Ω - 40MΩ	.001nF - 200μF		.001 - 10M	-50 to 1000	-58 to 1832	✓		✓		✓				5.7 x 2.9 x 1.6	645626	64.95	59.95
1581177	Extech EX430	9	4000	100μV	.1mV - 1000V	.1mV - 750V	.1μA - 20A	.1μA - 20A	.1Ω - 40MΩ	.1nF - 100μF		.001 - 10	-20 to 750	-4 to 1382	✓		✓		✓			✓	7.4 x 3.2 x 2.0	1581177	99.95	89.95
1537328	Fluke 115†	9	6000	100μV	600mV - 600V	600mV - 600V	6A - 10A	6A - 10A	600Ω - 40MΩ	1000nF - 9999μF		99.99 - 50k	—	—	✓		✓		✓	✓		✓	6.3 x 3.3 x 1.9	1537328	189.95	179.95
1537336	Fluke 117*†	9	6000	100μV	600mV - 600V	600mV - 600V	6A - 10A	6A - 10A	600Ω - 40MΩ	1000nF - 9999μF		99.99 - 50k	—	—	✓		✓		✓	✓		✓	6.3 x 3.3 x 1.9	1537336	209.95	199.95
645571	Velleman DVM890F	11	2000	100μV	200mV - 1000V	2V - 700V	2mA - 10A	20mA - 10A	200Ω - 200MΩ	2000pF - 20μF		—	—	-58 to 1832	✓		✓	✓	✓				6.7 x 3.5 x 1.5	645571	44.95	39.95
211650	Extech MN26T	11	4000	100μV	400mV - 600V	400mV - 600V	400μA - 10A	400μA - 10A	400Ω - 40MΩ	4nF - 200μF		10 - 10M	0 to 760	0 to 1400	✓		✓		✓				4.8 x 2.4 x 1.6	211650	49.95	44.95
2173634	Fluke 87-5/E2 KIT#	11	19,999	600mV	600mV - 1000V	600mV - 1000V	600μA - 10A	600μA - 10A	600Ω - 50MΩ	10nF - 9999μF	↔	199.99 - 199.99k	-200 to 1090	-328 to 1994	✓		✓		✓	✓	✓		7.7 x 3.6 x 1.6	2173634	499.95	474.95
2208462	Dawson DDM645	—	20,000	0.1V	200mV - 1000V	2V - 750V	2mA - 10A	2mA - 10A	200Ω - 200MΩ	20nF - 200μF		—	—	—	✓		✓	✓					2.2 x 3.7 x 7.7	2208462	54.95	49.95
185535	Fluke 179†	13	6000	100μV	600mV - 1000V	600mV - 1000V	60mA - 10A	60mA - 10A	600Ω - 50MΩ	1000nF - 9999μF		99.99 - 99.99k	-40 to 400	-40 to 752	✓		✓		✓	✓		✓	7.3 x 3.5 x 1.7	185535	319.95	304.95

\*With non-contact voltage detector (100-600VAC range) # Kit with accessories included † With backlight

Multi-Functional Graphics Display with Touch Screen Capabilities – Panel Pilot Series

★ Web Code: PNP





Connect PanelPilot meter to PC via USB

Choose the test configuration for your application

Enter worksheet display parameters and configure test units

Set up the analog output using an I/O module

Upload configuration and save meter to memory

The Panel Pilot Series is a range of color TFT graphics meters that users can program to display a variety of meter styles previously provided by a traditional panel meter. Available in 2.4", 2.8" and 3.5" sizes, the meters are programmable via USB interface with free Windows-based configuration software. Users can select the type of meter style they want and personalize the display by selecting preferences in color, text and voltage input scaling. Once programming is complete, the user can save all selections to the meter and computer, detach the unit and mount in their panel as they would a standard display. The unit is supplied with an ever increasing number of programmable meter styles. A NEMA 6 rated version of the 2.4" display is available for more hostile environments. 4-20mA measurement versions in all sizes also available.

Part No.	Mfr. Part No.	Description	Module Size (inch)	Connection	Supply Voltage	Measurement Range	User Interface	Price
2115354	SGD 24-M	Multi-function 2.4" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.0 x 1.9 x 0.75	Screw terminal	4-30VDC	0-40VDC	USB	\$109.95
2178275	SGD 28-M	Multi-function 2.8" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.4 x 2.3 x 0.80	Screw terminal	4-30VDC	0-40VDC	USB	99.95
2178267	SGD 35-M	Multi-function 3.5" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.7 x 3.0 x 0.90	Screw terminal	4-30VDC	0-40VDC	USB	179.95
2125149	SGD 24-M420	Multi-function 2.4" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.0 x 1.9 x 0.75	Screw terminal	4-30VDC	4-20mA	USB	119.95
2178283	SGD 28-M420	Multi-function 2.8" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.4 x 2.3 x 0.80	Screw terminal	4-30VDC	4-20mA	USB	119.95
2137924	SGD 35-M420	Multi-function 3.5" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.7 x 3.0 x 0.90	Screw terminal	4-30VDC	4-20mA	USB	149.95
2178291	SGD 24-M-IP	Multi-function 2.4" color TFT display NEMA 6 rated for hostile environments	3.0 x 1.9 x 0.75	Screw terminal	4-30VDC	0-40VDC	USB	144.95
2219292	SGD ADPT-TC	Thermocouple add-on board for PanelPilot compatible displays, supplied with K-type probe	—	—	—	-200°C–1350°C	—	34.95
2219305	SGD 43-A	Multi-function 4.3" color TFT display w/ 8 digital I/O pins, 4 16-bit analog inputs & 4 PWM outputs	4.7 x 3.1 x 2.5	Screw Terminal	4-30VDC	0-40VDC, 4-20mA	USB	274.95
2219313	SGD 43-A-DK+	Development kit with multi-function 4.3" color TFT display	7.1 x 5.8 x 2.5	Screw Terminal	4-30VDC	0-40VDC, 4-20mA	USB	499.95

Analog Panel Meters

- Includes mounting hardware
- ★ 316507: Includes current shunt

Part No.	Mfr. P/N	Range	Size (W" x H" x D")	1	10
316603	AVM6015	0 – 15VDC	2.4 x 1.8 x 1.3 ...	\$9.95	\$8.95
316671	AVM7015	0 – 15VDC	2.8 x 2.4 x 1.4 ...	10.95	9.95
316638	AVM6030	0 – 30VDC	2.4 x 1.8 x 1.3 ....	9.95	8.95
316654	AVM7030	0 – 30VDC	2.8 x 2.4 x 1.4 ...	10.95	9.95
315301	AIM60005	0 – 50μA	2.4 x 1.8 x 1.3 ....	9.95	8.95
316523	AIM6050	0 – 50mA	2.4 x 1.8 x 1.3 ....	9.95	8.95
316558	AIM60500	0 – 500mA	2.4 x 1.8 x 1.3 .....	9.95	8.95
316566	AIM60500	0 – 5A	2.4 x 1.8 x 1.3 ...	10.95	9.95
316582	AIM705000	0 – 5A	2.8 x 2.4 x 1.4 ...	10.95	9.95
316494	AIM6010A	0 – 10A	2.4 x 1.8 x 1.3 ...	10.95	9.95
316507	AIM6030A	0 – 30A	2.4 x 1.8 x 1.3 ...	13.95	12.49

★ Digital Panel Meters — Enter Web Code GCG

★ 7, 14 & 16-Segment Displays — Enter Web Code PBW

★ Meters and Testers — Enter Web Code EMT

Drill Mountable Panel Meters

Mount by simply drilling a single hole (7/32") & insert the threaded section of the panel meter					Module size: 1.71" L x 0.84" W				
Part No.	Mfr. Part No.	Description	Digit Ht.	Supply Volt.	Measurement Range	1	5	25	
2113201	EMV-1125	3½-digit, LCD volt/current meter	.50"	7.5-15VDC	200mV-20V/200μA-200mA	\$39.95	\$34.95	\$31.95	2113201
2095040	EMV 1200	3-digit, signal pwrd, LCD voltmeter	.50"	3-50VDC	4-25VDC .....	39.95	34.95	31.95	2095040
2095074	EMC 1500	5-digit, LCD hour meter	.35"	5-27VDC	99999 hours .....	34.95	31.95	28.95	
2116584	V1	3½-digit, LCD voltmeter	.25"	7-12VDC	200mV-20V .....	20.95	18.95	16.95	2095074

★ For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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Digital Multimeters & Displays

See [www.Jameco.com](http://www.Jameco.com) for complete specifications

3 LEVELS OF SAVINGS

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Digital Multimeters & Panel Meters

DT830B

P/N 1928476

\$8.95

MN35

P/N 645618

\$24.95

MAS830L

P/N 220759

\$16.95

MAS838

P/N 220741

\$19.95

DDM230B

P/N 2206053

\$69.99

EX330

P/N 645626

\$64.95

EX430

P/N 1581177

\$99.95

115

P/N 1537328

\$189.95

117

P/N 1537336

\$209.95

DVM890F

P/N 645571

\$44.95

MN26T

P/N 211650

\$49.95

87-5

P/N 2173634

\$499.95

175

P/N 192655

\$269.99

DDM645

P/N 2208462

\$54.95

179

P/N 185535

\$319.95

All meters come with probes/leads

★ Web Code: HBK

Basic Measurement Functions												Test Functions				Special Functions				★ Web Code: HBK						
Jameco Part No.	Manufacturer Part No.	No. of Functions	Display Count	Resolution (max DC)	DC Voltage Ranges (V)	AC Voltage Ranges (V)	DC Current Ranges (A)	AC Current Ranges (A)	Resistance Ranges (Ω)	Capacitance Ranges (F)		Frequency Ranges (Hz)	Temperature Range		Diode Test	Battery Test	Continuity Test	Transistor hFE Test	Autorange	Analog Bargraph	RS-232 PC Interface	True RMS	Size (H" x W" x D")	Jameco Part No.	Pricing	
													°C	°F											1	5
1928476	Vastech DT830B	4	1999	1V	200mV - 1000V	200V - 750V	200µA - 10A	—	200Ω - 2MΩ	—		—	—	—	✓	✓	✓	✓					5.5 x 3.1 x 1.6	1928476	\$8.95	\$7.95
645618	Extech MN35	5	2000	100µV	200mV - 600V	200mV - 600V	200mA - 10A	—	200Ω - 20MΩ	—		—	-20 to 750	-200 to 1400	✓		✓						5.4 x 3.0 x 1.5	645618	24.95	22.49
355207	Velleman DVM850BL	6	2000	100µV	200mV - 100V	200V - 600V	200µA - 10A	—	200Ω - 2MΩ	—		—	—	—	✓		✓	✓					5.4 x 2.7 x 1.2	355207	19.95	17.95
2131127	Velleman DVM810	7	2000	1V	200mV - 500V	200mV - 500V	200µA - 10A	—	200Ω - 2MΩ	—		—	—	—	✓			✓					3.6 x 1.8 x 1.0	2131127	10.95	9.95
220759	Mastech MAS830L	7	2000	100µV	200mV - 600V	200V - 600V	200µA - 10A	—	200Ω - 2MΩ	—		—	—	—	✓		✓						5.7 x 3.0 x 1.4	220759	16.95	14.95
2113471	Fluke-87-5	7	6000	10uV	0 - 1000V	0 - 1000V	0 - 10A	0 - 10A	0 - 50M	0 - 9999µF	↔	0 - 200K	-200 to 1090	-328 to 1994	✓		✓		✓		✓	✓	7.4 x 3.4 x 1.3	2113471	419.95	399.95
220741	Mastech MAS838	8	2000	100µV	200mV - 600V	200V - 600V	.2mA - 10A	—	200Ω - 2MΩ	—		—	-20 to 1000	—	✓		✓						5.7 x 3.0 x 1.4	220741	19.95	17.95
2206061	Dawson DDM640	8	2000	0.1mV	200mV - 1000V	200mV - 750V	20µA - 10A	20µA - 10A	200Ω - 200MΩ	—		—	—	—	✓	✓	✓	✓					7.7 x 3.7 x 2.2	2206061	34.95	31.95
2206053	Dawson DDM230B	9	4000	0.1V	0 - 600V	0 - 600V	0 - 10A	0 - 10A	0 - 10MΩ	0 - 100µF		0 - 5M	—	—	✓		✓		✓				5.8 x 3.0 x 1.6	2206053	69.99	63.95
645626	Extech EX330*	9	4000	100µV	.1mV - 1000V	.1mV - 750V	.1µA - 10A	.1µA - 10A	.1Ω - 40MΩ	.001nF - 200µF		.001 - 10M	-50 to 1000	-58 to 1832	✓		✓		✓				5.7 x 2.9 x 1.6	645626	64.95	59.95
1581177	Extech EX430	9	4000	100µV	.1mV - 1000V	.1mV - 750V	.1µA - 20A	.1µA - 20A	.1Ω - 40MΩ	.1nF - 100µF		.001 - 10	-20 to 750	-4 to 1382	✓		✓		✓		✓	✓	7.4 x 3.2 x 2.0	1581177	99.95	89.95
1537328	Fluke 115†	9	6000	100µV	600mV - 600V	600mV - 600V	6A - 10A	6A - 10A	600Ω - 40MΩ	1000nF - 9999µF		99.99 - 50k	—	—	✓		✓		✓	✓		✓	6.3 x 3.3 x 1.9	1537328	189.95	179.95
1537336	Fluke 117*†	9	6000	100µV	600mV - 600V	600mV - 600V	6A - 10A	6A - 10A	600Ω - 40MΩ	1000nF - 9999µF		99.99 - 50k	—	—	✓		✓		✓	✓		✓	6.3 x 3.3 x 1.9	1537336	209.95	199.95
645571	Velleman DVM890F	11	2000	100µV	200mV - 1000V	2V - 700V	2mA - 10A	20mA - 10A	200Ω - 200MΩ	2000pF - 20µF		—	—	-58 to 1832	✓		✓	✓	✓				6.7 x 3.5 x 1.5	645571	44.95	39.95
211650	Extech MN26T	11	4000	100µV	400mV - 600V	400mV - 600V	400µA - 10A	400µA - 10A	400Ω - 40MΩ	4nF - 200µF		10 - 10M	0 to 760	0 to 1400	✓		✓		✓				4.8 x 2.4 x 1.6	211650	49.95	44.95
2173634	Fluke 87-5/E2 KIT#	11	19,999	600mV	600mV - 1000V	600mV - 1000V	600µA - 10A	600µA - 10A	600Ω - 50MΩ	10nF - 9999µF	↔	199.99 - 199.99k	-200 to 1090	-328 to 1994	✓		✓		✓	✓	✓		7.7 x 3.6 x 1.6	2173634	499.95	474.95
2208462	Dawson DDM645	—	20,000	0.1V	200mV - 1000V	2V - 750V	2mA - 10A	2mA - 10A	200Ω - 200MΩ	20nF - 200µF		—	—	—	✓		✓	✓					2.2 x 3.7 x 7.7	2208462	54.95	49.95
185535	Fluke 179†	13	6000	100µV	600mV - 1000V	600mV - 1000V	60mA - 10A	60mA - 10A	600Ω - 50MΩ	1000nF - 9999µF		99.99 - 99.99k	-40 to 400	-40 to 752	✓		✓		✓	✓		✓	7.3 x 3.5 x 1.7	185535	319.95	304.95

\*With non-contact voltage detector (100-600VAC range) # Kit with accessories included † With backlight

Multi-Functional Graphics Display with Touch Screen Capabilities – Panel Pilot Series

★ Web Code: PNP

The Panel Pilot Series is a range of color TFT graphics meters that users can program to display a variety of meter styles previously provided by a traditional panel meter. Available in 2.4", 2.8" and 3.5" sizes, the meters are programmable via USB interface with free Windows-based configuration software. Users can select the type of meter style they want and personalize the display by selecting preferences in color, text and voltage input scaling. Once programming is complete, the user can save all selections to the meter and computer, detach the unit and mount in their panel as they would a standard display. The unit is supplied with an ever increasing number of programmable meter styles. A NEMA 6 rated version of the 2.4" display is available for more hostile environments. 4-20mA measurement versions in all sizes also available.

Part No.	Mfr. Part No.	Description	Module Size (inch)	Connection	Supply Voltage	Measurement Range	User Interface	Price
2115354	SGD 24-M	Multi-function 2.4" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.0 x 1.9 x 0.75	Screw terminal	4-30VDC	0-40VDC	USB	\$109.95
2178275	SGD 28-M	Multi-function 2.8" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.4 x 2.3 x 0.80	Screw terminal	4-30VDC	0-40VDC	USB	99.95
2178267	SGD 35-M	Multi-function 3.5" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.7 x 3.0 x 0.90	Screw terminal	4-30VDC	0-40VDC	USB	179.95
2125149	SGD 24-M420	Multi-function 2.4" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.0 x 1.9 x 0.75	Screw terminal	4-30VDC	4-20mA	USB	119.95
2178283	SGD 28-M420	Multi-function 2.8" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.4 x 2.3 x 0.80	Screw terminal	4-30VDC	4-20mA	USB	119.95
2137924	SGD 35-M420	Multi-function 3.5" color TFT display with 3½ digit, bargraph and analog style meter styles choices	3.7 x 3.0 x 0.90	Screw terminal	4-30VDC	4-20mA	USB	149.95
2178291	SGD 24-M-IP	Multi-function 2.4" color TFT display NEMA 6 rated for hostile environments	3.0 x 1.9 x 0.75	Screw terminal	4-30VDC	0-40VDC	USB	144.95
2219292	SGD ADPT-TC	Thermocouple add-on board for PanelPilot compatible displays, supplied with K-type probe	—	—	—	-200°C–1350°C	—	34.95
2219305	SGD 43-A	Multi-function 4.3" color TFT display w/ 8 digital I/O pins, 4 16-bit analog inputs & 4 PWM outputs	4.7 x 3.1 x 2.5	Screw Terminal	4-30VDC	0-40VDC, 4-20mA	USB	274.95
2219313	SGD 43-A-DK+	Development kit with multi-function 4.3" color TFT display	7.1 x 5.8 x 2.5	Screw Terminal	4-30VDC	0-40VDC, 4-20mA	USB	499.95

Analog Panel Meters

• Includes mounting hardware

• 316507: Includes current shunt

Part No.	Mfr. P/N	Range	Size (W" x H" x D")	1	10
316603	AVM6015	0 – 15VDC	2.4 x 1.8 x 1.3 ...	\$9.95	\$8.95
316671	AVM7015	0 – 15VDC	2.8 x 2.4 x 1.4 ...	10.95	9.95
316638	AVM6030	0 – 30VDC	2.4 x 1.8 x 1.3 ....	9.95	8.95
316654	AVM7030	0 – 30VDC	2.8 x 2.4 x 1.4 ...	10.95	9.95
315301	AIM60005	0 – 50µA	2.4 x 1.8 x 1.3 .....	9.95	8.95
316523	AIM6050	0 – 50mA	2.4 x 1.8 x 1.3 .....	9.95	8.95
316558	AIM60500	0 – 500mA	2.4 x 1.8 x 1.3 .....	9.95	8.95
316566	AIM60500	0 – 5A	2.4 x 1.8 x 1.3 ...	10.95	9.95
316582	AIM705000	0 – 5A	2.8 x 2.4 x 1.4 ...	10.95	9.95
316494	AIM6010A	0 – 10A	2.4 x 1.8 x 1.3 ...	10.95	9.95
316507	AIM6030A	0 – 30A	2.4 x 1.8 x 1.3 ...	13.95	12.49

★ Digital Panel Meters — Enter Web Code GCG

★ 7, 14 & 16-Segment Displays — Enter Web Code PBW

★ Meters and Testers — Enter Web Code EMT

Drill Mountable Panel Meters

• Mount by simply drilling a single hole (7/32") & insert the threaded section of the panel meter

• Module size: 1.71" L x 0.84" W

Part No.	Mfr. Part No.	Description	Digit Ht.	Supply Volt.	Measurement Range	1	5	25
2113201	EMV-1125	3½-digit, LCD volt/current meter	.50"	7.5-15VDC	200mV-20V/200µA-200mA	\$39.95	\$34.95	\$31.95
2095040	EMV 1200	3-digit, signal pwrd, LCD voltmeter	.50"	3-50VDC	4-25VDC .....	39.95	34.95	31.95
2095074	EMC 1500	5-digit, LCD hour meter	.35"	5-27VDC	99999 hours .....	34.95	31.95	28.95
2116584	V1	3½-digit, LCD voltmeter	.25"	7-12VDC	200mV-20V .....	20.95	18.95	16.95

★ For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

LCD Digital Panel Meters

• Input ranges: 200mV, 20V, 200V, 500V

• Input imped.: >100MΩ

• Accuracy: ±0.5%

• Automatic polarity indication

• Size: 1.8"W x 1.0"H (DFRobot meters)

• Size: 2.7"W x 1.7"H (Velleman & ValuePro meters)

• Supply volt.: 8-12VDC (recommend 9V battery P/N 151095, pg 109)

Part No.	*Mfr.	Mfr. Part No.	Description	1	10	25
2131135	VEL	PMLCDL	3½-digit .....	\$9.95	\$8.95	\$7.95
2076113	VEL	PMLED/5	3½-digit 5VDC .....	19.95	17.95	16.95
2190750	DFR	DFR0130-R	3-digit red LED (4.5V-30V) .....	10.95	9.95	8.95
2152323	DFR	DFR0130-B	3-digit LED (4.5V-30V w/ 1% accuracy)	10.95	9.95	8.95
2190768	DFR	DFR0244-B	LED current meter (blue) .....	10.95	9.95	8.95
2190776	DFR	DFR0245-R	LED current meter (red) .....	9.95	8.95	7.95
108388	JVP	PM-428†	3½-digit (no bezel, snap mount) .....	9.95	8.95	7.95
2144606	JVP	CX102B	3½-digit red (4.75VDC-5.25VDC) .....	11.95	10.95	9.95
175951	JVP	PM-128†	3½-digit (bezel, screw mount) .....	13.95	12.49	10.95
146835	JVP	PM-188BL†	3½-digit (with backlight display) .....	14.95	13.49	11.95
2076121	VEL	PM/RES	Resistor set for Velleman meters .....	1.95	1.75	1.49

†Only the PM ports \*Mfr.: VEL = Velleman; DFR = DFRobot; JVP = Jameco ValuePro Cannot use in common ground app.



# Test Equipment & Graphic Displays

3 LEVELS OF SAVINGS		
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## Meters & Testers



\* Web Code: EMT

Part No.	Manufacturer	Mfr. Part No.	Description	1	5
2130749	Velleman	VTLAN4	LAN tester, tests RJ-45, 10 Base-T, Token Ring, RJ11/12 cables	\$16.95	\$14.95
14285	BenchPro	RS232	RS232 Line Tester, identifies simple interface problems on lines 2-6, 8, 11, 19, 20	9.95	8.95
2175445	Velleman	DVM6013	3½-digit Capacitance Meter	69.95	62.95
2206037	Dawson	DDM30	Smart SMD Tweezer Tester	44.95	39.95
198678	Extech	LCR Meter	Passive Component LCR Meter	210.95	199.95
2075946	P3	P4400	Kill A Watt® Energy Consumption Meter	29.95	26.95
2193432	P3	P4482	Kill A Watt® Control - Power Monitor and Automatic Timer	39.95	35.95



## Function Generators



\* Web Code: DEJ

229251



2160411



2112831



Part No.	Manufacturer	Mfr. Part No.	Features	Bandwidth	# of Waveform Types	Size (in.)	Wt. (lbs.)	Includes*	Price
229251	Instek	GFG-8020H	Built-in 4-digit counter with CMOS output	2MHz	5	9.1 x 3.7 x 11.0	4.6	1, 2, 3	\$214.95
2160411	Instek	SFG-1003	DDS with FPGA design and 6-digit LED display	3MHz	4	9.9 x 3.6 x 11.5	4.6	1, 2, 3	179.95
2112831	SKMI	SK5200	Rotary switch control w/ built-in 60MHz counter	5MHz	6	11.8 x 3.5 x 10.8	5.5	1, 3	229.95

\* 1. Power cord 2. BNC cable 3. User's manual

## Oscilloscopes



\* Web Code: RCG

Part No.	Manufacturer	Mfr. Part No.	Bandwidth	Features	Size (in.)	Wt. (lbs.)	Includes	Price
2205940	Gobotronics	GT-0007	200kHz	Mixed signal, 2MSa/s, PDI interface, board and headers	1.98 x 1.01	0.017	Two 10-pin headers	\$24.95
2205907	Gobotronics	GT-0010	200kHz	Mixed signal plug-in DIP package, 2MSa/s, 0.96" OLED	1.615 x 1.01	0.024	Two 10-pin headers	59.95
2205915	Gobotronics	GT-0005	200kHz	Mixed signal plug-in DIP package, 2MSa/s, 2.42" OLED	3.3 x 1.75	0.065	Two 10-pin headers	74.95
2205931	Gobotronics	GT-0015	200kHz	Mixed signal handheld, 2MSa/s, 2.42" OLED, 750mAh Li-Ion	3.17 x 2.22 x 0.7	0.40	Header, USB cable, 2 test clip leads	129.95
2127339	Velleman	HPS140I	10MHz	Handheld pocket size, 40MSa/s, hold/store function, autorange, 6 hours on single charge	2.9 x 4.5 x 1.1	0.91	NiMH rechargeable battery pack, test probe (x10), USB charger	189.95
2187454	Velleman	PCSU200	12MHz	USB PC-Based scope, function generator, transient recorder, bode plotter and spectrum analyzer	3.9 x 3.9 x 1.4	0.54	USB cable, user's manual	149.95
2137422	Velleman	PCSGU250	12MHz	All-in-One PC lab with o-scope, spectrum analyzer, recorder, function generator, bode plotter	2.2 x 8.2 x 7	2.1	Scope probe, BNC-to-RCA adaptor, USB cable, CD software, manual	249.95
2207259	Link Instruments	MSO-28	60MHz	10-channel PC based oscilloscope and logic analyzer	4.0 x 2.4 x 0.8	0.88	Power cord, BNC cable, user's manual	324.95
1536886	SKMI	SK0404	40MHz	2-Channel scope with built-in 5MHz function generator, 6" CRT display, 20Vp-p output	15.7 x 5.2 x 12.8	23.8	2 test probes (x1/x10), BNC cable, AC cord, spare fuse	499.95
2171655	Uniteq	DS-1065	60MHz	2-Channel, 500MSa/s, built-in delay sweep function, 320x240 pixel high-resolution 5.7" display, USB storage	11.8 x 5.9 x 5.1	8.0	2 probes, DB9 cable, USB cable, power cord, user's manual, CD software	649.95
2143401	Instek	GDS-1152A-U	150MHz	2-Channel, 1GSa/s, 2Mpoint record length	12.2 x 5.6 x 5.5	7.9	Test probe, AC cord, user's manual	599.95
2217393	Seeed Studios	TOL01241P	200kHz	USB PC-based scope, 2.8" LCD display, built-in signal generator	4.1 x 2.1 x 0.3	0.4	Carrying case, stand, 2 grabbers, wrench	124.95
2217406	Seeed Studios	TES725AAB	8MHz	4-channel/2 analog/2 digital, built-in signal generator	3.9 x 2.4 x 0.6	0.18	2 probes, 2 grabbers, wrench, User's Manual	249.95

## Oscilloscope Probe Sets



- Input resistance at x10 ratio: 10MΩ
- Accessories may include: tips, ground lead, hooks, protection caps, trimmer screwdriver



\* Web Code: RAC



Part No.	Manufacturer	Mfr. Part No.	Bandwidth	Attenuation Ratio	Description	Length (ft.)	1	5
2130781	Velleman	PROBE60S	60MHz	1:1 or 10:1	IEC-1010 CAT II, 600V max	4.0	\$15.95	\$14.49
2145342	EZ Digital	T5060	60MHz	1:1 or 10:1	300VDC max.	4.0	22.95	20.95
22892	BenchPro	LF101E	60MHz	1:1 or 10:1	600VDC max.	5.0	24.95	22.49
2189880	BenchPro	P6100*	100MHz	1:1 or 10:1	600VDC max.	4.0	19.95	17.95
2130618	Velleman	PROBE100	100MHz	1:1 or 10:1	IEC-1010 CAT II, 600V max	4.0	27.95	24.95
2205982	Gobotronics	KSOLS101	—	—	Logic analyzer probe cable kit	1.1	8.95	7.95
2205958	Gobotronics	GT-0019	—	—	3.5mm plug to hook clips probe	2.0	3.49	2.99

\* 2 probes included



## Customizable Multi-Function Capacitive Touchscreen Graphic Displays

\* Web Code: PNP

- Eight digital input/output pins
- I²C, SPI, RS-485 and Ethernet support
- Connection: screw terminal and DIL
- Four 16-bit bipolar analog inputs (scalable in software to ±40V)
- Two alarm outputs (max current sink 10mA)
- Measurement range: 0-40VDC; 4-20mA
- RS232 serial interface
- Supply voltage: 4-30VDC
- User interface: USB

Part No.	Mfr. Part No.	Description	Module Size (in.)	Price
2219305	SGD 43-A	Multi-function 4.3" color TFT display	4.7 x 3.1 x 0.8	\$274.95
2219313	SGD 43-A-DK+	Development kit, including display	7.1 x 5.8 x 2.5	499.95





## 80,000-Count Benchtop Digital Multimeter

This benchtop multimeter not only provides voltage and current measurements, but also basic resistance, frequency, continuity and diode test functions.



- Large dual-display LCD with analog bar graph
- 50 measurement functions including capacitance, frequency, temperature
- 18 types of frequency up to 80MHz, with 0.1%-99% duty cycle
- Simultaneous measurement: (AC+DC, AC+Hz, DC+dBm, °C+°F, etc.)
- Auto data update and refresh, auto data hold, auto peak hold • RS-232 interface
- 36-hour dynamic record: MAG, MIN, AVG, MAX-MIN, setting upper & lower limit, timing measurement
- Size: 10.2"W x 8.7"D x 3.2"H

**Includes:** Test leads, thermocouple and user's manual

Part No.	Mfr. Part No.	Wt. (lbs.)	Price
2145748	DM-1150B	3.1	\$349.95

## 2.4GHz 2-Channel Frequency Counter

- 8-digit green LED display with annunciators
- Adjustable range and gate time
- Frequency ranges: 0.01Hz to 2.4GHz
- Gate time: 100 msec. to 10 sec.
- Channel A: DC coupled - 0.01Hz to 100Hz; AC coupled - 100Hz to 50MHz, sensitivity - 80mVrms, 1MΩ impedance
- Channel B: frequency range: 50MHz to 2.4GHz, sensitivity - 50mVrms, 50Ω impedance
- Size: 10.6"W x 8.5"D x 3.9"H • Weight: 3.5 lbs.



Part No.	Mfr. Part No.	1	5
1955968	DVM13MFC2U	\$149.95	\$134.95

## 4-in-1 Laboratory Center

This universal system is a versatile instrument, which combines a function generator, digital multimeter, frequency counter and power supply in one unit.

**Function Generator:** • Frequency range: 0.1Hz - 10MHz

• Wave outputs: Sine, Square, Triangle, Pulse, TTL output

**Frequency Counter:** • Channel A output: 1Hz - 100MHz • Channel B output: 100MHz - 2.7GHz

**DC Power Supply:** • Adjustable voltage output: 0-30V @ 0-30A • Fixed voltage output: ±15V @ 1A, +5V @ 2A

**Digital Multimeter:** • Temperature range: -50°C to +1372°C (-58°F to +2502°F)

• Maximum AC voltage: 750VAC • 80,000 count and bar graph display • Capacitance range: 1pF-100μF

• Maximum DC voltage: 1000VDC • Maximum AC/DC current: 20 A • Resis. range: 800Ω-80MΩ

• Frequency range: 1kHz - 6MHz • Diode, dBm functions, RS-232 interface

**Includes:** Power cord, test leads, fuses, temperature probe, RS-232 cable for DMM, user's manual

Part No.	Mfr. Part No.	Size (W" x D" x H")	Wt. (lbs.)	1	5
2135814	US-9170A	15.0 x 12.5 x 6.6	30.2	\$899.95	\$849.95

## Oscilloscope Tutor Kit

This board generates a number of safe "real world" signals that can help you learn terms such as V/div, as well as the measurement quantities of AC, DC, frequency and more. Most experiments can be done with a digital or analog scope. Learn more about oscilloscopes with this kit!

- Signals: alternating current (AC), adjustable AC, full wave and half-wave rectified AC, smoothed direct current (DC), ripple, astable oscillator
- No soldering required, assembled and tested • Power supply: 9-12VAC, min. 100mA



Part No.	Mfr. Part No.	Description	Size (L" x W" x H")	1	5
2175568	EDU06	Oscilloscope learning kit	4.6 x 2.9 x 0.9	\$29.95	\$28.49

## 20MHz & 30MHz 2-Ch Oscilloscopes

- 6" rectangular CRT with internal graticule
- High sensitivity X-Y mode
- Sensitivity: 1mV/div
- Sweep magnification (x10)
- 400V maximum input voltage



**Includes:** User's manual, 2 spare fuses, power cord

Part No.	Mfr. Part No.	Bandwidth	Price
2218265	OS-5020A	20MHz	\$444.95
2218273	OS-5030A	30MHz	499.95

## 17MHz Logic Probe

- Max input freq.: 17MHz
- Minimum pulse width: 30ns
- Pulse flash time: 500ms
- Audible tones for high & low
- Input impedance: 1MΩ
- Power supply protection: ±20V
- TTL threshold: Lo = 0.8V ±0.2V, Hi = 2.3V ±0.2V
- CMOS threshold: Lo = 30% VCC, Hi = 70% VCC



Part No.	Cross Ref. No.	1	5	25
149930	LP3500	\$39.95	\$35.95	\$32.95

## 4, 8 & 16-Ch Logic Analyzers

- Monitor digital signals
- Compatible with Windows, Linux, Mac OS
- 4, 8, 16 inputs/channels

**Includes:** Logic analyzer, flexible test lead set, micro-hook clips, USB cable and custom carrying case



Part No.	Description	Size (L" x W" x H")	Price
2217140	4-channel	1.66 x 1.66 x 0.39	\$109.95
2217131	8-channel	2.1 x 2.1 x 0.46	219.95
2217123	8-channel	3.6 x 3.6 x 0.59	479.95
2217115	16-channel	3.6 x 3.6 x 0.59	599.95

## 108W Desktop Power Supply

- Load regulation: ±2% • Line regulation: ±5%
- Input voltage: 88 132VAC/176-264VAC @ 47-63Hz (switch selectable)
- Efficiency (typical): 81%
- Ripple & noise max.: 120mVp-p
- Front panel on/off switch and 3 color LED loading indicator
- Voltage adjustment range: 12-15VDC
- Short-circuit/overload/overvoltage/ overtemperature protection
- Back panel 3-prong AC receptacle and banana plugs
- Size: 5.9"W x 5.5"D x 3.3"H • Weight: 3.3 lbs.



Part No.	Mfr. Part No.	1	10
673230	ESP-120-13.5	\$44.95	\$39.95

## PC-Base Oscilloscope, Logic Analyzer and Pattern Generator

- 100MHz spectrum analyzer/FTF
- 200 MSA/s logic analyzer
- 100 Mpt/s pattern generator
- 60MHz bandwidth
- 2 GSa/s oscilloscope
- 8 logic analyzer inputs & 1 pattern generator



Part No.	Mfr. Part No.	1	5
2207241	MSO-19	\$249.95	\$234.95

\*Frequency Counters — Enter Web Code VCG

## Logic Probe Kit

This kit will help you easily monitor digital signals, whether they are on or off. It tests digital circuits at various points to see if they are low, high, or constantly changing, which is perfect for troubleshooting several kinds of digital circuits including timers, clocks, counters and more.

Part No.	Mfr. Part No.	1	5
662725	EBLOG-300A	\$11.95	\$10.95

## 2 Channel - DC to 20MHz Analog Oscilloscope w/ Function Generator

- Frequency Range: 1Hz to 1MHz
- 6" Rectangular CRT Display
- Resolution/Sensitivity: 1mV/div
- V Mode Switch: CH1, CH2, DUAL and ADD
- Vertical deflection and Sweep Magnification: X5



**Functions Blocks:**

- Display and Power
- Vertical Amplifier
- Function Generator: Triangle, Sine, Square and TTL-level Square waves.
- Sweep and Trigger

**Basic Measurements:**

- Single & Dual Trace Measurement
- Trigger Selection • X-Y Measurements

**Measurement Applications:**

- Amplitude
- Time Interval Frequency
- Phase Difference
- Rise Time
- Dimension: 320mm (W) x 140mm (H) x 430mm (L)
- Operation: Output Frequency Adjustment & Waveform Selection, DC Output, and TTL Output

Part No.	Mfr. Part No.	1	5
2145246	OS-5020G	\$629.95	\$569.95

\*For additional products, availability and specifications visit [Jameco.com](http://www.Jameco.com) and enter the Web Code in the product search box



Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Benchtop & Precision Power Supplies

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## Single Output Benchtop Power Supplies

- Voltage and current adjustable



★ Web Code: SAX



301920



175257



301971



207618



301911

Part No.	Mfr.	Mfr. Part No.	Voltage (VDC)/ Current (A)	Power (W)	Input Voltage (VAC)	Displays (Digits)	Short Circuit Protection	Overload Protection	Size (W" x H" x D")	Weight (lbs.)	Pricing	
											1	5
301920	BenchPro	HY1503C	15/3	45	115 ±10%	2-Analog	Y	N	3.8 x 6.3 x 9.1	9.0	\$99.95	\$89.95
2130378	Velleman	PS1503SBU	15/3	45	220 @ 50Hz	2-Digital LCD (3.5)	Y	N	8.4 x 6.0 x 3.8	6.7	109.95	99.95
175265	BenchPro	DPS150A	15/10	150	110 @ 60Hz	2-Analog	Y	Y	6.2 x 4.0 x 5.7	12	99.95	89.95
175257	BenchPro	SPS250A	15/15	225	110/220 @ 47-63Hz	2-Analog	Y	Y	6.2 x 4.0 x 5.6	3.8	149.95	144.95
301971	Lascar	PSU130	30/1	30	100/240 @ 47-63Hz	2-Digital LCD (4)	Y	Y	5.5 x 1.6 x 5.2	1.2	99.95	89.95
2145879	Uniteq	PS-1305	30/5	150	110/220 @ 50-60Hz	2-Digital LED (3.5)	Y	Y	6.5 x 5.1 x 13.0	12.3	214.95	194.95
207618	Mastech	HY3005C	30/5	150	115 ±10%	2-Analog	Y	N	5.4 x 6.2 x 11.5	14	159.95	135.95
301911	BenchPro	HY3005D	30/5	150	115/230 ±10% (switchable)	2-Digital LCD (4)	Y	N	5.4 x 6.2 x 11.5	13	199.95	179.95
207635	Mastech	HY3010	30/10	300	115/230 ±10% (switchable)	2-Digital LED (4)	Y	N	10.4 x 6.5 x 14.4	31	299.95	269.95
301938	BenchPro	HY3005	30/5	195	115/230 ±10%	2-Digital LED	Y	N	11.5 x 5.25 x 6.25	10	179.95	162.95
2171735	Uniteq	PS-3610	36/10	360	120/230 50/60Hz	2-Digital LED (3.5)	Y	N	12.2 x 5.4 x 6.1	8.5	509.95	459.95
207600	Mastech	HY5005	50/5	250	115/230 ±10% (switchable)	2-Digital LED (4)	Y	N	10.4 x 6.5 x 14.4	17	229.95	209.95



## Multiple Output Benchtop Power Supplies

★ Web Code: SAX

These benchtop power supplies are a must for every laboratory. They sit out of the way of your workspace and stay ready to supply power at all times. Single and multiple outputs are available for your specific laboratory needs. Standard banana input plugs provide easy connections and precision adjustment knobs provide exact power outputs for all your projects. For more information, visit [www.Jameco.com](http://www.Jameco.com).

- Voltage and current adjustable



211693



301962



301947



197991



197982



Part No.	Mfr.	Mfr. Part No.	Voltage (VDC)/ Current (A)	Power (W)	Input Voltage	Displays (Digits)	Short Circuit Protection	Overload Protection	Size (W" x H" x D")	Weight (lbs.)	Pricing	
											1	5
211693	BenchPro	HY3003D-2	0-30/3; 0-30/3	180	115/230 ±10%	4-Digital LCD (3.5)	Y	N	10.4 x 6.5 x 14.4	28	\$219.95	\$199.95
2145861	Uniteq	PS-3030DU	0-30/3; 0-30/3	180	115/230 @ 50-60Hz	4-Digital LED (3)	Y	N	9.2 x 6.3 x 12.8	16.5	369.95	334.95
301962	Mastech	HY5003-2	0-50/3; 0-50/3	300	115/230 ±10%	2-Digital LCD (3.5)	Y	N	10.4 x 6.5 x 14.4	26	279.95	249.95
301947	Mastech	HY3005D-2	0-30/5; 0-30/5	300	115/230 ±10%	4-Digital LCD (3.5)	Y	N	10.4 x 6.5 x 14.4	26.5	299.95	269.95
211684	BenchPro	HY3003D-3	0-30/3; 0-30/3; 5/3	195	115 ±10%	4-Digital LCD (3.5)	Y	N	10.4 x 6.5 x 14.4	29	249.95	224.95
2145828	Uniteq	PS-2303	0-30/3; 0-30/3; 5/3	195	110-120 @ 50-60Hz	4-Digital LED (3.5)	Y	Y	9.6 x 5.5 x 13.6	17.6	324.95	299.95
301955	Mastech	HY3005D-3	0-30/5; 0-30/5; 5/3	195	115/230 ±10%	4-Digital LCD (3.5)	Y	N	10.4 x 6.5 x 14.4	29	319.95	289.95
2145801	Uniteq	PS-3303	0-30/3; 0-30/3; 5/3	195	110/220 @ 50/60Hz	4-Digital LED (3)	Y	Y	11.8 x 8.7 x 5.8	11.1	369.95	334.95
2145810	Uniteq	PS-3305	0-30/5; 0-30/5; 5/3	315	110/220 @ 50/60Hz	4-Digital LED (3)	Y	Y	9.6 x 5.5 x 13.6	22	424.95	399.95
2145799	Uniteq	PS-3305	0-30/5; 0-30/5; 2.5, 3.3, 5/3	315	110/220 @ 50/60Hz	4-Digital LED (3)	Y	Y	11.8 x 5.83 x 8.66	22	489.95	439.95
197991	Extech	382213	0-30/3; 5/0.5; 12/0.5	98.5	110/120 @ 50-60Hz	2-Digital LCD (3)	Y	Y	6.0 x 5.6 x 9.5	11	209.95	189.95
197982	Extech	382203	0-30/3; 5/0.5; 12/0.5	98.5	110/120 @ 50-60Hz	2-Analog	Y	Y	6.0 x 5.6 x 9.5	11	179.95	162.95

\* Selectable



## 13.8VDC Precision Regulated Power Supply

- Heavy duty 5'8" 3-prong power cord
- Illuminated rocker switch
- Short-circuit protected
- Output mating terminals: see pg 118 for banana terminal plugs
- Fuse protected



Part No.	Power (W)	Output Volts @ Curr.	Input Voltage	Wt. (lbs.)	1	5
138676	276	13.8VDC @ 20A	115VAC @ 60Hz	15.9	\$79.95	\$74.95



## Pocket Photodiode Geiger Counter Kit

- Intermediate level kit with step by step instructions
- Detects alpha and beta radiation particles
- Filters out noise and RF interference with copper tubing and aluminum
- Uses PIN photodiode as a substitute for an expensive Geiger Mueller tube



Part No.	Description	Price
2170812	DIY Geiger counter .....	\$32.95

## BEST SELLING TEST LEADS

Part No.	Manufacturer	Mfr. Part No.	Description	Length	1	10
10444	BenchPro	GAL01	Alligator to alligator, 10 pc	21" .....	\$5.95	\$5.39
135299	BenchPro	SF-207A-R	Mini grabber to mini grabber, 5 pc	14" .....	10.95	9.95
256832	BenchPro	CBB-069-R	BNC female to pigtail	7" .....	5.95	4.95
159899	Pomona	3782-36-02	Mini grabber to banana, 2 pc	36" .....	15.95	14.49
77746	BenchPro	FC-15B-R	Multimeter test probes, 2 pc	42" .....	6.95	6.25



10444



135299



# Test Leads, Cables, Plugs, Clips & Posts

## Test Leads and Cables

Pomona

KEYSTONE

JAMECO

BenchPro

NEW

NEW  
MARKED IN PINK

\*Web Code: RAC



2113877



176971



2211055



11422



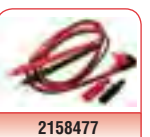
176954



256832



2113869



2158477



212222

Part No.	Manufacturer	Product No.	Description	Size (L")	1	10	25
159871	Pomona	2249-C-36	BNC male to male cable, RG58C/U, 50Ω, 20 AWG, black	36	\$17.95	\$15.95	\$14.49
2113877	Pomona	3957	BNC male to Multi-Stacking banana plugs (2nd End)	1.55	18.95	16.95	14.95
176971	Pomona	4532-C-36	BNC male to Mini alligator clips w/ strain relief, RG58C/U, 50Ω, 20AWG, blk	36	23.95	21.49	19.49
2218901	BenchPro	11384	BNC male to alligator clips, RG58C/U, 18AWG, 1 black, 1 red	20	4.95	4.49	3.95
11464	BenchPro	05-A-078-R	BNC male to Mini-clip test lead, RG174A/U, black	39	5.49	4.95	4.49
11422	BenchPro	05-A-081-R	BNC male to Micro-clip test lead, RG174A/U, black	39	5.49	4.95	4.49
2097150	Pomona	5187-C-36	BNC male to MiniGrabber test leads, RG58C/U 50Ω, 20 AWG, black	36	23.95	21.49	19.49
176954	Pomona	5187-K-36	BNC male to MiniGrabber test leads, RG174/U 50Ω, 26 AWG, black	36	33.95	29.95	26.95
256832	BenchPro	CBB-069	BNC female to pigtail, 20 AWG, 2 wire, 1 black, 1 red	7	5.95	4.95	4.49
2097555	BenchPro	CBB-070	BNC male to pigtail, 20 AWG, 2 wire, 1 black, 1 red	9	5.95	4.95	4.49
2113869	Pomona	3788	BNC female Minigrabber test clips (2nd end)	2.56	14.95	13.49	11.95
2158477	BenchPro	FC16A	Probes w/ right angle banana, screw on alligator clips, 1 black, 1 red	40	8.95	7.95	6.95
2211055	Arndt	TP9238	Probes, R/A with screw on alligator clip, 24 AWG, red/black	36	7.95	6.95	6.25
212222	Probe Master	8043S	Softie test probe leads, 10-pc. set, interchangeable tips, 18 AWG, 1 blk, 1 red	48	34.95	31.95	28.95
174625	Probe Master	8150	Micro-tip test probe leads rt. angle (w/10 plunger type tips), 1 blk, 1 red	39	39.95	35.95	32.49
168516	BenchPro	GA-5010	Universal test lead kit w/ 12 interchangeable tips, 1 black, 1 red	36	9.95	8.95	7.95
2113914	Pomona	5953A	Adjustable tip test probe set, tip adjusts up to 3", 1 black, 1 red	48	29.95	26.95	23.95
155951	Pomona	5519A	Banana plug to rt. angle probe, insulated leads, 18 AWG 1 blk, 1 red	48	18.95	16.95	14.95
1814153	Pomona	1166-48-0	Multi-stacking banana plug to alligator clip, black	48	7.95	6.95	6.25
77738	BenchPro	GF19-R	Protected banana style multimeter test leads, 1 black, 1 red	40	4.95	4.49	3.95
77746	BenchPro	FC-15B-R	Standard banana style multimeter test probes, 1 black, 1 red	42	6.95	6.25	5.59
10444	BenchPro	GAL01	Alligator clip test leads, 24 AWG (19/36), 10-pc. assorted colors	21	5.95	5.39	4.79
2210239	BenchPro	GAL1016	Alligator clip test leads, 16 AWG, 2 sets, 5 colors	21	9.95	8.95	7.95
2185483	BenchPro	GAL02	Alligator clip test leads, 24 AWG, 1 black, 1 red	21	1.95	1.75	1.49
2210247	BenchPro	GAL0216	Alligator clip test leads, 16 AWG, 1 set (red/black)	21	5.95	5.39	4.75
159901	Pomona	B-24-02	Stackable banana patch cords, 18 AWG, 1 black, 1 red	24	12.95	11.49	10.49
159919	Pomona	B-36-02	Stackable banana patch cords, 18 AWG, 1 black, 1 red	36	12.95	11.49	10.49
2208884	BenchPro	CRF-TS0284TS-XX-250MM	Stackable banana patch cords, 18 AWG, 2 ea. (black,red,blue,white,yellow)	9.8	27.95	24.95	22.49
77842	BenchPro	CRF-TS0284TS-XX-330MM	Stackable banana patch cords, 18 AWG, 2 ea. (black,red,blue,white,yellow)	13	27.95	24.95	22.49
1814137	Pomona	1166-12-0	Alligator clip to stackable banana plug, 18 AWG, black	12	6.95	6.25	5.59
1814145	Pomona	1166-12-2	Alligator clip to stackable banana plug, 18 AWG, red	12	6.95	6.25	5.59
1814161	Pomona	1166-48-2	Alligator clip to stackable banana plug, 18 AWG, red	48	7.95	6.95	6.25
2218919	BenchPro	ACBP-20AWG1000-RB	Alligator clip to stackable banana plug, 20AWG, 1 black, 1 red	20	7.95	6.95	6.25
21857	BenchPro	05-A-082-R	Mini-clip to stackable banana test leads, black	39	4.95	4.49	3.95
21865	BenchPro	05-A-079-R	Mini-clip to stackable banana test leads, red	39	4.95	4.49	3.95
2189601	BenchPro	3782-36-02JVP	Mini-clip to stackable banana test leads, 1 black/ 1 red	39	7.95	6.95	6.25
159899	Pomona	3782-36-02	Mini-clip w/ stackable banana test leads, 20 AWG, 1 black, 1 red	36	15.95	14.49	12.95
135299	BenchPro	SF-207A-R	Mini-clip test leads, 26 AWG, 5 sets (blue, black, yellow, red, green)	14	10.95	9.95	8.95
156495	Pomona	5523-R	MiniGrabber™ test clip patch cord, 20 AWG 10-pc. assorted colors	24	47.95	42.95	38.95
155985	Pomona	2708B	9 slot test lead holder, accepts RG213 & RG214 wire sizes (blue)	11	15.95	14.49	12.95
155977	Pomona	4408	10 slot test lead holder, accepts RG59 & RG108 wire sizes (black)	11	12.95	11.95	10.49
155969	Pomona	1508	14 slot test lead holder, accepts RG58 & RG142 wire sizes (orange)	11	15.95	14.49	12.95

## Test Clips, Plugs and Posts

Test Clips, Plugs & Posts continued on next page

\*Web Code: TLC



71240



77691



1818787



2127742



2205755



1582170



2168528



2144024



125197

Part No.	Manufacturer	Product No.	Description	Size (in.)	1	10	100
71240	BenchPro	GIP-003-R	Binding post, screw type, chassis mount 1 black, 1 red	1.0 L x .50 Dia.	\$1.95	\$1.75	\$1.49
77691	BenchPro	GIP-001-R	Binding post, screw type, chassis mount 1 black, 1 red	1.8 L x .50 Dia.	1.95	1.75	1.49
1818779	Pomona	3760-0	Binding post, accepts banana, wire, or spade lug, black	1.78 L x .44 Dia.	4.49	3.95	3.59
1818787	Pomona	3760-5	Binding post, accepts banana, wire, or spade lug, green	1.78 L x .44 Dia.	4.49	3.95	3.59
2127742	Pomona	3760-2	Binding post, accepts banana, wire, or spade lug, red	1.78 L x .44 Dia.	4.49	3.95	3.59
2205755	BenchPro	WTA-60R-4PK	Binding post 4-pack, chassis mount, red/black/green/yellow	1.1 L x .30 Dia.	3.95	3.59	3.29
2215443	Pomona	5935-0	Banana jack chassis mount, .079 solder tab black	.680 L x .260 Dia.	1.25	1.09	.99
1582188	Keystone	6092	Banana jack, chassis mount, 0.182" solder tab, black	.937 L x .433 Dia.	1.95	1.75	1.49



72195



137526



159863



159927

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# Test Clips, Plugs, Posts & Tool Kits

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## Test Clips, Plugs and Posts (Continued)

More images on previous page

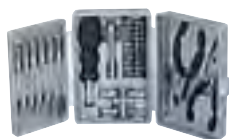
\* Web Code: TLC

Part No.	Manufacturer	Product No.	Description	Size (in.)	1	10	100
1582170	Keystone	6091	Banana jack, chassis mount, 0.182" solder tab, red	.937 L x .433 Dia.	\$1.95	\$1.75	\$1.49
2168528	BenchPro	0584-BLK	Banana jack, chassis mount, solder tab, tin-plated, black	0.91 L x .43 Dia.	1.49	1.25	1.09
2168536	BenchPro	0584-RED	Banana jack, chassis mount, solder tab, tin-plated, red	0.91 L x .43 Dia.	1.49	1.25	1.09
125197	BenchPro	GBRR2-R	Screw mount double binding/banana post, black/red	1.6 L x 1.4 W	3.95	3.49	2.95
2144024	Pomona	6883	Dual binding posts with base	1.9 L x .17 Dia.	2.95	2.75	2.49
72195	BenchPro	GBP205-R	Set screw banana plug, 1 black, 1 red	1.6 L x .40 Dia.	1.95	1.75	1.49
137526	BenchPro	HP-2234P-R	Set screw banana plug, 1 black, 1 red	2.3 L x .30 Dia.	3.95	3.59	3.29
159855	Pomona	1325-02	Solderless stackable banana plug w/ set screw, 1 black, 1 red	1.55 L x .17 Dia.	3.95	3.59	3.29
159863	Pomona	1825-02	Solderless stackable banana plug w/ safety collar, 1 black, 1 red	4.59 L x .39 Dia.	3.95	3.59	3.29
159927	Pomona	MDP-02	Solderless stackable dbl banana plug, w/ wire guide, red (set of 2)	1.55 L x 1.18 W	6.95	6.25	5.59
11440	BenchPro	03-701A-R	BNC female to standard double banana plug, black	2.03 L x 1.7 W	4.95	4.49	3.95
125225	BenchPro	GB2BR2	BNC male to standard double banana plug, black	2.21 L x 1.8 W	6.95	5.95	5.39
125233	BenchPro	GB1BN2	BNC female to double binding/banana posts, black	2.14 L x 1.8 W	6.95	5.95	5.39
99355	BenchPro	GB2BN2	BNC male to double binding/banana posts, black	2.35 L x 1.7 W	6.95	5.95	5.39
153163	BenchPro	SF-207-BL-R	Micro test clip, 1 blue	1.7 L	.79	.75	.69
2197783	BenchPro	XM-BLK	Micro test clip, 1 black	1.5 L	.69	.59	.49
114810	BenchPro	G2P004-R	Micro test clip, 1 red, 1 black	1.7 L	1.75	1.49	1.25
114818	BenchPro	G2P002-R	Mini test clip, 1 black, 1 red	3.5 L	2.95	2.75	2.49
2197791	BenchPro	201W36BLK	Mini grabber test clip to banana plug, 3' black	2.18 L / 1.45 L	1.95	1.75	1.49
248921	BenchPro	SF101CP-R	Mini alligator clip, solder/crimp (set of 2)	1.2 L x .30 W	.49	.45	.39
248939	BenchPro	SF-103CP-R	Mini alligator clip, solder/crimp (set of 2)	1.6 L x .30 Dia.	.59	.55	.45
256525	BenchPro	SF105B-R	Alligator clip, barrel/screw, 2" (set of 2)	2.0 L x .20 Dia.	.59	.55	.45
2178081	Pomona	5250	8-pin SOIC gold plated test clip	1.73 L x .43 W	14.95	13.49	11.95
70991	BenchPro	GIP006-R	Insulated alligator clips, 1 black, 1 red	2.3 L x .50 W	.59	.55	.45
2215654	BenchPro	SLV-1.2-R	Red insulator sleeve for P/N 248921 (set of 2)	1.3 L x .30 Dia.	.49	.44	.39
2215662	BenchPro	SLV-1.2-BK	Black insulator sleeve for P/N 248921 (set of 2)	1.3 L x .30 Dia.	.49	.44	.39
248962	BenchPro	SF-103SV-BK	Black insulator sleeve for PNs 248939 & 256525 (set of 2)	2.1 L x .20 Dia.	.39	.29	.25
248972	BenchPro	SF103SV-RD-R	Red insulator sleeve for PNs 248939 & 256525 (set of 2)	2.1 L x .20 Dia.	.39	.29	.25
2208913	Vero Tech	20-2137D	PCB mini test point, looped, black, 0.100ID eyelet	.30 L x .09 Dia.	.25	.22	.17
1581986	Keystone	5001	PCB mini test point, looped, black, 0.100ID eyelet	.30 L x .09 Dia.	.35	.29	.25
2168430	Grip-On	37128	28-pc. electrical clip kit, alligator clips and charging clips	Various	5.95	5.29	4.69



## 26-Piece SAE Hobby Tool Set

- 4-1/2" long nose pliers
- 4-1/2" diagonal cutting pliers
- #1 & #2 Phillips bits
- #1 & #2 pozi bits
- 3/16" & 1/4" slotted bits
- Hex to 1/4" driver adapter
- Compact carrying case
- T-10, T-15, and T-20 Torx bits
- 3" extension bar for 1/4" drive
- 3 slotted and 3 screw driver precision set
- 3/16", 1/4", 11/32" and 3/8" sockets for 1/4" drive
- Size: 12.0"L x 9.0"W x 2.0"H
- Weight: 1.5 lbs.



Part No.	Description	1	5	25
170069	26-pc. SAE tool set	\$14.95	\$13.49	\$11.95

## 40-Piece Electronic Tech Tool Kit

- Kit includes:
  - Wire cutters/ stripper
  - Adapter bit for sockets
  - Pocket clip screwdriver
  - 10-pc screwdriver set
  - T10-T25 reversible
  - Torx screwdriver bits
  - Potentiometer alignment tools
  - 3/16"-1/2" S.A.E. nut driver sockets
  - 6mm-12mm metric nut driver sockets
  - Slotted and Phillips screwdriver bits
  - Extra long 3-claw parts holder
  - IC inserter with pin straightener
  - IC extractor
- Size: 9.5"L x 6.8"W x 1.4"H
- Weight: 1.7 lbs.



Part No.	Description	1	5	25
119183	40-piece tool kit	\$24.95	\$22.49	\$19.95

\* Tool Kits — Enter Web Code CAA

## 65-Piece Master Electronics Tool Kit

Simply every tool needed for field repair or installation, all in a handsome lockable case with room for spare parts or special equipment.

- Kit includes:
  - 7 pliers
  - Wrench
  - Soldering iron with stand and sponge
  - 10-piece screwdriver set
  - Crimping tool
  - 6-piece screwdriver set
  - Testing screwdriver
  - IC extractor
  - 6-piece wrench set
  - 3-prong holder
  - Measuring tape
  - Solder core
  - Utility knife (3 blades)
  - Storage box
  - 3-piece soldering aid kit
  - Brush
  - Oil can
  - Desolder wick
  - Desolder pump
  - 5-piece file set
  - Alignment tool
  - 7-piece hex set
  - Tweezers
  - Heat sink
  - Scissors
  - PVC insulated tape
  - Part tube
- Carrying case has two removable pallets, adjustable compartments, and combination locks
- Size: 18.0"W x 13.0"D x 4.0"H
- Weight: 16.9 lbs.



Part No.	Description	1	5
218245	65-piece tool kit	\$179.95	\$169.95

## Aluminum Tool Case

Made of lightweight aluminum, this tool case is designed to take rough field use.

- Size: 19.0"L x 14.0"W x 6.0"H
- Includes: Tool pallet, egg carton foam lid and 2.5" thick pre-cut foam bottom



Part No.	Description	1	5
261877	Tool/equipment case	\$49.95	\$44.95

## ELECTRONIC DIGITAL MULTIMETER TEST LEAD KIT

This kit is compatible with multimeters that accept safety style sheath banana plugs store in the tri-fold nylon pouch.



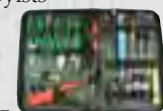
Kit includes:

- Modular Probe Set with Brass Tip
- Minipincer Test Clip with DMM Jack
- Minigrabber Test Clip with DMM Jack
- Extended Fine Point Test Probe Adapter
- Insulated Spade Lug Adapter
- Flexible Test Lead Set with Right Angle and Straight Banana Plugs
- Medium Alligator Clip
- IC Test Probe Tip Adapter

Part No.	Description	1	5
2116015	10 piece test lead kit	\$64.95	\$58.95

## 18 PIECE HOBBYIST TOOL KIT

This is a perfect kit for hobbyists to organize their tools.



Kit includes:

- 30W soldering iron
- Desoldering pump
- Solder in dispenser 1.0mm 17g
- Heavy-duty long nose pliers
- Heavy-duty universal pliers
- Adjustable wrench
- PLCC extraction tool
- Heavy-duty universal cutter
- Screwdriver/voltage tester with neon indicator 5 x 90mm
- Self-adjusting wire stripper
- Size: 13.4"L x 8.7"W x 2.2"H

Part No.	Description	Wt. (lbs.)	1	5
2212841	18 piece tool kit	4.0	\$39.95	\$35.95

## JAMECO BenchPro 100-Piece Professional Electronics Tool Kit

- Kit includes:
  - Soldering iron
  - 12 screwdrivers
  - 7-piece hex key set
  - Extractor
  - 4 Pliers
  - Adjustable wrench
  - Crimper/Stripper
  - 6-piece screwdriver set
  - 3-piece soldering aid kit
  - Flashlight
  - Desoldering pump
  - Multimeter
  - Tweezers
  - 5-piece file set
  - 10-piece wrench set
  - Voltage tester
  - 2 bottles cleaning liquid
  - Blade cutters
  - Cordless screwdriver kit (bits included)
- Aluminum case features removable pallets, surface-type locks, and black plastic handle
- Size: 18.0"L x 14.0"W x 6.0"H • Weight: 20 lbs.

Part No.	Description	1	5
242851	100-piece tool kit	\$159.95	\$149.95

## 12-Piece Fiber Optic Tool Kit



- Kit includes:
  - SC polishing disk
  - Fiber optic crimping tool
  - Fiber optical tools
  - Foam swabs cleaning kit
  - Utility component storage box
  - Fiber optic 100x-200x viewing scope kit
  - Universal syringe 2.5mL
  - Size: 11.0"L x 7.8"W x 2.8"D

Part No.	Description	Weight	Price
2193491	Fiber optic tool kit	3.5 lbs.	\$179.95

**\*Tool Kits — Enter Web Code CAA**

## COAXIAL CRIMPING TOOL KIT

### Kit includes:

- Crimper tool
- Screwdriver #1x125
- Round cable cutter
- Rotary coaxial cable stripper
- Spare Die:
  - .255", .213", .187", .068" (Hex)
  - .319", .256", .213", .068" (Hex)
  - .043" (SQ), .100", .213", .068", .137", .255" (Hex)
  - .042" (SQ), .078", .151", .068", .128", .178" (Hex)
  - .10", .128", .429"
- Size: 12.0"L x 8.3"W x 2.3"H

Part No.	Description	Price
2196908	9-piece tool kit	\$114.95



## JAMECO BenchPro 95-Piece Pro-Tech Tool Kit

- Kit includes:
  - Navy blue storage box
  - 7-piece hex key set
  - 5-piece needle file set
  - 10-piece wrench set
  - 8 different pliers
  - 6-piece precision screwdriver set
  - 29-pc. socket wrench set
  - Wire stripper/crimper
  - Cushion grip screwdrivers
  - Inspecting mirror
  - Tape measure
  - Digital multimeter
  - Lead-free solder core
  - Desolder pump
  - 6" chrome-plated wrench
  - Stainless steel tweezer
  - Hammer
  - 30W soldering iron
  - Plastic flip-top box
  - Cleaning brushes
  - Aluminum flashlight
  - Mini drill with drill bits
  - Mini hobby vise
  - Elastic wrist strap
  - IC extractor
  - Electrical tape
- Size: 18.4"L x 13.4"W x 6.4"H

Part No.	Description	Weight	Price
2153756	95-piece tool kit	20.6 lbs.	\$199.95



## 116-Piece Tech Service Tool Kit

- Kit includes:
  - Storage box
  - 8 pliers
  - Spring hook
  - 3-piece soldering aid kit
  - Desoldering pump
  - 3-piece alignment tool set
  - Diagonal cutter
  - Soldering iron
  - Forceps
  - 9-piece screwdriver set
  - Wire stripper
  - 5-piece file set
  - Flashlight
  - 3-prong holder
  - PVC insulated tape
  - Heat sink
  - Measuring tape
  - 6-piece electronic screwdriver set
  - 40-piece socket & screwdriver set
  - 10-piece electronic wrench set
  - Drill
  - Desoldering wick
  - Brush
  - Crimping tool
  - Extractor
  - 7-piece hex key set
  - Hammer
  - Solder core
  - Wrist strap
  - Inspection Mirror
- Size: 18.5"L x 13.8"W x 6.7"H • Weight: 22.8 lbs.

Part No.	Description	1	5
149024	116-piece tool kit	\$319.95	\$289.95



## TOOL KIT FOR GAMING CONSOLES

Great tool kit for anyone working on gaming consoles or other consumer electronics with special types of screws and fasteners. The ratchet handle features forward, reverse and locking function for easy operation.

### Kit includes:

- 1 handle: ratchet handle 5.5"
- 1 extension bitholder: extension bitholder 4.53"
- 20 bits (1")
- 1 tweezers
- 1 Nintendo bit holder
- 1 multifunctional opening tool
- 2 bits (1.53"): Nintendo
- Weight: 0.8 lbs.

Part No.	Description	Price
2212832	27-piece tool kit	\$24.95



## JAMECO BenchPro 5-Piece Needle File Set

- Round, square, tri-square, half-round, flat
- Made of heavy duty hardened steel
- Color: black with red handle
- Each 7" long

Part No.	Description	1	10	25
2157589	5-piece file set	\$5.95	\$5.35	\$4.79

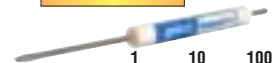
## JAMECO BenchPro Pocket Screwdriver

### Phillips & Flat head

- Pen clip for pocket storage

**\*Web Code: CAQ**

Part No.	Description	1	10	100
127271	6"L pocket screwdriver	\$1.95	\$1.59	\$1.39



## JAMECO BenchPro Precision Cutting Knife

- Ultra sharp cutting blades
- Precise blade with protective cover

Part No.	Length	1	5	25
2157571	6.0"L	\$3.59	\$3.25	\$2.95



## JAMECO BenchPro Deluxe Precision Knife Set

- Three different knife handles — fine work, medium and heavy duty power grip
- Size: 6.3"L x 2.8"W x 1.4"H
- Includes: 13 types of blades

Part No.	Description	1	10	100
72768	13 blade knife set	\$8.95	\$7.95	\$6.95



## Nibbling Tool

- Perfect for cutting, trimming, or notching sheet metal up to 18 AWG
- Time-saver when working on prototyping, chassis, and circuit boards
- Minimum 0.375" hole required
- Size: 7.8"L

Part No.	Mfr. Part No.	Description	1	10
18810	HT204	Nibbling tool	\$9.95	\$8.95
29331	HT204B	Replacement bit	3.49	2.95



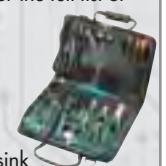
## TECHNICIAN'S TOOL KIT

This professional tool kit is essential for any technician for on the go fixing. For the full list of tools, go to Jameco.com

### Kit includes:

- Wrist strap 10 ft.
- Tweezers
- LED Flash light
- Screwdriver handle
- 4 pcs screwdriver set
- 7 in 1 crimping tool
- 8" Adjustable wrench
- 5 pcs needle file set
- Utility knife (3 blades self-loading)
- 7 pcs folding type hex key set (inch)
- Mini hammer set (including 6 parts)
- 6 pcs electronic screwdriver set
- Brush
- Extractors
- Heat sink
- Double-end blades
- 3 prong holder
- 5 pcs pliers set
- Soldering accessories

Part No.	Description	Price
2196895	59-piece tool kit	\$204.95



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# Crimpers, Strippers, Cutters & Miscellaneous Tools

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Xcelite

JAMECO  
BenchPro



Wire Cutters/Strippers/Crimpers

EXIMCORP

Pro's Kit

\* Web Code: GBU



Part No.	Manufacturer	Mfr. P/N	Description	Functions			Size (L" x W")	Pricing	
				Cut	Strip	Crimp		1	5
179902	BenchPro	GPL-171	4" leaf spring cutters w/ flush side cutting, forged steel, cushion grip	✓			4.0 x 2.6	\$3.95	\$3.59
34622	Eximcorp	ES2494	4.5" spring loaded diagonal flush cutters, heat treated forged steel, insulated handle	✓			4.5 x 2.6	3.59	3.15
2123320	BenchPro	GPL-101	4.5" spring return cutters w/ flush side cutting, carbon steel, vinyl grip	✓			4.5 x 2.6	4.95	4.49
35482	BenchPro	AX103	4.3" Diagonal wire cutters, rubber handles, 0.5" cutting blade, 45° angle	✓			4.3 x 2.1	8.49	6.95
2203750	Plato	175LX	5.6" Ergonomic, ESD-safe shear lead cutter with guard, blue grips	✓			5.6 x 2.0	7.95	6.95
146712	Xcelite	170M	5" general purpose shearcutters, flush cutting, red cushioned grips	✓			5.0 x 2.5	9.95	8.95
2188051	Xcelite	170D	5" general purpose shearcutter with static-dissipative black grips, up to 20AWG	✓			5.6 x 2.7	8.95	7.95
2188060	Xcelite	1178M	5.6" heavy-duty shearcutters, for IC pins, cables and harnesses, up to 14AWG, red grips	✓			5.6 x 2.7	14.95	13.49
161411	Pro's Kit	1PK-717	5" Diagonal wire cutters, insulated handles, cuts 0.08mm fine wire	✓			5.0 x 1.8	7.95	6.95
146739	Xcelite	MS54V	4" semi-flush oval head cutters, diagonal cut, green cushioned grips	✓			4.2 x 1.8	22.95	20.95
217921	Xcelite	MS54J	4" oval head-flush diagonal cutters, flush cut, green cushioned grips	✓			4.3 x 1.8	22.95	20.95
1536974	Xcelite	S475NJS	5" tapered head diagonal cutters, flush cut, green cushioned grips	✓			5.0 x 2.5	22.95	20.95
217904	Xcelite	MS549JV	4" tapered head diagonal cutters, flush cut, green cushioned grips	✓			4.2 x 1.8	22.95	20.95
217867	Xcelite	MS545JV	4" slim line tapered head cutters, diagonal flush cut, green cushioned grips	✓			4.2 x 1.9	22.95	20.95
2112292	BenchPro	TTK-061	UTP/STP wire stripper, 3-24 AWG, shielded/unshielded/twisted pair cable		✓		3.5 x 1.3	2.49	2.25
159185	Hanlong	HT-332D	2-blade rotary coax cable strippers, 4 settings for cable sizes 4-12mm		✓		3.9 x 0.7	12.95	11.49
114535	Hanlong	HT-336G	Ratcheted BNC crimper, for RG58, RG59, RG62, RG174, and fiber optic			✓	8.5 x 2.5	25.95	23.49
78992	Hanlong	HT-108	5" cutter/strippers, 10-30 AWG, spring return, screw-adjustable wire gauge	✓	✓		5.0 x 3.0	5.95	5.49
215889	BenchPro	JE-2022C	5" cutter/strippers, 10-24 AWG, spring return, dial to adjust wire gauge	✓	✓		5.0 x 3.0	5.49	4.95
159274	Hanlong	HT-1091	5" cutter/strippers, 20-24 AWG, spring-loaded, insulated grips, 45° angle	✓	✓		5.0 x 3.0	4.95	4.49
2112284	BenchPro	GTA-002	Automatic wire strippers, 10-24 AWG, spring-loaded handle w/ wire stopper	✓	✓		6.8 x 3.2	9.95	8.95
159291	Hanlong	HT-5023	6.6" cutter/strippers, 20-30 AWG, cuts steel wire, scale markings in AWG/mm	✓	✓		6.6 x 2.0	10.95	9.95
99443	Hanlong	HT-202A	Non-insulated terminal crimper, for D-sub and non-insulated connectors	✓		✓	7.3 x 1.5	10.95	9.95
159266	Hanlong	HT-213	D-sub crimper, crimps D-sub pins and sockets, works with 20-28 AWG wire	✓		✓	7.0 x 4.0	15.95	14.49
2196879	Pro's Kit	200-080	2-in-1 cutter/stripper tool, 14-26 AWG, hardened stainless steel blades	✓	✓		5.0 x 3.0	13.95	12.49
161200	Ideal	45-120	6" cutter/strippers, strips 12-20 AWG stranded, 10-18 AWG solid, plier nose	✓	✓		6.0 x 2.0	16.95	14.95
161218	Ideal	45-121	6" cutter/strippers, strips 16-26 AWG stranded, 14-24 AWG solid, plier nose	✓	✓		6.0 x 2.0	17.95	15.95
175098	BenchPro	GTA-006H	Automatic strippers, 8-22 AWG, spring-loaded handle with wire stopper	✓	✓		7.0 x 3.5	18.95	16.49
18797	Hanlong	HT-1041	7-in-1 wire-handling tool, 10-18 AWG, steel wire cutter, wire loop, red	✓	✓	✓	6.6 x 3.0	5.95	5.39
127862	Hanlong	HT-1042	7-in-1 wire-handling tool, 16-26 AWG, steel wire cutter, wire loop, blue	✓	✓	✓	6.6 x 3.0	5.95	5.39
127871	Hanlong	HT-1043	7-in-1 wire-handling tool, 22-30 AWG, steel wire cutter, wire loop, orange	✓	✓	✓	6.6 x 3.0	6.95	6.25
2153078	BenchPro	GRK-42N	8.5" cutter/crimper/stripper, ergonomic grip, 10-22 AWG, wire gauge markings	✓	✓	✓	8.5 x 3.0	7.19	6.25
2192376	BenchPro	HT-N5684	7.5" modular crimping tool, 8P8C/RJ45, 6P6C/RJ12, 6P4C/RJ11, 4P4C and 4P2C	✓	✓	✓	7.5 x 3.0	15.95	14.49
174676	BenchPro	TTK-070	Modular crimping tool, for RJ11 and RJ45 modular plugs, repeatable crimping	✓	✓	✓	8.5 x 2.2	27.95	24.95

Test/Tools

## BEST SELLING CRIMP CONTACTS

449342		234982	
* Order in multiples of 10			
Part No.	Mfr. Part No.	AWG	1 10
449342	205089-1	24-20	\$ .49 \$ .45
449351	205090-1	24-20	.49 .45
234982	66570-3	28-24	.35 .29
43377	500-055	28-24	* .15
43369	500-155	28-24	* .15

## molex Hand Tools for Mini-Fit™ Jr.

304928		304936	
<b>304928:</b> • Accepts wire range from 14-24 AWG • Insulated small handle spread design • Great for open-barrel terminals <b>304936:</b> • For the removal of Mini-Fit Jr™ crimped terminals series from their housings			
Part No.	Mfr. Part No.	Description	1 5
304928	63811-1000	Crimp tool	\$54.95 \$49.95
304936	11-03-0044	Extraction tool	27.95 24.95
* Crimping Tools — Enter Web Code GBU			

## Pro's Kit 34-Piece Security Bit Set

These bits match the security fasteners commonly used in today's electronic products. <b>Includes:</b> Torx bits: #6, #8 and #10; Tri-wing bits: #1, #2, #3 and #4; Security hex bits: 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16" and 1/4"; Security Torx bits: T8, T10, T15, T20, T25, T27, T30, T35 and T40; Spanner bits: 4, 6, 8 and 10mm; Phillips bits: #1, #2, #3 and #4; and 60mm magnetic bit extension that fits 1/4" hex driver		
Part No.	Description	1 10
223829	32-piece security bit set	\$13.49 \$12.49

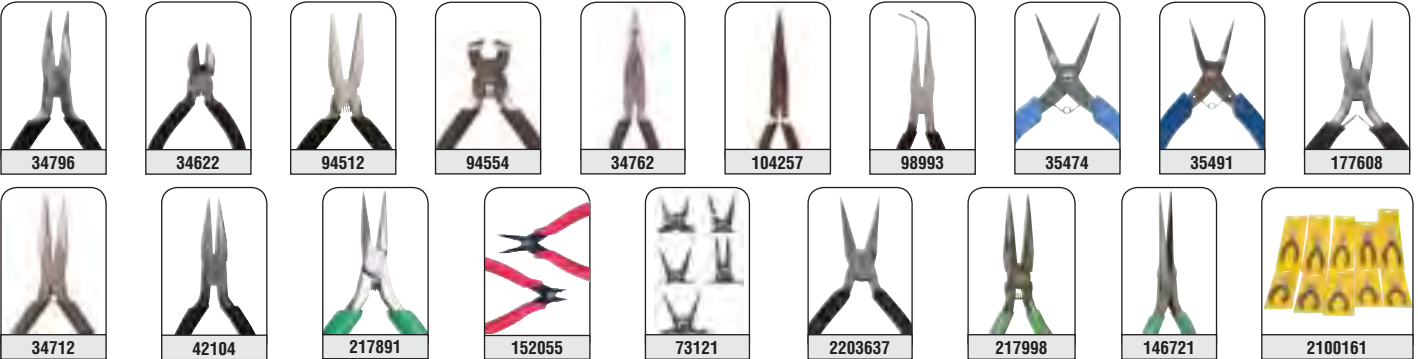


Xcelite EXIMCORP

JAMECO BenchPro

Pliers

\* Web Code: XPC



Part No.	Manufacturer	Mfr. Part No.	Description	Length	1	5
34796	Eximcorp	BN2497	Bent oval diagonal nose pliers with serrated jaws, forged steel, heat-treated, insulated grips *	4.5"	\$3.95	\$3.59
34622	Eximcorp	ES2494	Diagonal tapered spring loaded cutters, heat-treated, forged steel, spring-loaded, insulated handle *	4.5"	3.59	3.15
94512	Eximcorp	SN2468	Standard square nose pliers with serrated jaws, forged steel, heat-treated, insulated grips *	5.5"	3.59	3.29
94554	Eximcorp	NP2491	Standard nipper nose pliers, spring-loaded, forged steel, heat-treated, insulated grips *	4.25"	3.59	3.29
34762	Eximcorp	BNC2493	Standard bent oval nose pliers with cutters, serrated jaws, forged steel, heat-treated, insulated grips *	7.0"	3.59	3.29
104257	Eximcorp	SP2460	Sportman's straight square pliers, forged steel, heat-treated, insulated grips *	8.0"	3.59	3.29
98993	Eximcorp	SBP2459	Sportman's square bent pliers, forged steel, heat-treated, insulated grips *	7.5"	4.49	3.95
35474	BenchPro	GPL-204-R	Flat long nose, stainless steel, spring return, durable rubber handles, knurled jaws	5.3"	5.95	5.39
35491	BenchPro	AX104-R	Half round long nose, stainless steel, spring return, durable rubber handles, knurled jaws	5.3"	5.95	5.39
177608	BenchPro	GPL-172	Half round long nose, drop forged steel, heat treated, spring return, vinyl grips, knurled jaws	4.5"	5.49	4.95
34712	Eximcorp	NNC2480	Needle oval nose pliers with cutters and serrated jaws, forged steel, heat-treated, insulated grips *	5.25"	5.95	5.39
42104	Eximcorp	SN2481	Needle flat nose pliers with serrated jaws, forged steel, heat-treated, insulated grips *	5.25"	5.95	5.39
217891	Xcelite	L4V	Subminiature needle nose pliers, cushioned grips, general purpose use	4.0"	21.95	19.95
152055	Xcelite	S2K	Shearcutter pliers set with 5.6" needle nose plier and 5.2" electronic flush cutter, made of carbon steel	5.6" / 5.2"	21.95	19.95
73121	BenchPro	PLIERS 5PC-R	5-Piece precision stainless steel pliers set (micro cutting, micro round, long nose, flat nose, bent nose)	4.0"	19.95	17.95
2203637	Eximcorp	SN2483	Standard square nose flat smooth jaws, insulated handle *	6.0"	6.95	6.25
217998	Xcelite	LN54GV	Thin long nose pliers with cushioned grips, smooth jaws, general purpose use	5.0"	19.95	17.49
146721	Xcelite	NN7776V	Long needle nose flat pliers with cushioned grips, smooth jaws, general purpose use	6.0"	25.95	22.95
2100161	Eximcorp	EXIM10	10-piece pliers & cutters tool kit w/ the pliers marked above with an asterisk ( *) and 5.3" diagonal cutters	4.25-8"	28.95	25.59

## Hi-Speed Steel Step Drill Bit & Set

Drill multiple holes in thin material with the same bit, faster and easier. Each bit does the work of many drill bit sizes. You can drill holes in most materials such as plastic, metal and wood up to 1/8" thick.

- Heat-treated, high speed steel with titanium coating
- 2 flute design for faster, smoother and cleaner cuts

229657: 3/8" round shank

2169731: 1/4" quick change hex shank

- Includes 3 pieces: 3/16" - 1/2" 6-step; 1/4" - 3/4" 9-step; 1/8" - 1/2" 13-step

Part No.	Description	1	10
229657	3/16" - 7/8" 13-step	\$14.95	\$13.49
2169731	3-piece set	16.95	14.95

\* Drills and Bits — Enter Web Code NEJ

## SECURITY DRILL BIT SET KIT

- Star: #T8, T10, T15, T20, T25, T27, T30, T35, T40
- Hex: #5/64", 3/32", 7/64", 1/8", 9/64", 5/32"
- Tri-wing: #1, 2, 3, 4
- Fork: #4, 6, 8, 10
- Hex: #2, 2.5, 3, 4, 5, 6
- Magnetic bit holder: 1/4" hex
- Four-wing: #6, 8, 10

Part No.	Description	1	10	100
2131101	33-piece drill bit set	\$8.95	\$7.95	\$7.19

## PC Board Drill Bits

- Shaft diameter: 0.125"
- Use for drilling holes in glass PC boards

Part No.	Size	Diameter	1	10	100
1919537	1/8	0.125" .....	\$1.09	\$ .99	\$ .69
1919588	31	0.120" .....	1.09	.99	.69
1919300	32	0.116" .....	1.09	.99	.69
1919609	33	0.113" .....	1.09	.99	.69
1919553	35	0.110" .....	1.09	.99	.69
1919570	38	0.102" .....	1.09	.99	.69
16619	75	0.021" .....	2.49	2.25	1.95

## Mini-Drill Bit Kit

- Mini drill (26702)
- Mini drill stand (26711)
- Drill bit sizes 75 & 31 (P/Ns 16619/1919588)

Part No.	Description	Price
2113252	Mini-drill bit kit	\$62.95

## Mini-Drill and Stand

This Mini-Drill is excellent for drilling through circuit boards and protoboards. The drill comes with an array of drilling, grinding and sanding attachments. Drill stand is designed to function like a drill press.

Part No.	Description	Wt. (lbs.)	1	5	25
26702	GTT-103A drill	0.8	\$37.95	\$34.95	\$31.95
26711	GTT-104 stand	1.8	29.95	26.95	23.95

## DRILL AND GRINDER ACCESSORIES KIT AND CASE

Kit includes:

- Sanding bands: 19 pcs
- Collets: 4 pcs
- Dressing stone: 1 pc
- Felt wheels: 3 pcs
- Pointed felt wheel: 1 pc
- Grinding wheels: 14 pcs
- Rubber emery wheels: 2 pcs
- Sanding papers: 30 pcs
- Sanding shanks: 2 pcs
- Diamond cutters: 5 pcs
- Cloth wheel: 1 pc
- Felt wheels: 8 pcs
- Mandrels: 3 pcs

Part No.	Description	1	5
2151857	188-piece drill kit	\$22.95	\$20.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Screwdrivers, Calipers & Miscellaneous Tools

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



JAMECO BenchPro

## Ball-End, Hex Key, Nut Driver & Screwdriver Sets

**Bondhus/Felo Products:** Inferior tools cost extra money when something goes wrong. The cost of removing a stripped or broken screw head from a tight location or replacing a damaged tool exceeds the cost of purchasing a superior tool in the first place. Get it right the first time around with these reliable tools.

- Material: Protanium high torque steel
- Delivers perfect balance between tip strength and working angle
- Ergonomically designed anti-roll handle
- Bondhus: Made in USA; Felo: Made in Germany
- Ball-end inserts quickly into screw head up to 25 degrees
- Lifetime warranty

★ Web Code: CAQ

Part No.	Mfr.	Description	1	10
34041	BenchPro	6-pc. precision screwdriver set (slotted - 3/64", 1/16", 5/64", 5/32", 1/8", 9/64")	\$3.59	\$3.25
34059	BenchPro	6-pc. precision screwdriver set (Phillips #0 - 1/16", 5/64", 3/32", #1 - 1/8", 9/64")	3.25	2.95
99451	BenchPro	6-pc. long neck screwdriver set (slotted - (Dia. x L) 3/32" x 6 5/8", 1/8" x 7 5/8", 5/32" x 9 5/8", Phillips - #00 x 6 5/8"L, #0 x 7 5/8"L, #1 x 9 5/8")	10.95	9.95
168735	Xcelite	XP600 6-pc ESD-safe screwdriver set, slotted & philps, vanadium steel w/ black oxide tips and case	26.95	23.95
226106	BenchPro	6-pc. precision 50 mm torx screwdriver set (Torx - T5, T6, torx hex - T7, T8, T9, T10)	12.95	11.95
2096229	Felo	6-pc. screwdriver set (slotted - 9/64"; 5/32"; 7/32"; 1/4"; Phillips - #1; #2)	34.95	31.95
2204226	Xcelite	NPND600 6-pc ESD-safe precision nutdriver set, vanadium steel, 7/64", 1/8", 9/64", 5/32", 3/16", 7/32"	32.95	29.95
2119005	BenchPro	8-pc. ratcheting screwdriver bit set (3-slotted, 3 philips, 1 square)	1.19	.99
2157634	BenchPro	8-pc. folding hex wrench set, compact foldable design, 4" long	4.49	3.95
226094	BenchPro	11-pc. magnetic AWL prec. screwdriver set (slotted - .9, 1.2, 1.4, 1.8, 2.4, 3 mm, Phillips - #00, #0, #1)	4.79	3.59
2096173	Bondhus	12-pc. ball-end hex key set (.05"; 1/16"; 5/64"; 3/32"; 7/64"; 1/8"; 9/64"; 5/32"; 3/16"; 7/32"; 1/4", 5/16"	13.95	12.49
2153060	BenchPro	14-pc. mini screwdriver set with leather pouch and 12 flathead, philips, and Torx bits	9.95	8.95



JAMECO BenchPro

## 30 AWG Wire Wrap/Strip Tool

Recommended for use on 0.025" (0.63mm) square posts on 0.100" (2.54mm) center grids. The first 1-1/2 loop on the modified tool has wire insulation.

- Modified wrap for 30 gauge Kynar wire (pg 42)
- Knurled handle for easy grip
- 5" long
- Wire stripper stored in handle

Part No.	Description	1	5
2150361	Modified wrap tool	\$21.95	\$19.95



## Strip-Wrap-Unwrap Tools

- Tool tip made of tempered steel
- Spring steel cutter
- Use with 30 AWG wire on .025" square posts
- No solder necessary, see pg 42 for wire
- Wrap 1 to 2 turns of insulated portion of wire for secure connections
- 4.5" long

Part No.	Mfr. Part No.	1	5
34585	HSM30 (Modified)	\$29.95	\$27.95
236785	HSR30 (Regular)	29.95	27.95

★ Web Code: BBC

JAMECO BenchPro

## IC Pin Straightener

Straighten bent pins safely and easily with Jameco's IC pin straightener.

- Straightens 8/14/16/18/20/24/28/40/42-pin ICs
- Material: durable plastic
- Size: 3.3"L x 1.5"W x 0.4"H

Includes: Ground terminal

Part No.	Description	1	10	100
99363	IC straightener	\$7.95	\$6.95	\$5.95

## 6" & 12" Stainless Steel Rulers

**Tough and durable for on-site measurements**

- Etched markings in centimeters and inches
- Conversion table from inches to millimeters

Part No.	Cross Ref. No.	Length	1	10	100
2153107	GMT-106	6"	\$3.59	\$3.25	\$2.95
2153131	GMT-112	12"	4.95	4.49	3.95

JAMECO BenchPro

## T-Handle Reamer Tool

**Excellent for aluminum chassis work**

- For enlarging starter holes on panel mount components from 1/8" to 1/2" diameter
- T-handle for easy rotation of tool
- Handle: 3.3" long, tool: 5.3" long

Part No.	Description	1	10
151750	T-handle reamer	\$7.95	\$6.95

JAMECO BenchPro

## Metal Dial Caliper

**Measures in inches**

- Measures outside, inside & depth
- Accurate measurements every time
- Easy-to-read dial gauge
- Materials: metal
- Color: silver
- Length: 6" (150mm)

Includes: Fitted plastic storage case

Part No.	Description (min. reading)	1	5
116126	Inches (.001 inch)	\$19.95	\$17.95

★ Web Code: PAQ

JAMECO BenchPro

## Digital Display Calipers

**Metric and Inches**

- Hardened stainless steel
- Display: inches to 0.001; mm to 0.01
- Instructions for making internal, external, depth & step measurements
- One-year warranty

Includes: Fitted case and 1.5V silver oxide battery (replacement battery, P/N 140783, pg 109)

Part No.	Description	1	5
127482	Measures 6" (150mm)	\$29.95	\$26.95
2153545	Measures 8" (203mm)	31.95	28.95

JAMECO BenchPro

## Tweezers

★ Web Code: FAA

- 252929: Straight round, fine-point tip, stainless steel
- 253092: Curved fine-point tip
- 252938: Self-closing reverse-action tweezers; medium point tip; stainless steel
- 253113: Fine-point tip, insulated, anti-static
- 252912: Straight fine-point tip, tapered

Part No.	Length	Photo	1	10	25
252929	4.75"	1	\$2.95	\$2.49	\$1.95
253092	4.6"	2	2.95	2.49	1.95
252938	4.6"	3	3.95	3.59	3.25
253113	4.75"	4	2.95	2.49	1.95
252912	4.75"	5	3.59	3.25	2.95

## 1/4-Watt & 1/2-Watt Resistor & Capacitor Lead Forming Tool

- Watt size indicates appropriate package size
- Bends lead length in 0.05" increments
- Lead spacing: 1/4W: 0.4"-1.5"; 1/2W: 0.5"-1.5"

Part No.	Description	Size (L" x W")	1	10
106884	1/4W & 1/2W	5.4 x 1.5	\$4.95	\$4.49

JAMECO BenchPro

## 5" Steel Hemostats

- Grade 410 A.I.S.I. stainless steel
- Three locking positions

Part No.	Cross Ref. No.	Description	1	10
115107	HEMO1	5" straight	\$3.95	\$2.95
115115	HEMO2	5" curved	3.95	2.95

## SOLDER REWORK CHEMICALS

CHIPQUIK

These work great with both leaded and lead-free rework.

- Solder pastes are 96.5% tin, 3% silver and 0.5% copper
- Each includes a 35gram/10cc syringe with plunger and tip

Part No.	Description	Price
2097441	Lead-free, no clean solder paste	\$29.95
2098232	Water-soluble solder paste	36.95

2097441



# Tweezers, Magnifying Lamps & Anti-Static Products



## 4-Piece Steel Tweezer Set



- 4 styles of stainless steel tweezers, one self-locking

Part No.	Description	1	10	100
10735	4-piece tweezer set	\$5.95	\$5.49	\$4.95



## Vacuum Tweezers

- Pick & place small parts of all kinds: glass slides, coins, optics, SMDs, film, etc.
- Easy interchangeable tips
- ESD safe body



207239

Part No.	Mfr.	Includes	1	5
207239	Xytronic	4 tips/cups	\$19.95	\$17.95
2183939	Xytronic	3 tips/cups	24.95	22.95



## PLCC & DIP IC Extractors

\*Web Code: MAB



Part No.	Manufacturer	Description	1	10	100
16838	BenchPro	DIP	\$1.95	\$1.75	\$1.49
2157600	BenchPro	3-prong	3.95	3.59	3.25
2173175	BenchPro	PLCC	3.19	2.69	2.29
16766	Velleman	PLCC	3.95	3.49	2.95

## BEST SELLING HAND TOOLS

Part No.	Description	Price
35482	4.3" diagonal wire cutters	\$8.49
215889	5" wire cutter/strippers, 10-24 AWG	5.49
159291	6.6" wire/cutter/stripper, 10-24 AWG	10.95
127862	7-in-1 wire handling tool, 16-26 AWG	5.95
159266	D-sub crimper, 20-28 AWG	15.95
114535	Ratcheted BNC crimper	25.95



## Magnifying Lamps

For anyone working with precision assembly, inspection or design, these magnifying lamps are essential for the workbench. Whether with incandescent or LED light, our selection will have you choose what best suits your needs to help reduce eye strain and vision fatigue. Easily view the smaller details today!



Part No.	Dioptr	Lamp Size	Length	Shape	Type	# of Bulbs	Watts	Color	Wt. (lbs.)	1	5
22710	3	4"Diameter	30"	Circular	INC	1	60	Beige	2.9	\$21.95	\$18.95
2210618	3	5"Diameter	39"	Circular	LED	90	5.4	White	5.6	76.95	71.95
100829	3	5"Diameter	45"	Circular	INC	1	22	Black	7.3	59.95	54.95
149981	3	5"Diameter	45"	Circular	INC	1	22	White	7.3	59.95	54.95
2120330	3	7"Diameter	30"	Circular	LED	4	3.4	White	21	129.95	116.95
217517	3	7"L x 4.5"W	47"	Rectangular	INC	3	9	Beige	7.6	79.95	74.95
2196924	5	5"Diameter	36"	Circular	LED	90	5.5	White	6.8	99.95	89.95
2210600	5	5"Diameter	39"	Circular	LED	45	9.4	White	5.4	94.95	84.95
197456	5	5"Diameter	40"	Circular	INC	1	22	White	7.1	89.95	79.95
2210597	5*	7"Diameter	36"	Circular	LED	102	16.8	White	10.8	245.95	224.95

\*Also contains 5 UV LEDs    †INC = Incandescent

## Anti-Static Heel Strap

- Discharges static without restricting your mobility
- Ground strap length: 24"L



Part No.	Description	1	10	25
2204437	Strap w/ 1MΩ resistor	\$5.49	\$4.95	\$4.49



## Anti-Static Work Mats

These mats are made of attractive semi-conductive vinyl that provide adequate discharging yet will not short leads or pins.



Part No.	Dimensions	Wt. (lbs.)	1	10	25
10576	11.3" x 22"	0.7	\$9.95	\$8.95	\$7.95
10584	19.5" x 23.5"	1.1	13.95	12.49	10.95
2130853	19.7" x 23.6"	1.1	14.95	13.95	12.95
236541	23.5" x 27.5"	1.4	22.95	20.95	17.95
2152075	24" x 48"	3.9	69.95	64.95	59.95

\*Anti-Static — Enter Web Code XAA



## Field Service Static Kit

- 4 pocket for ESD safe storage
- 10' ground strap and 6' wrist strap share on one ground point
- Size: 2' x 2.13'



Part No.	Cross Ref. No.	1	5	25
2113720	8PK-AS07-1	\$15.95	\$14.95	\$13.95

## 22"L Anti-Static Plastic DIP IC Storage Rails & Rubber Rail Stops



29524 (ICs not included)  
29516: .300" rail fits 8, 14, 16, 18, 20 and 22-pin ICs  
29524: .600" rail fits 24, 28, 36 and 40-pin ICs  
29583: Rubber stops used to plug plastic rail ends

Part No.	Product No.	Description	1	10	100
29516	RIC20	.300"W rail	\$2.29	\$2.25	\$2.22
29524	RIC220	.600"W rail	.29	.25	.22
29583	RRS	Rubber stop	*	.09	.07



\*Web Code: DAW

## Anti-Static Wrist Straps

- Comfortable, adjustable black Velcro wrist strap
- The coiled grounding cord has banana plug and alligator clips
- Extended cord: 9'L (2131266: 6'L)



Part No.	Mfr.	Color	1	10	100
34552	BenchPro	Blk/yellow	\$6.95	\$6.49	\$5.95
2131266	Velleman	Black/yellow	4.95	4.49	3.95
2202087	3M	Disposable	3.95	3.59	3.19

## Conductive Anti-Static Bags and Foam

Don't get zapped!

Protect your investment with these inexpensive bags and ensure a safe work area with our conductive anti-static foam.



Part No.	Description	1	10	100
249519	4" x 6" anti-static bags, pink	* \$1.19	\$1.12	
249527	5" x 7" anti-static bags, pink	* .19	.12	
2202247	5" x 7" anti-static zip, gray	.39	.29	.19
78650	8" x 10" anti-static bags, gray	.39	.29	.25
13864	Anti-static foam	12.95	11.95	10.95

## Visor Magnifier w/ Light

- Power supply: 4 AAA batteries (not included)
- Adjustable dioptery: 1.8/2.3/3.7/4.8
- Size: 7.9"L x 2.4"W x 5.5"H



Part No.	Mfr.	Part No.	Wt. (oz.)	1	10
2131119	VTMG6		5.3	\$7.95	\$6.95

## LED Lighted Helping Hand

- Built-in LED light
- 2.5" magnifier lens with adjustable neck
- 2 alligator clips
- Soldering iron holder
- Size: 10.5"L x 5.2"W x 2.6"D

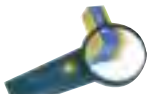


Part No.	Mfr.	Part No.	1	5
2168448	55133		\$14.95	\$13.95



## Illuminated 1.5X Magnifier

- 3.5"Dia. x 7.5"L
- Light requires 2 AA batteries (not included, recommend P/N 198707, pg 109)



Part No.	Description	1	10
149542	Illuminated magnifier	\$3.59	\$3.25

## BEST SELLING SOLDERING STATIONS

Part No.	Description	Page	Price
146595	5W to 40W, analog	125	\$59.95
2082775	80W, analog	123	79.95
2099198	100W, digital	123	399.95
2144577	700W, digital	123	299.95
2174741	1000W, digital	123	249.95

\*For additional products, availability and specifications visit [Jameco.com](http://www.Jameco.com) and enter the Web Code in the product search box

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# Heat Guns & Soldering Equipment

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## JAMECO BenchPro Glue Gun and Glue Sticks

- Adheres to PCBs, cardboard, wires, metal and cloth
- Silicon nozzle
- Electronic heating
- Trigger action
- Utilizes 100mm long gluesticks (2 sticks included) • Size: 7.3"L x 6.3"W



Part No.	Description	1	5	25
72696	Glue gun	\$7.95	\$7.29	\$6.49
78633	Glue sticks (6/pk)	2.95	2.49	1.95

## Weller Light-Duty Battery-Powered Soldering Irons

Battery-powered cordless soldering iron for ultimate portability.

- Over 100 solder joints with new batteries
- Long lasting iron-plated conical tip
- Improved heater performance
- Batteries included

2196043



Part No.	Mfr. Part No.	Wattage	1	5
2196035	BP650MP	4.5	\$19.95	\$17.95
2196043	BP865MP	6-8	27.95	24.95

## Weller 18-Watt Pro Series Soldering Iron

- Heats up to working temperature in just 35 seconds
- Up to 900°F temperature
- Co-molded grip for a comfortable feel
- Performance equivalent to a 60 watt iron
- Designed be self-standing, no stand is needed
- Tips use a phono jack and plug for easy tip exchange • UL and CUL listed
- Ideal for hobbies, kits, radios and electronics

Includes: Charger and WPS10 soldering tip

Part No.	Mfr. Part No.	Description	1	5
2153810	WPS18MP	18-watt iron	\$34.95	\$31.95
2158637	WPS11	0.03125" chisel tip	10.95	9.95
2158629	WPS10	0.03125" conical tip	10.95	9.95

## Weller 20-Watt Soldering Iron

A high-quality, mains-powered soldering iron for general purposes.

- Power supply: 20W/110VAC
- UL approved
- Cord length: 5 feet

Includes: Iron stand

Part No.	Mfr. Part No.	1	5
2131151	VTS20U	\$9.95	\$8.95

## XYTRONIC 25-Watt Thermally Balanced Soldering Iron

The XY200GX is a thermally balanced soldering iron for the professional or hobbyist.

- 120VAC; 6' cord • UL listed
- 25-watt power consumption
- Interchangeable tips (pg 127)
- Length: 8.0" • One-year warranty

Includes: 1.6mm conical tip

Part No.	Mfr. Part No.	1	5	25
129040	200GX-25W	\$14.95	\$13.49	\$11.95

\*Soldering Stands — Enter Web Code YAU

## NTE Heat Guns and Strippers

All Master® products are made in the US from superior quality materials and the finest craftsmanship. Heat guns are ideally suited for drying, heating, welding, shrinking, soldering, desoldering and many other applications where heat is required.

- 2076501: • No-slip adjustable stand
- Weight: 4.0 lbs.
- 191943: • 3-pos. switch (hot/off/cool)



Part No.	Mfr.	Product No.	Description	Watts	Heat Setting (°F)	Temp. (°F max.)	1	5
2117413	NTE	HG300-D	Mini heat gun	350	482-662	662	\$24.95	\$22.49
254925	BenchPro	1001A	Economical heat gun	1200	600 & 1000	1000	44.95	39.95
76865	BenchPro	G1HG1	Heat gun/stripper	1500	600 & 1100	1100	44.95	40.95
2076501	Master	HG-501A	Industrial heat gun (23 CFM)	1680	750	750	134.95	124.95
191943	Weller	6996C	Industrial heat gun	250	750-800	800	149.95	134.95
2007062	BenchPro	1004	Accessory kit for P/N 254925	—	—	—	10.95	9.95

## XYTRONIC 16 to 30-Watt Variable Soldering Iron & Stand

- 116572: Length: 7.5"
- 36329: • Black anodized steelbase — 5.3"L x 3.3"W
- See below for replacement sponge (P/N 134631)
- Fits most soldering irons .85" dia.

Includes: Sponge

Part No.	Description	1	5	25
116572	258VL soldering iron ...	\$19.95	\$17.95	\$15.95
36329	Soldering stand	5.95	5.39	4.79
134631	Sponge (for P/N 36329)	3.95	3.59	3.29

## BEST SELLING SOLDER TIPS

Part No.	Mfr. Part No.	Description	Price
35238	44-415405	Semi-chisel wide 1/8"	\$4.49
35115	44-415404	Conical chisel 1/16"	4.49
35078	44-415402	Semi-chisel 1/32"	4.49
35326	44-415401	Conical bevel 1/32"	4.95
35334	44-415403	Conical sharp 1/64"	4.49

## BEST SELLING VISES

Part No.	Mfr. Part No.	Size (LxWxH)	Wt. (lbs.)	Price
134439	PVJR 201	2" x 1" x 6.8"	1.4	\$29.95
251791	209	2" x 1" x 7.5"	0.8	35.95
27131	#381	5" x 4" x 6.3"	3.3	69.95
262116	GV-300-R	5" x 4" x 6.3"	3.3	39.95
127167	GV-190	10" x 2.5"	2.1	19.95

## Weller LED Soldering Irons

- 3 high-temperature LEDs with 25 lumen light intensity
- Each iron includes soldering aid tool, tip and user's manual
- 2174901/2174928 includes soldering aid tool, lead-free solder and 2 spare soldering tips

Part No.	Mfr. Part No.	Description	1	5
2174899	SP15NUS	15W soldering iron	\$16.95	\$14.95
2174901	SP25NKUS	25W soldering iron kit	22.95	20.95
2174936	SP40NUS	40W soldering iron	22.95	20.95
2174928	SP40NKUS	40W soldering iron kit	26.95	23.95
2174944	SP80NUS	80W soldering iron	29.95	26.95

## Weller 40 & 60W High-Performance, Economical Soldering Irons

- Iron length: 9"
- 120VAC; 6' cord with 3-prong plug
- High-performance double-wound nichrome heating element
- Flexible, burn-resistant silicon cable

Part No.	Description	1	5	25
224602	40W soldering iron	\$13.95	\$12.49	\$10.95
195223	60W soldering iron	14.95	13.49	11.95
226018	Conical tip for P/N 224602	2.95	2.75	2.49

## Weller 25 & 35-Watt High-Quality Soldering Irons

- 120VAC @ 60Hz
- Interchangeable heater elements
- Lightweight handle with cushioned grip
- Quick change knurled collar • Length: 9"

Includes: Power cord & ST3 tip (pg 125)

Part No.	Mfr. Part No.	Description	1	5
170587	WP25	25W solder iron	\$44.95	\$39.95
192102	WP35	35W solder iron	59.95	53.95
146608	ST1	Screwdriver tip 1/16"	5.95	5.39
146616	ST3	Screwdriver tip 1/8"	6.95	6.25
192145	ST6	Screwdriver tip .031"	5.39	4.89
146624	ST7	Conical tip 1/32"	5.95	5.39

## XYTRONIC 60-Watt Replacement Soldering Iron

- Compatible with the following XYtronic soldering stations: 168-3C, 168-3CD, 9-60A and 9-60D.

Part No.	Mfr. Part No.	1	5
2144649	XY-207ESD	\$39.95	\$35.95

\*Soldering Irons — Enter Web Code QAS

- Cord strain relief for extended life
- Durable cable with 5-foot reach



LED Illumination

## Weller® 100-Watt Soldering Iron

- "Closed loop" method of controlling max. tip temperature
- Nominal heat-up time with 700°F tip is 110 seconds
- Length: 6"
- 120VAC @ 60Hz input • Weight: 0.7 lbs.



192081



**Includes:** CT6F7 (0.375" screwdriver tip; 700°F)

Part No.	Mfr. Part No.	Description	1	5
192081	W100PG	Solder iron .....	\$69.95	\$62.95
192090	CT6F7	.375" screwdriver tip ..	8.95	7.95

## Weller® 25 to 125-Watt Cordless Soldering Iron Kit

- Self-igniting and instant heat
- Adjust. temperature (25W to 125W)
- Auto switch off
- Visible gas level
- Additional tips can be special ordered
- 2 hours of heat on average tank setting
- Use with butane refill (P/N 2097491, pg 130)



**Includes:** Soldering tool, hot blower tip, hot knife tip, 2.4mm and 4.8mm double flat tip, cleaning sponge, storage case and instruction manual

Part No.	Mfr. Part No.	1	5
152207	PSI-100K	\$109.95	\$99.95

## Jameco ValuePro 30 to 100-Watt Soldering Kit

**Includes:** 30W soldering iron

- 100W soldering gun with extra tip
- Manual desoldering pump
- Mini third-hand board/component holder
- Soldering aid tool
- Lead solder
- Size: 13.8"L x 11"W x 3"H



Part No.	Product No.	Wt. (lbs.)	1	5
684596	GSR-600A	4.0	\$39.95	\$35.95

## Weller® Soldering Tip Care

- Tip thinner and activator • 1.5 oz.



Part No.	Mfr. Part No.	Price
2188043	51303199	\$13.95

## SOLDERING AND DESOLDERING

141786

For a complete selection of soldering and desoldering accessories, go to page 129.

Part No.	Description	Price
170457	99.3 SN, 0.3 CU, 15 feet .....	\$3.25
141786	60 SN, 40 PB, 1.0 lb. ....	32.95
2158178	63 SN, 37 PB, 1.0 lb. ....	29.95

**For Prototyping Boards, see page 134**

**\*Prototyping Boards — Enter Web Code PBH**

## Weller® 40-Watt Soldering Station

- Lighted on/off switch
- Adjustable power from 5 watts to 40 watts
- 120V @ 60Hz
- Temperature is electronically controlled from 350°F to 850°F
- Illuminated on/off switch • Light weight pencil iron
- Size: 5.5"L x 4.5"W x 3.5"H • Weight: 1.9 lbs.



**Includes:** ST3 1/8" screwdriver tip and manual

Part No.	Mfr. Part No.	1	5
146595	WLC100	\$59.95	\$53.95

## Weller® Soldering Tips

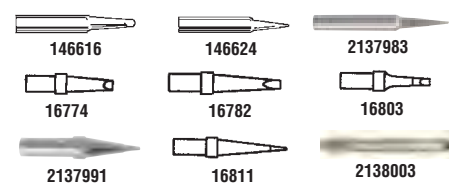
**ST Series:** Replacement tips for WLC100, WP25, WP30, WP35 soldering irons and stations.

Precision ground copper tips plated with iron, nickel and chromium

**\*Web Code: NAB**

**ET Series:** Replacement tips for PES51 soldering pencil (P/N 2082847). Contains a sensor hole in base of tip fitted with a stainless steel liner

**MT Series:** Replacement tips for SP23 and SP23D soldering irons. Solid copper tips, nickel-plated and tinned



Part No.	Mfr. P/N	Description	1	5
192145	ST6	Screwdriver tip 1/32" ...	\$5.39	\$4.89
146608	ST1	Screwdriver tip 1/16" .....	5.95	5.39
2137975	ST2	Screwdriver tip 1/10" .....	5.95	5.39
146616	ST3	Screwdriver tip 1/8" .....	6.95	6.25
146624	ST7	Conical tip 1/32" .....	5.95	5.39
2137983	ST5	Single flat tip 1/32" .....	6.95	6.25
16774	ETA	Screwdriver tip 1/16" .....	6.95	6.25
2138020	ETH	Screwdriver tip 1/32" .....	6.25	5.59
16782	ETJ	Long screwdriver tip 1/32" ..	6.95	6.25
16803	ETR	Narrow screwdriver tip 1/16" ..	6.95	6.25
2137991	ETP	Conical tip 1/32" .....	6.95	6.25
16811	ETS	Long conical tip 1/64" .....	6.95	6.25
2138011	ETO	Long conical tip 1/32" .....	6.95	6.25
2138003	MT1	Cone-shape tip 1/8" .....	7.95	6.95

## Weller® 50W Soldering Stations

- Manual temperature setting
- Electronic temperature control
- Power-on LED indication
- Input voltage: 115VAC
- Input power: 50VA max.
- Temp. range: 374°F to 896°F (2130626); 302°F to 842°F (2196801)
- Size: 7.3" x 4.0" x 3.5" • Weight: 1.6 lbs.

**Includes:** AC cord, iron stand and sponge

Part No.	Mfr. Part No.	Description	1	5
2196801	VTSS4NU	48W station ....	\$24.95	\$22.49
2130626	VTSS5U	50W station .....	29.95	26.95
2174864	BITS5	Conical tip .....	2.65	2.39

**\*Soldering Irons — Enter Web Code QAS**

**\*Soldering/Desoldering Stations — Enter Web Code GEJ**

**\*Soldering Tips & Sponges — Enter Web Code NAB**

## Weller® 60-Watt ESD-Safe Soldering Station

- Temperature controllable: 600°F, 700°F or 800°F
- Closed-loop method of controlling maximum tip temperature to protect sensitive components
- Ferromagnetic temperature sensor, no adjustments necessary
- Quick disconnect plug for soldering iron and lighted on/off switch
- Impact-resistant plastic power unit
- Input: 120VAC @ 60Hz
- Size: 5.9"L x 4.5"W x 3.6"H • Weight: 4.0 lbs.



**Includes:** Power unit, soldering pencil with PTA7 tip (below), stand and sponge

Part No.	Mfr. P/N	Description	1	5
170552	WTCPT	Solder station .....	\$189.95	\$179.95
192161	TC201T	Replacement iron .....	99.95	94.95
192188	PTA7	Screwdriver tip 700°F	6.25	5.59

## 60 & 80W Lead-Free Digital Soldering Stations

**Grounded Soldering Tip**

- 150°C to 480°C (302°F to 896°F)
- Fully grounded
- Insulated ceramic heating element for rapid heat-up and heat recovery
- Heater insulation exceeds 100MΩ
- Zero voltage circuitry eliminating high voltage spike and magnetic field generation
- Size: 4.1"L x 3.5"W x 3.5"H • Weight: 2.5 lbs.



**Includes:** Manual, soldering iron w/ 1/32" tip, stand, tip cleaner and sponge

Part No.	Mfr. Part No.	Description	1	5
2174733	LF-389D	60W station .....	\$59.95	\$53.95
2193782	LF-399D	80W station .....	64.95	58.95

Part No.	Mfr. Part No.	Description	1	5
156814	XYB01	1/32" tip .....	\$4.95	\$4.49
156822	XYB04	1/16" tip .....	4.49	3.95
134631	SP715	Sponge .....	3.95	3.59

## Weller® 50-Watt Analog & Digital Display Soldering Stations

Innovative heater and sensor combination for quick heat-up and rapid temperature recovery.

- Tip temperature offset capability allows user to reset temperature readings to match tip size and style
- Wireless temp. lockout
- Auto power-down after 90 minutes of inactivity • Temp. accuracy: ±9°F
- Temperature range: 350°F to 850°F • ESD safe
- Size: 5.9"L x 4.5"W x 3.6"H • Weight: 4.0 lbs.



**Includes:** PES51 50W soldering iron with ETA tip, PH50 stand and sponge, and adjustment tool

Part No.	Mfr. Part No.	Description	1	5
217461	WES51	Analog .....	\$134.95	\$128.95
233533	WESD51	Digital .....	189.95	179.95
2082847	PES51	Soldering iron .....	49.95	47.49
2082783	WCC104	Replacement sponge ..	3.95	3.59

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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125



# Soldering Equipment

3 LEVELS OF SAVINGS		
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## 70-Watt Analog Lead-Free Soldering Stations

- Input: 110-120VAC @ 60Hz
- Soldering iron assembly
- Adjustable knob for temperature setting
- Weight: 5.3 lbs.



**Includes:** soldering station, soldering stand with cleaning pad, soldering iron and manual

- With nichrome heating element & K-type thermocouple sensor • Size: 8.0"L x 5.2"W x 3.8"H
- LED to indicate power (green), heater on (red)
- Temp. acc.:  $\pm 3^{\circ}\text{C}$  • Uses model 209 soldering iron
- Temp. range: 200°C to 450°C (329°F to 842°F)

Part No.	Mfr.	Part No.	Description	1	5
1950711	169		70W analog ...	\$84.95	\$79.95

## Weller 80-Watt Soldering Station

- 120V @ 60Hz
- Lighted on/off switch
- Adjustable power from 5 to 80 watts
- Temperature: 350°F to 900°F
- Size: 5.5"L x 4.5"W x 3.5"H
- Weight: 2.1 lbs.



**Includes:** MTG20 3/8" chisel tip, iron stand, sponge, AC cord and manual

Part No.	Mfr.	Part No.	Description	1	5
2082775	WLC200		Soldering station ..	\$79.95	\$72.95
2082821	MTG22		3/8" cone tip .....	13.95	12.49
2082783	WCC104		Sponge .....	3.95	3.59



## 70-Watt Digital ESD-Safe Soldering Station

- Adjustable temp. control
- Temp. range: 122°F to 896°F (50°C to 480°C)
- Ceramic heating element and sensor ensures rapid heat-up temperature and fast thermal recovery
- Password protected temperature setting



**Includes:** iron stand, brass wool cleaner, sponge, AC cord, conical tip

Part No.	Mfr.	Part No.	Description	1	5
2174611	FX888D-29BY/P		.....	\$139.95	\$125.95



## 90 & 120-Watt ESD Safe, Digital Lead-Free Soldering Stations

- Input: 220-240VAC @ 50Hz, 100-120VAC @ 60Hz
- 0-volt. switching circuitry
- Precise temp. regulation
- Heater/sensor failure detection
- PTC sensor for quick heat-up time
- Temperature range: 2143970: 100°C to 500°C (212°F to 932°F); 2181503: 200°C to 500°C (392°F to 932°F)
- Temp lock out feature, password protected
- High-quality sensor and heat transfer technology
- Aluminum housing • Size: 4.4"W x 6.2"H x 5.4"D



**Includes:** Separate iron holder with brass tip cleaner, soldering tip and AC cord

Part No.	Mfr.	Part No.	Wattage	1	5
2143970	LF-3000		90W .....	\$109.95	\$99.95
2181503	LF-3200		120W .....	149.95	134.95

## Replacement Sponges for Legacy Model Soldering Stations

134640: For 138-3

134631: For XY-60D, XY-379 & XYT379-C

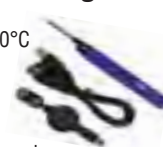


236460

Part No.	Mfr.	Part No.	Size (in.)	1	5	25
134640	SP815		1.8 x 1.8 ....	\$2.95	\$2.59	\$2.29
134631	SP715		1.7 x 2.1 .....	3.95	3.59	3.29
236460	SP715		1.7 x 2.1 .....	2.95	2.59	2.29

## 6-Watt Portable USB Soldering Iron

- Professional grade soldering tip
- Achieves max. temp. of 896°F/480°C via 9V battery or USB connection
- Rating: 5V @ 800mA
- Built-in ultra bright LED light
- Heats up in just 20 seconds
- Perfect for soldering SMD components
- Energy-efficient, only consumes approx. 5W



**Includes:** 9V battery adapter, USB cable Y-adapter and sponge

Part No.	Mfr.	Part No.	Size	1	5
2173618	MSD-086		5.8"L x 0.6"W ..	\$19.95	\$17.95

\*SMD Rework Stations — Enter Web Code NAT

\*Soldering/Desoldering Stations — Enter Web Code GEJ

## 100-Watt Soldering & Desoldering Station with Fume Extractor



- Input voltage: 110-120VAC @ 60Hz
- Soldering iron: 32VAC/100W 150°C to 480°C (302°F to 896°F) • Size: 4.2"W x 3.6"D x 5.0"H
- Desoldering iron: 32VAC/100W 300°C to 450°C (572°F to 842°F) • Weight: 28 lbs.
- Heater and sensor failed detection and temp. lockout features • Digital temp. readout

**Includes:** 307A soldering iron, DIA100 desoldering iron, soldering stands, fume extractor, AX205 micro cutting pliers, 5-piece high precision tweezers, filter and cleaning accessories, AC power cord and manual

Part No.	Description	1	5
2099198	LF-8800 station .....	\$399.95	\$379.95
2095509	Desolder tip 1.2mm .....	8.95	7.95
2095517	Desolder tip 1.5mm .....	8.95	7.95

## 700-Watt Lead-Free Multi-Function Surface Mount Rework Station

- 3-in-1 design: soldering, desoldering, hot air
- Heater/sensor failure detection
- Auto cooling design
- Temp. range: 212°F to 896°F
- Weight: 24.5 lbs.



**Includes:** AC cord, 5-piece tweezers, replacement heating element, cleaning element, 4-piece nozzle set, iron/hot air gun holders and IC popper

Part No.	Mfr.	Part No.	1	5
2144577	LF-855D		\$299.95	\$279.95

## CHIPQUIK SMD Removal Kit

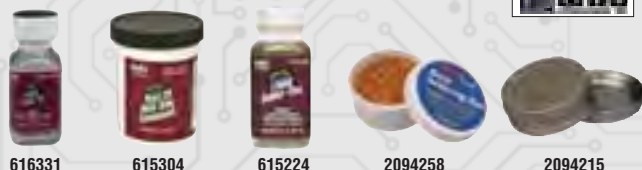
- Potential damage to printed circuit boards is eliminated
- 2.5" of CHIPQUIK® material removes 1250-1500 SMD pins



**Includes:** 2.5 feet removal alloy material, 1cc syringe rework paste flux, alcohol pads for cleaning and complete instructions

Part No.	Description	1	5
141305	SMD removal kit .....	\$19.95	\$17.95

## BEST SELLING WORKSHOP CHEMICALS AND COMPOUNDS



Part No.	Mfr.	Mfr. Part No.	Description	1	5
616331	GC Electronics	22-023	Conductive silver paint .....	\$59.95	\$53.95
195004	Caig/DeoxIT	D5S-6	Contact cleaner .....	17.95	15.95
2188262	MG Chemicals	415-1L	Ferric chloride solution .....	17.95	15.95
615304	GC Electronics	10-8106	Heat sink compound .....	29.95	26.95
481764	Techspray	2507-N	Solder flux, dispensing pen ....	9.95	8.95
615224	GC Electronics	10-4202	Solder flux liquid .....	9.95	8.95
2094258	Caig/DeoxIT	RSF-R80-2	Solder flux, rosin paste .....	10.95	9.95
2098208	Chipquik	SMD291AX10	Solder paste, syringe .....	27.95	24.95
2094215	Caig/DeoxIT	TPC-14	Soldering tip cleaner .....	9.95	8.95

## SOLDERING ACCESSORIES



Be prepared to get to work and make sure you have all the tools you need with these best selling soldering necessities.



### Solder

Part No.	Mfr.	Description	Price
170457	ValuePro	15 ft solder tube, 0.031" Dia., 99.3% tin, 0.7% copper .....	\$3.25
141786	ValuePro	1 lb. solder roll, 0.031" Dia., 60% tin, 40% lead .....	32.95

### Circuit Board Holders

Part No.	Mfr.	Description	Price
26690	BenchPro	Third hand tool w/ 3.5" magnifying lens, adjust. clip jaws ...	\$7.95
684844	Panavise	Circuit board holder w/ 8 rotating pos. and lateral notches	89.95

### Cleaning Tools

Part No.	Mfr.	Description	Price
153322	BenchPro	6" acid brush tool with metal handle .....	\$7.95
41082	ValuePro	5 ft solder wick desoldering braid, 0.079" wide .....	1.95
158131	BenchPro	6 oz. plastic pump bottle with dispenser cover .....	14.95



# Soldering Equipment, Solder Kits & Tips

## 80-Watt SMD Rework Stations



2120541



2099219

- Thermocouple sensor for stable temp.
- Rapid heat-up and recovery

**2120541:** • Size: 7.4"L x 5.0"W x 3.3"H • Wt.: 2.6 lbs.  
• Adjustable temperature: 482°F-842°F (250°C-450°C)

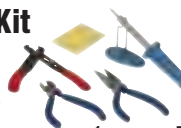
**2099219:** • Size: 8.8"L x 6.0"W x 4.5"H • Wt.: 6.8 lbs.  
• Adjustable temperature: 392°F-896°F (200°C-480°C)

**Includes:** Base power unit, sponge, stand, surface mount tweezer iron and stand for tweezers

Part No.	Description	1	5
2120541	SMD rework tweezer station .....	\$59.95	\$54.95
2099219	Soldering & tweezer combo station ...	139.95	129.95
156814	SMD conical tip (1/32") .....	4.95	4.49

## 30-Watt Solder Tool Kit

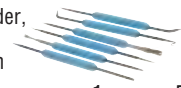
**Includes:** Soldering iron with stand, long nose pliers, wire strippers, side cutters & sponge



Part No.	Description	1	5
358598	7-piece tool soldering kit .....	\$15.95	\$15.49

## 6-Piece Solder Aid Tool Kit

**Includes:** Various tips: chip holder, spacer, reamer, lever, needle, knife, fork shaft, hook and brush



Part No.	Cross Ref. No.	1	5
2096000	GSR-107 .....	\$6.95	\$6.25

## 600 & 1000-Watt Lead-Free Hot Air SMD Rework Stations

- Incorporates the largest pump in the industry
- Long life ceramic heater insures accurate and sufficient heat where you need it
- Automatic cooling mode protects the heating element
- Adjustable air-flow: 2128032: 1.5-40L/min; 2174741: 1.5-7.7L/min.
- Nichrome heating element
- Power supply: 100-120VAC @ 60Hz or 220-240VAC @ 50Hz
- Electronically controlled temperature system with digital readout in preset and actual temperature
- Hot air temp. range: 100°C - 480°C (212°F - 896°F)
- Temp lock-out feature, password protected
- Sensor/pump failure detection
- Static-free circuit design • 25W diaphragm pump
- Size: 7.3"W x 5.3"H x 9.6"D • Weight: 10.8 lbs.

2128032



2174741



2174709



**2128032 includes:** Extra 600W heater, 4 focus hood tips, 5 stainless steel anti-magnetic tweezers, IC popper for IC extraction

**2174741 includes:** 2 focus hood tips, 5 stainless steel anti-magnetic tweezers, IC extractor

Part No.	Mfr. P/N	Description	1	5
2128032	LF-852D	600W station .....	\$225.95	\$199.95
2174741	LF-852D-II	1000W station .....	249.95	229.95
2174709	A1126B	14mm² QFP nozzle	26.95	23.95
2174717	A1135B	17mm² PLCC nozzle	27.95	25.49
2174725	A1260B	18x8.6mm SOP nozzle	27.95	25.49

## 900-Watt Lead-Free, ESD-Safe Soldering Rework Station

- 3-in-1 design: soldering, desoldering and hot air station
- 2 LED displays
- Temperature and air pressure settings
- Temperature-lock feat
- Heater and sensor failure detection
- Input voltage: 100-120/220-240VAC @ 60Hz/50Hz
- Soldering iron temperature range: 302°F - 896°F
- Desoldering iron temperature range: 572°F - 842°F
- Hot air temperature range: 212°F - 896°F
- Fume extractor air volume: 95/115 CFM
- Weight: 26.5 lbs.



**Includes:** Soldering iron, desoldering iron, hot-air iron, fume extractor, extra heating element, 2 soldering iron stands, 4 hood tips and 5 tweezers

Part No.	Mfr. Part No.	1	5
2128041	LF-853D .....	\$569.95	\$529.95

**\* SMD Rework Stations — Enter Web Code NAT**

## Heat Sink & Soldering Aid Kit

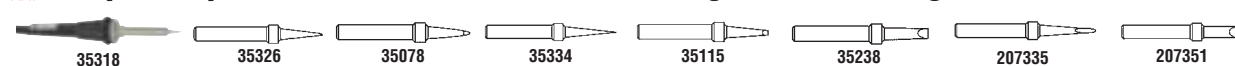


**100378:** Heat sink absorbs and dissipates heat during soldering & desoldering of sensitive parts

**100503 Includes:** Soldering wick, 3 pc. scraper set, acid brush, clip-on heat sink and empty squirt bottle

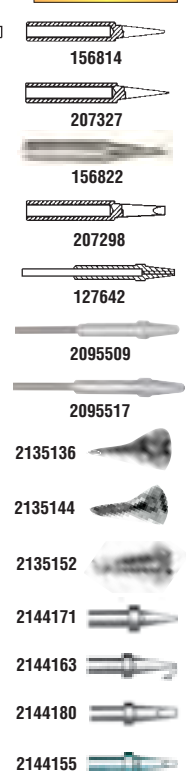
Part No.	Description	1	10	25
100378	Clip-on heat sink .....	\$1.49	\$1.25	\$0.99
100503	7-piece soldering kit .....	7.95	7.49	6.95

## Tips & Replacement Parts for XYtronic Soldering and Desoldering Products



**\* Web Code: NAB**

		For XYtronic Model Numbers (* Legacy Models)										Pricing		
Part No.	Mfr. P/N	Description	169 250HL JS1208	138E30 370-C-3800 LF-1600	169 250X 370-C-3800 LF-1600	169 250X 370-C-3800 LF-1600	960D	968	999SDA *	LF-3000 160D	LF-700 200PHG	LF-1000 LF-5000	LF-3000 LF-3200	LF-8500 LF-3000
35318	XY48	Assembly - 60W w/ nichrome heater												
35326	XY401	Soldering tip - conical bevel 1/32"	✓		✓		✓			✓		✓		
35078	XY402	Soldering tip - semi-chisel 1/32"	✓		✓		✓			✓		✓		
35334	XY403	Soldering tip - conical sharp 1/64"	✓		✓		✓			✓		✓		
35115	XY404	Soldering tip - conical chisel 1/16"	✓		✓		✓			✓		✓		
35238	XY405	Soldering tip - semi-chisel wide 1/8"	✓		✓		✓			✓		✓		
207335	XY406	Soldering tip - long conical chisel 3/64"	✓		✓		✓			✓		✓		
207351	XY410	Soldering tip - chisel 3/16"	✓		✓		✓			✓		✓		
156814	XYB01	Soldering tip - sharp conical chisel 1/32"		✓										
207327	XYB03	Soldering tip - conical sharp 1/64"		✓										
156822	XYB04	Soldering tip - conical sharp 1/16"		✓										
207298	XYB05	Soldering tip - semi-wide chisel 1/8"		✓										
127642	XYD12	Desoldering tip - 1.2mm (.0472")					✓	✓	✓	✓		✓		
2095509	XY12	Desoldering tip - 1.2mm (.0472")										✓		
2095517	XY15	Desoldering tip - 1.5mm (.0586")										✓		
2135136	44-710654	Soldering tip - conical 0.2mm (.007")										✓		
2135144	44-710657	Soldering tip - 45° flat hoof										✓		
2135152	44-710662	Soldering tip - chisel 2.4mm (.094")										✓		
2144171	44-413081	Soldering tip - conical 0.5mm											✓	
2144163	44-413072	Soldering tip - semi-chisel 0.8mm											✓	
2144180	44-413071	Soldering tip - semi-chisel wide 3.2mm											✓	
2144155	44-413069	Soldering tip - flat 1.6mm											✓	



\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)

# Soldering Stands, Pots & Fume Extractors

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## Electric & Manual Desolder Pumps

- Easily disassembles for cleaning
- Replacement tips available

**2168261:** • UL listed  
• One-hand operation  
• Size: 10.5"L x 1.0"Dia.

**1942139:** Size: 13.3"L x 1.0"Dia.

**19166:** Size: 7.8"L x 0.8"Dia.

**2131215:** Size: 7.5"L x 0.8"Dia.

Part No.	Description	1	5
2168261	Electric desolder pump	\$29.95	\$26.95
2131021	Vacuum desolder pump	11.95	10.95
1942139	Manual desolder pump	8.95	7.95
19166	Manual desolder pump	8.95	7.95
2131215	Manual desolder pump*	8.95	8.49
2168270	1 tip for P/N 2168261	5.39	4.75
2146610	1 tip for P/N 1942139	1.75	1.49
22091	2 tips for P/N 19166	7.95	6.95

\*Antistatic tip

## 11-Piece Soldering Aid Tool Kit

This kit combines all the tools you need in order to begin soldering.

**Kit includes:**

- 30-watt UL listed soldering iron
- Soldering iron stand
- Heat sink clamp
- Small slotted screwdriver with stripper
- Medium slotted screwdriver
- Medium philips screwdriver
- Tool case
- Pliers
- Soldering tool
- Diagonal cutters

Part No.	Cross Ref. No.	1	5
2132322	GTK-059A	\$19.95	\$18.95

## Heavy Duty Solder Stand

- Heavy hardened steel base
- Sturdy screw-on iron holder
- Weight: 1.1 lbs.

**Includes:** Cleaning sponge

Part No.	Size (L x W x H)	1	5
2157651	4.0" x 3.0" x 6.5"	\$7.95	\$6.95

## Solder Spool & Iron Stand

- 4 pc. spool stand (some assembly required)
- Sponge size: 1.6"W x 2.4"L
- Shaft diameter: 0.6"

Part No.	Size (L x W x H)	Wt. (lbs.)	1	5
169551	6.0" x 3.5" x 3.1"	2.0	\$11.95	\$10.95

## Solder Spool Stand

- 12 pc. solder spool stand (some assembly required)
- Size: 3.6"W x 3.9"D x 4.3"H
- Shaft diameter: 0.6"

Part No.	Description	Wt. (lbs.)	1	5	25
141761	Solder stand	1.6	\$12.95	\$11.49	\$9.95

## Soldering Tip Cleaner with Stand

- For cleaning soldering iron tips without the use of water and sponge
- Metal wool for cleaning
- Rubberized base for stability

Part No.	Description	Wt. (lbs.)	1	5	25
156777	Tip cleaner and stand	0.5	\$6.95	\$6.39	\$5.79
160004	Metal wool replacement	0.1	2.95	2.59	2.29

## 150-Watt Solder Pot

- On-off switch on handle
- Input voltage: 120VAC
- Maintains pot temp. of 450°C to 480°C (842°F to 896°F)
- 3-conductor power cord: 5' long
- Pot size: 30mm deep x 35mm Dia.

Part No.	Mfr. Part No.	Wt. (lbs.)	1	5
2115418	RD-7339	1.2	\$52.95	\$46.95

## 300-Watt Solder Pot

**Temperature Regulated Between 420°C and 450°C**

- 2 conductor power cord: 5' 9" long
- Holds up to 2.2 lbs. of solder bars recommend P/N 176057, pg 129
- Input voltage: 110VAC @ 2.7A; 50-60Hz
- Size: (unit) 4.8"H x 5.5" Dia. (base)
- Size: (tub) 2.4"Dia. x 1.6"D
- One-year warranty

Part No.	Description	Wt. (lbs.)	1	5
1951625	300W solder pot	5.9	\$89.95	\$79.95

## 600-Watt Solder Pot

**Temperature Adjustable**

- 2-wire power cord (5' 5")
- Temperature: 0°C to 500°C
- Input voltage: 110VAC @ 5.5A
- Holds up to 5.5 lbs. of solder bars pg 129
- power switch and LED indicator for heat
- Self-regulating temp.
- Size: (tub): 3.9"L x 1.6"D
- Size: (unit): 6.8"L x 5.5"W x 2.8"H

**Includes:** Skimmer and removable cross tray

Part No.	Description	Wt. (lbs.)	1	5
172276	600W solder pot	7.4	\$229.95	\$209.95

## 2000-Watt Solder Pot

- Thermostat control for setting temp. from 50°C to 300°C
- Holds up to 57.3 lbs. of solder bar pg 129
- 3 conductor pigtail power cord: 5'L
- Input voltage: 110VAC @ 18A, 50-60Hz single phase
- Size: (unit): 18.1"L x 11.5"W x 6.0"H
- Size: (tub): 12.0"L x 8.0"W x 2.9"H

Part No.	Description	Wt. (lbs.)	1	5
149876	2000W solder pot	23.1	\$299.95	\$269.95

## Weller Magnifier Third Hands

- Great for when two hands aren't enough
- 2 adjustable clamps for easy board hold
- 3.5" diopter 4 (2x magnification)
- 2196756: With iron stand, 2 LEDs & mini diopter 20 (6x magnification)

Part No.	Mfr. Part No.	Size (in.)	1	5
2196756	VTHH3	8.3 x 6.7 x 4.3	\$21.95	\$19.95
2196764	VTHH4	5.3 x 6.9 x 4.7	14.95	13.49

## Third Hand Tools

- Two adjustable arms with alligator clip jaws
- Quick and easy rotation
- Sturdy, heavy base

Part No.	Description	Size	Wt. (lbs.)	1	5
26690	Third hand	2.0"	1.4	\$7.95	\$6.95
72865	With holder/sponge	2.0"	1.4	9.95	8.95
681002	With holder/sponge	3.5"	1.7	12.95	11.49

\*Solder Pots — Enter Web Code HAW



## 22-Watt Fume Extractor

**Absorbs noxious lead fumes using activated-carbon filter and a high-efficiency fan**

- Operate continuously providing filtered air
- Static ground jack
- Fuse protected
- Noise: 49dB fan
- Air flow: 115 CFM
- 120VAC, 60Hz, 22 watts
- Uses 130mm filters
- Large surface area w/ adjust. angles
- Size: 7.2"W x 5.4"D x 7.9"H
- One-year warranty

**Includes:** Detachable power cord

Part No.	Description	Wt. (lbs.)	1	5
2171786	Fume extractor	2.6	\$49.95	\$45.95
127183	Replace. filters (3/pk)	0.05	9.95	8.95

## Fume Extractor Kit

Everything you need in order to build your very own mini pocket-sized fume extractor.

- Kit includes:
  - Voltage regulator
  - 12VDC fan
  - Slide switch
  - 2 fan guards
  - Replacement filter
  - Heat shrink
  - Jumper wire
  - Tin enclosure
  - Two 9V batteries w/ clips
- For step-by-step instructions, visit the workshop center at [www.Jameco.com/Fume](http://www.Jameco.com/Fume)

Part No.	Description	1	5
2137481	13-pc. fume extractor kit	\$17.95	\$15.95



## 42-Watt Combo Soldering Station and Fume Extractor

- Power consumption: 42W @ 650°F (soldering iron)
- Adjustable knob for temperature control: 500°F to 800°F
- Stability @ idle: ±9°F
- Max. air volume: 95/115CFM
- LED indicator for pilot light
- Electronic zero-voltage switching
- Input voltage: 100-120VAC @ 60Hz
- Size: 6.4"W x 7.8"H x 4.7"D

**Includes:** Soldering iron, iron holder, sponge, carbon activated filter, power cord and manual

Part No.	Mfr. Part No.	Wt. (lbs.)	1	5
183169	456DLX	5.2	\$74.95	\$68.95

## Weller 20-Watt Fume Extractor

This fume extractor removes flux fumes from the soldering workbench by drawing smoke through an activated carbon filter. With its exceptionally quiet fan, it can process up to 1.37 cubic meters of air per minute and its stand is adjustable, allowing it to be set-up in multiple positions.

- Voltage: 120VAC
- Sound level: 45-50dB
- Air consumption: 87-107CFM
- Power consumption: 20W
- Absorption capacity: 1.25 cubic meters to 1.37 cubic meter per minute
- Size: 10"L x 6.5"W x 11"H

Part No.	Mfr. Part No.	Wt. (lbs.)	1	5
684810	WSA350	4.2	\$69.95	\$64.95
684828	WSA350F (carbon filter)	0.02	8.95	7.95

\*Fume Extractors — Enter Web Code HAR



# Vises, Soldering Accessories & Tape Products

## PANA VISE Multi-Purpose Work Center

- Jaws open to 9"
- Double action extra wide self-centering heads allow fast opening and closing; centered weight allows jaws to hold heavier objects; plates can be reversed to close together; reversible jaw pads feature ribbing on one side and a V groove on the other
- Base has three 1/4" countersunk mounting holes
- Overall base diameter is 8.5"



Part No.	Mfr. Part No.	Wt. (lbs.)	1	5
684852	350	5.0	\$99.95	\$89.95

## Electronic Work Center

- Size: 8.5"W x 7.8"H
- Includes: Circuit board holder, standard base, tray base mount and wire holder



Part No.	Mfr. Part No.	Wt. (lbs.)	1	5
27060	324	5.3	\$99.95	\$89.95

## PANA VISE Rapid Assembly Circuit Board Holder

- 8 positions rotating adjustment, six positive lock positions in the vertical plane and height adjustment for quick board rotation speeds
- Holds circuit boards from 1/8" (3.2mm) to 12" (304.8mm) wide and up to 5/32" (4mm) thick
- Arms move independently • 10" high



Part No.	Mfr. Part No.	Wt. (lbs.)	1	5
684844	333	6.4	\$89.95	\$84.95

## PANA VISE Vacuum Base Vise

- Head moves through three planes: 210° tilt, 360° turn and rotation
- Grooved jaws are made of reinforced thermal alloy and open up to 2.9"
- Fine/coarse adjustment • Base dia.: 3.4"
- Jaw size: 2"H x 1"W • Height: 7.5"H



Part No.	Mfr. Part No.	Wt. (lbs.)	1	5
251791	209	0.8	\$35.95	\$32.95

## PANA VISE Vacuum Base Vises

- Features the patented "split ball" that tilts, turns and rotates through three planes
- Powerful suction pad for quick and easy set-up
- Nylon jaws open 2.25"
- Size: 5.0"L x 4.0"W x 6.3"H



Part No.	Mfr. Part No.	Product No.	Wt. (lbs.)	1	5
262116	BenchPro	GV-300	3.3	\$39.95	\$35.95
27131	PanaVise	M381	3.3	69.95	63.95

## JAMECO BenchPro LED Lighted Helping Hand

- Two alligator clip jaws
- Two LED lighting w/ adjustable gooseneck for optimum lighting
- Main lens of 2.56" with 3.5x magnification and accessory lens of 0.67" with 12x magnification
- Bottom battery compartment is furnished with steel plate base for great stability



Part No.	Description	1	5
2218302	Lighted helping hand	\$14.95	\$13.49

\*Vises — Enter Web Code TAD

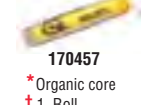
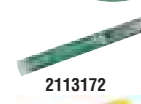
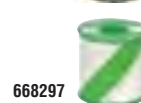
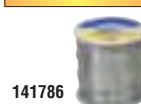


## Solder Bars, Rolls and Pocket Packs

Due to extraordinary price fluctuations, solder prices are subject to change.

Part No.	Manufacturer	% Composition				Diameter Inches/mm	Weight	Type†	Pricing	
		Tin	Lead	Silver	Copper				1	10
2210132	Kester	60	40	—	—	0.025/0.64	1 lbs.	1	\$37.95	\$34.95
73576	Kester	60	40	—	—	0.031/0.787	0.5 oz.	2	3.29	2.95
32117	Kester	60	40	—	—	0.031/0.787	1.08 lbs.	1	35.95	33.95
2184616	Kester	60	40	—	—	0.062/1.57	1.03 lbs.	1	37.95	35.95
141786	ValuePro	60	40	—	—	0.031/0.787	1.13 lbs.	1	32.95	29.95
176057	ValuePro	60	40	—	—	12.5x0.75x0.44	1.1 lbs.	3	29.95	27.95
2188220	Kester	60	40	—	—	0.05/1.27	1.0 lb.	1	29.95	26.95
94570	Kester	60	40	—	—	0.05/1.27	1.3 oz.	2	4.95	4.49
2210124	Kester	60	40	—	—	0.040/1.02	1 lbs.	1	36.95	33.95
73605	Kester	62	36	2.0	—	0.02/0.508	0.35 oz.	2	3.95	3.59
2177694	ValuePro	63	37	—	—	0.015/0.381	1.0 lb.	1	39.95	34.95
2210116	Kester	63	37	—	—	0.025/0.64	1 lbs.	1	39.95	36.95
2210087	Kester	63	37	—	—	0.031/0.79	1 lbs.	1	39.95	36.95
2210095	Kester	63	37	—	—	0.031/0.79	1 lbs.	1	44.95	39.95
151474	Kester*	63	37	—	—	0.031/0.787	1.0 lb.	1	39.95	34.95
2188246	Kester	63	37	—	—	0.031/0.787	1.0 lb.	1	34.95	31.95
2158178	Kester	63	37	—	—	0.05/1.27	1.0 lb.	1	29.95	26.95
668262	ValuePro	96.3	—	3.2	0.5	0.04/1.02	7.2 oz.	1	39.95	36.95
668297	ValuePro	96.3	—	3.2	0.5	0.04/1.02	1.1 lbs.	1	79.95	75.95
2113172	Kester	96.5	—	3.0	0.5	0.031/0.787	0.43 oz.	2	5.95	5.39
170457	ValuePro	99.3	—	—	0.7	0.031/0.787	0.8 oz.	2	3.25	2.95
668078	ValuePro	99.3	—	—	0.7	0.04/1.02	9.15 oz.	1	26.95	24.95
209075	ValuePro	99.3	—	—	0.7	0.031/0.787	1.0 lb.	1	36.95	33.95

\*Web Code: ABD



170457  
\*Organic core  
† 1. Roll  
2. Packet  
3. 13" Bar

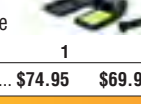
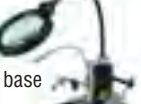
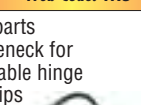
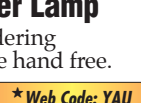
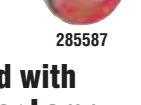
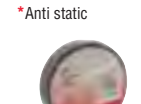
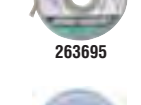
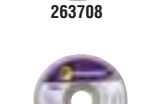


## 5' Desolder Braids



\*Web Code: DAG

Part No.	Manufacturer	Product No.	Description	Width (in.)	1	10
2139137	Techspray	1820-5F	No-Clean, Military/NASA certified, 5'	.035	\$3.95	\$3.59
2203776	Techspray	1821-5F*	No-Clean, Military/NASA certified, 5'	.055	3.59	3.25
124126	Techspray	1815-5F	No-Clean, Military/NASA certified, 5'	.055	4.95	4.49
2203784	Techspray	1822-5F*	No-Clean, Military/NASA certified, 5'	.075	3.95	3.59
124118	Techspray	1816-5F	No-Clean, Military/NASA certified, 5'	.075	4.95	4.49
2203792	Techspray	1823-5F*	No-Clean, Military/NASA certified, 5'	.098	4.49	3.95
263708	Techspray	1817-5F	No-Clean, Military/NASA certified, 5'	.098	5.49	4.95
2203805	Techspray	1825-5F*	No-Clean, Military/NASA certified, 5'	.193	4.95	4.49
2192430	Philips	ZW100-5	Zip Wick Military/NASA certified, 5'	.100	3.49	2.95
2203768	Techspray	1810-5F*	Pro Wick, pure rosin 5'	.075	3.59	3.25
263695	Techspray	1803-5F	Pro Wick, pure rosin, 5'	.075	3.95	3.75
263599	Techspray	1804-5F	Pro Wick, pure rosin, 5'	.098	4.49	3.95
263581	Techspray	1811-5F	Pro Wick, pure rosin w/ bobbin, 5'	.098	3.59	3.25
41082	ValuePro	GISW20	Desolder braid, solder wick, 5'	.079	1.95	1.75
41100	ValuePro	GISW25	Desolder braid, solder wick, 5'	.079	2.19	1.99
153462	ValuePro	GSR104D	Desolder braid, solder wick, 5'	.120	2.25	1.95
2113130	Chemtronics	60-3-5	Soder-Wick® no clean size 3, 5'	0.08	4.95	4.49
2113148	Chemtronics	60-4-5	Soder-Wick® no clean size 4, 5'	0.11	5.95	5.39



## Tape Products

\*Web Code: TPS

Part No.	Description	Color	Width	Length	Thickness	1	10	50
285587	Vinyl electrical tape, Tartan 1710, UL	Black	.75"	20 yards	.007"	\$1.59	\$1.45	\$1.25
1643551	Embossed copper foil, 1245 tape	Copper	.50"	18 yards	.004"	22.95	21.49	19.95

## PANA VISE PV Jr. Vise

- Jaw size: 1" wide x 2" long; opening: 2.8"
- Jaw heat tolerance: 350°F
- Vertical/horizontal jaw grooves
- Fine/coarse adjusting knob
- Vise height: 6.8" • Weight: 1.4 lbs.
- Base bolt is 4.3" and fits all PanaVise base mounts



Part No.	Mfr. Part No.	1	5
134439	PVJR 201	\$29.95	\$26.95



## 360° Clamp Vise

- Ball cup allows vise to adjust to any angle
- Rubber jaws open 2"
- Size: 10.0"L x 2.5"W



Includes: interchangeable pipe vise attachment

Part No.	Cross Ref.	Wt. (lbs.)	1	5
127167	OR-307	2.1	\$19.95	\$17.95



## Helping Hand with LED Magnifier Lamp

This is perfectly suited for soldering comfortably while keeping one hand free.

- Large lens with 2x magnification
- Small embedded lens to 4x magnification of extremely small parts
- Ring light with 16 LEDs and gooseneck for optimum lighting • Easily adjustable hinge
- Adjust. third hand w/ 2 alligator clips
- Additional flexible 9.8" (250mm) gripping arm with alligator clip
- Solder wire reel holder
- Soldering iron holder • Cast-iron base
- Stand size: 7.0"W x 7.0"H

\*Web Code: YAU

Includes: Power adapter and sponge

Part No.	Description	Wt. (lbs.)	1	5
2168587	Helping hand	2.9	\$74.95	\$69.95



\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

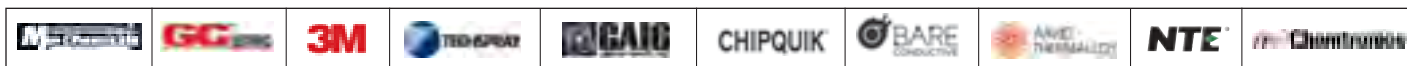
3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)



# Workshop Chemicals & Heat Sink Compounds

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



## Workshop Chemicals & Heat Sink Compounds

Part No.	Manufacturer	Description	Vol. (oz.)	1	5
2120794	MG Chemicals	Adhesive epoxy, high temperature encapsulating and potting compound *	12	\$43.95	\$39.95
615769	GC Electronics	Adhesive, sealant, silicon, one part, non corrosive, clear	3	5.95	5.39
2094207	Caig/DeoxIT	Air duster, non-flammable, moisture free, non-ozone depleting, no VOC *	10	10.95	9.95
2112524	Chipquik	Cleaner & tinner, soldering tip for pre-tinning & tinning *	8†	10.95	9.95
2097491	Master Appliance	Butane gas refill	5.125	6.95	6.25
2094231	Caig/DeoxIT	Cleaner wash, contact evaporates quickly, safe on plastics *	10	9.95	8.95
2094223	Caig/DeoxIT	Cleaner, contact quick dry, chemically improves metal electronic connections *	0.5	11.95	10.95
118033	Techspray	Cleaner, contact, ECONOLINE, CFC free, aerosol can *	13.5	17.95	15.95
195004	Caig/DeoxIT	Cleaner, contact dioxidizer & preservative, improves electronic connections *	5	17.95	15.95
2094215	Caig/DeoxIT	Cleaner & conditioner, soldering tip	0.5	9.95	8.95
616331	GC Electronics	Conductive paint, silver print II *	0.5#	59.95	53.95
2110529	Caig/DeoxIT	Circuit writer pen, silver based, for drawing & repairing traces, works on rubb., epoxy, glass, plastic *	5g†	27.95	24.95
2188297	MG Chemicals	Conductive nickel coating aerosol, reduces EMI/RFI, adheres to ABS & polycarbonates *	12	44.95	40.95
2120559	MG Chemicals	Conformal coating, acrylic lacquer, protects from ESD *	2	14.95	13.49
525851	Chemtronics	Cotton swabs, double headed, 6" handle, 100-pack	—	6.25	5.59
616411	GC Electronics	Developer, positive type, concentrate, dilute 9:1 *	6	11.95	10.95
2157941	3M	Electrical coating FD, fast drying sealant and bonding agent	15	36.95	32.95
616438	GC Electronics	Etching solution, PC board, ferric chloride solution *	32	24.95	22.95
2188262	MG Chemicals	Ferric chloride copper etchant solution, etches PCBs 175-200 pinch/minute *	33	17.95	15.95
616446	GC Electronics	Etching solution, PC board, ferric chloride solution *	128	47.95	42.95
139934	Techspray	Freeze spray, Envi-Ro-Tech, circuit chiller, CFC and HFC free *	8	19.95	17.95
615355	GC Electronics	Heat sink compound, 100% synthetic base stocks type 44	16†	39.95	36.95
236823	ValuePro	Heat sink compound, silicon based grease	0.35†	4.95	4.49
167249	Aavid Thermalloy	Heat sink compound, silicon based grease *	2†	8.95	7.95
169252	Techspray	Heat sink compound, silicon free	4†	32.95	29.95
259151	NTE	Heat sink compound, white gel, thermal grease (5 pack)	1g†	2.95	2.49
615312	GC Electronics	Heat sink compound, zinc oxide-filled silicon grease	0.23†	3.95	3.59
615321	GC Electronics	Heat sink compound, zinc oxide-filled silicon grease	1†	7.95	6.95
615304	GC Electronics	Heat sink compound, zinc oxide-filled silicon grease	16†	29.95	26.95
263572	Techspray	Isopropyl alcohol, plastic bottle *	16	13.49	11.95
2188289	MG Chemicals	Liquid isopropyl alcohol, general purpose cleaner *	33.8	14.95	13.49
2201762	MG Chemicals	Liquid rosin flux, fully activated, instant wetting, non-corrosive, non-conductive *	4.2	12.95	11.49
2201771	MG Chemicals	Liquid rosin flux pen, fully activated, RA type, non-corrosive, non-conductive *	0.34	13.95	12.49
2188300	MG Chemicals	No clean flux paste with syringe, 10cc/10ML	8g†	12.49	11.49
118041	Techspray	Solder flux remover, ECONOLINE, CFC free, aerosol can *	13.5	19.95	17.95
1586015	Chipquik	Solder flux, tack for rework, no clean, 10cc w/ syringe	0.34	19.95	17.95
481764	Techspray	Solder flux, dispensing pen, No-clean, resin & halide free leaves no residue *	0.38	9.95	8.95
615224	GC Electronics	Solder flux, liquid, non corrosive, solution of special rosin in alcohol *	2	9.95	8.95
615232	GC Electronics	Solder flux, liquid, non corrosive, solution of special rosin in alcohol *	16	26.95	24.95
2094258	Caig/DeoxIT	Solder flux, rosin paste for electronic applications including PCBs *	2	10.95	9.95
2113092	Chemtronics	Solder flux, rosin dispensing pen, for electronic applications including PCBs *	0.32	12.95	11.49
2098208	Chipquik	Solder paste, 63% SN, 37% PB, no clean 10cc w/ syringe *	0.34	27.95	24.95
2098224	Chipquik	Solder paste, 63% SN, 37% PB, no clean 10cc w/ syringe, water washable *	0.34	29.95	26.95
2097441	Chipquik	Solder paste, 96.5% SN, 3% AG, 0.5% CU, no clean 10cc w/ syringe *	0.34	29.95	26.95

\* Shipped via ground to continental U.S. only # Troy ounces † Measured by weight

Test/Tools

## ProtoDough Reusable Prototyping Design Plastics

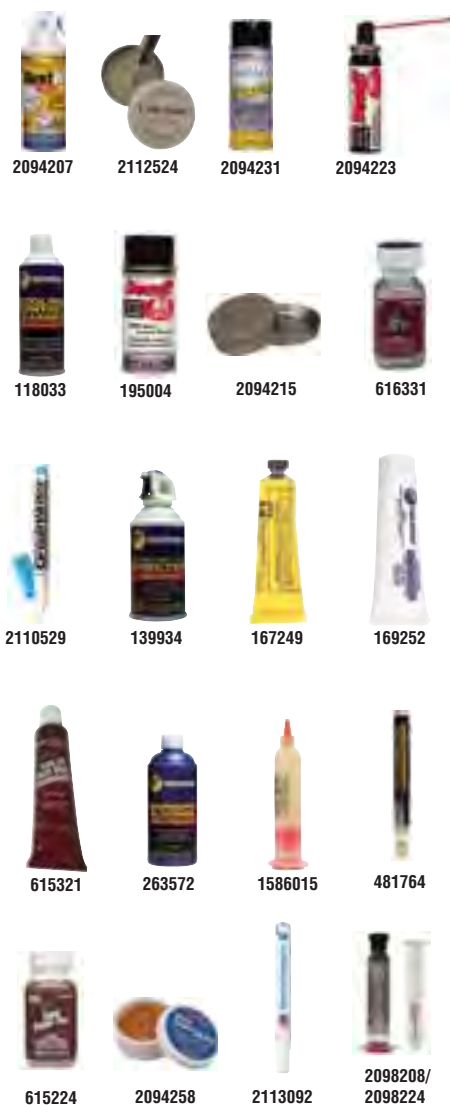
- Create custom molds of any design quickly and easily
- High elongation break points
- Can be drilled, sawed and machined
- Safe for hand molding
- Non-toxic, lightweight and paintable
- 3.5mm pellets
- Melting point temperature: 136°F-140°F

Part No.	Cross Ref. No.	Description	1	5
2208286	Proto Dough-250G	250 gram bag	\$14.95	\$13.49
2208294	Proto Dough-500G	500 gram bag	17.95	15.95
2208307	Proto Dough-1000G	1000 gram bag	34.95	31.95



\* Workshop Chemicals — Enter Web Code YAQ

\* Heat Sink Compounds — Enter Web Code YBA



## Cleaning Brushes

153322: Metal handle

Part No.	Description	Length	1	10	100
153322	Soft bristles	6" .....	\$ .79	\$ .69	\$ .59

## Plastic Pump Bottle

- 6 oz. bottle
- ESD compliant
- Plastic bottle with dispenser cover
- Color: light blue

Part No.	Cross Ref. No.	1	5	25
158131	450 .....	\$14.95	\$13.49	\$11.95

## Clip-On Heat Sink

- Absorbs and dissipates heat during soldering and desoldering sensitive parts

Part No.	Cross Ref.	Size	1	10	100
159126	HT156	2.7"L x 0.7"W ..	\$2.95	\$2.59	\$2.29

\* Cleaning Tools — Enter Web Code CLE

# Solderless Breadboards & Jumper Wires



PARALLAX

## Solderless Breadboards



★ Web Code: HAC

The screen-printed color coordinates are suitable for many types of digital and analog prototyping and circuit design. Larger models feature a heavy-duty aluminum backing with binding posts. Use with Jameco's AC/DC breadboard power supply, P/N 77682 (below).

- Accepts most electronic components, including integrated circuits and transistors for digital and/or analog circuitry
- Ideal for high frequency and low noise circuits
- Pins are identified by numbered rows and columns • 0.1" hole spacing • One-year warranty
- Components are easily interconnected using 20-28 AWG wire (P/N 19290 & 20080, below)



Part No.	Manufacturer	Product No.	Terminal Strips	Bus Strips	Contact Points	Binding Posts	Breadboard Size (L" x W")	Baseplate Size (L" x W")	Weight (lbs.)	Pricing			
										1	10	50	100
94457	ValuePro	JE19*†	0	2	100	0	6.5 x 0.4	—	0.04	\$3.95	\$2.95	\$2.75	\$2.39
2155452	ValuePro	WBP-317	1	0	170	0	1.9 x 1.3	—	0.03	2.95	2.59	2.29	1.95
2109801	Parallax	700-00012	1	0	170	0	1.8 x 1.4	—	0.03	5.95	5.39	4.79	4.39
2155461	ValuePro	WBP-323	1	2	270	0	2.6 x 1.6	—	0.05	3.95	3.59	3.29	2.95
2125018	BusBoard	BB300	1	0	300	0	3.3 x 1.4	—	0.04	4.95	4.49	3.95	3.49
2157693	ValuePro	BB-801	1	2	400	0	3.3 x 2.1	—	0.11	4.95	4.49	3.95	3.29
20601	ValuePro	WBU-301-R#	1	2	400	0	3.3 x 2.1	—	0.13	5.95	5.39	4.79	4.39
20670	Wisher	WBU-TN-R#	1	0	630	0	6.5 x 1.4	—	0.20	7.95	6.95	6.49	5.49
194299	Wisher	WB-102-R	1	2	640	0	6.9 x 2.4	—	0.25	8.95	7.95	6.95	6.25
2157706	ValuePro	BB-102†	1	2	830	0	6.5 x 2.2	—	0.21	5.49	4.95	4.49	3.95
20723	ValuePro	WBU-202-R#	1	2	830	0	6.5 x 2.2	—	0.30	9.95	8.95	7.95	6.95
194272	Wisher	WBU-204-1-R#	2	3	1,560	3	6.5 x 4.0	8.5 x 4.7	0.73	19.95	17.95	15.95	13.49
2157714	ValuePro	BB-2T1D	2	1	1,360	2	6.5 x 3.1	8.2 x 4.0	0.68	12.49	11.49	9.95	8.95
20758	ValuePro	WBU-204-3-R#	2	1	1,360	2	6.5 x 3.1	8.5 x 4.0	0.60	15.95	14.49	12.95	11.49
20774	ValuePro	WBU-204#	2	4	1,660	3	6.5 x 4.4	8.5 x 5.2	0.70	22.95	20.95	18.95	16.95
136901	Wisher	WBU-504	2	3	1,855	4	5.3 x 5.6	7.5 x 6.3	0.90	23.95	21.49	19.49	17.49
2157722	ValuePro	BB-3T5D†	3	5	2,390	4	6.9 x 5.8	8.7 x 7.2	1.28	24.95	22.49	19.95	17.95
20791	ValuePro	WBU-206#	3	5	2,390	4	6.9 x 5.8	9.1 x 6.9	1.10	29.95	26.95	23.95	21.95
2157731	ValuePro	BB-4T7D†	4	7	3,220	4	7.3 x 7.5	9.3 x 8.1	1.60	29.95	26.95	23.95	21.95
20812	ValuePro	WBU-208#	4	7	3,220	4	7.3 x 7.5	9.5 x 8.3	1.40	39.95	35.95	32.95	29.95

\* Pack of 2 † Interconnect with other † listed above # Interconnect with other # listed above



## Powered Project Breadboard

★ Web Code: XAT

Being confined to a lab bench in order to test your circuit can be a hassle. These breadboards have a built-in power supply, so all you have to do is plug them into the wall outlet and you're ready to go!

- Solderless breadboard with 2,420 tie points
- Outputs are short-circuit protected
- Includes: 3-prong power cord
- Input power: 110VAC or 220VAC @ 50-60Hz (switch selectable)
- Grounded case
- Triple output power supply: fixed 5VDC @ 1.5A; 0 to ±16VDC @ 0.5A (adjustable)
- Breadboard size: 6.9"L x 5.8"W
- Overload protection
- Power switch with light
- Fuse protection
- Lighted power switch
- Overall size: 9.8"L x 7.8"W x 3.0"H



Part No.	Description	Wt. (lbs.)	1	5
1942163	5VDC @ 1.5A & ±16VDC @ 0.5A	5.8	\$139.95	\$124.95
2225107	Unassembled kit of 1942163	5.8	139.95	124.95

## Breadboard and Jumper Wire Kit

This kit is perfect for easy prototyping!



Part No.	Description	1	5	25
2134993	830-point breadboard with 70-piece wire kit	\$14.95	\$13.49	\$11.95

## Wire Jumper Kits

★ Web Code: LAS

- 0.1" to 5.0" lengths (14 sizes)
- Clear plastic durable case
- Pre-stripped/preformed
- 22 AWG solid wire jumpers in 10 colors

19290



\* Order in multiples of 10

Part No.	Description	1	10	50	100
2127718	70-piece kit, 5 of each length	\$6.95	\$6.25	\$5.59	\$4.95
2096018	140-piece kit, 10 of each length	9.95	8.95	7.95	6.95
19290	350-piece kit, 25 of each length	17.95	15.95	14.49	12.95
20080	350 pieces, refill for P/N 19290	11.95	10.95	9.95	8.95
2213211	0.5" red wire jumper	*	.12	.10	.08
2213202	0.5" yellow wire jumper	*	.12	.10	.08
2213190	0.75" black wire jumper	*	.15	.13	.11
2213173	1.0" black wire jumper	*	.17	.15	.12
2213165	2.0" blue wire jumper	*	.19	.17	.15



## AC/DC Power Supply

Ideal for Breadboards above

With built-in short circuit protection.

- Input power: 120/220VAC @ 50-60Hz (switchable)
- Indicator lamps and power fuses
- Just plug in and start to use
- Compact and lightweight
- One-year warranty
- For both digital and analog circuits
- Compatible with test leads P/N 77842, pg 117
- Size: 7.4"W x 5.5"D x 2.6"H



International 120/220VAC Switchable

Output Specifications:

+5VDC @ 1A; -5V @ 300mA fixed;  
0 to +15VDC @ 500mA variable;  
0 to -15VDC @ 300mA variable;  
12-6-0-6-12 tapped VAC, 300mA fixed

Part No.	Description	Wt. (lbs.)	Color	1	5
77682	Power supply	5.5	Beige	\$179.95	\$162.95



## Reinforced Jumper Wires

★ Web Code: LAS

These jumper wires are exactly what you need to build the circuits you have designed on breadboards. The various lengths of the wire can help make your circuit concise and less cluttered for larger designs. You can also separate various functions based on color to make the circuit easier to read and follow with reinforced pin ends for durability.



NEW MARKED IN PINK

126342

Part No.	AWG	Length (in.)	Number of Wires per Color	1	10	100
2117106	22	7.00	(10) blue	\$8.95	\$7.95	\$6.95
126360	24	1.97	2 ea. yellow/white/red/black/blue	6.95	6.25	5.59
126342	24	3.94	2 ea. yellow/white/red/black/blue	6.95	6.25	5.59
126325	24	7.87	2 ea. yellow/white/red/black/blue	6.95	6.25	5.59
421315	24	5.90	4 ea. yellow/white/red/black/blue	11.95	10.95	9.95
2214555	22-26	5.9	1 ea. of 10 assorted colors†	4.95	4.49	3.95
2214563	22-26	5.9	1 ea. of 10 assorted colors\$	4.95	4.49	3.95
2214571	22-26	5.9	1 ea. of 10 assorted colorsf	4.95	4.49	3.95
2150467	26	1.6, 3.2, 4.8	28 ea. green/red/black/white/orange*	12.95	11.49	9.95
2213405	26	4.3, 5.9, 7.9, 9.5	65 total of 7 assorted colors	6.95	6.39	5.75
2213456	26	7.8	6 ea. of red/blue/black/white/green	5.95	5.39	4.79

\* Contains 100 male-male cables, 40 female-female cables † Male to male cables

\$ Male to female f Female to female

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)



# Enclosures, Component Kits & Digital Labs

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

## JAMECO ValuePro Deluxe Electronic Kits



2129115 Top



2129115 Bottom



2129123 Top



2129123 Bottom

**2129115:** 219 pieces; fuses, battery holders, batteries, potentiometers, loudspeaker, capacitors, resistors, photoresistors, transistors, switches, LEDs, clips, jumper and hookup wires, breadboard, AC adapter, and deluxe carrying case P/N 2129131

**2129123:** 109 pieces; voltage regulators, relays, diodes, switches, potentiometers, logic chips, DIP sockets, inverters, counters, timers, headers, 3-digit display, numeric keypad, DC power jacks, binding posts, solder tube, heat shrink tubing, printed circuit boards, clips, IC inserter, IC extractor, anti-static wristband, helping-hands, project box, deluxe carrying case P/N 2129131

**2129131:** Clear flip-top lid with 26 built-in compartments, case with 8 interchangeable compartments, snap-lock closure

- Color: black with clear lid
- Size: 15"L x 11.25"W x 3.75"H

\* Web Code: CKS

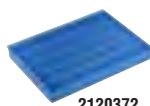
Part No.	Description	1	5
2129115	219 pcs. deluxe kit	\$89.95	\$80.95
2129123	109 pcs. deluxe kit	99.95	89.95
2129131	Case with 34 compartments	19.95	17.95



## Bug Trays

- Tray size: 4.8"L x 3.6"W x 0.5"H
- 2120372:** 5 compartments (4.6"L x 0.58"W x 0.3"H ea.)

Part No.	Description	1	10	100
2120372	Divided bug tray	\$.75	\$.59	\$.49
2120381	Open bug tray	.75	.59	.49



2120372



## JAMECO ValuePro Component Cabinets



319600

319600:

- Drawer can be divided into 3 sections (clear)
- Wall mountable cabinet (ABS black)
- Cabinet size: 14.7"W x 6.0"D x 7.4"H
- Includes:** 20 clear plastic drawers, 20 dividers and 30 adhesive I.D. labels
- 319601 (drawer):** 5.5"L x 2.7"W x 1.5"H
- 319611 (divider):** 2.5"W x 1.2"H

- 2213675:**
- Cabinet size: 17.6"L x 7.0"D x 9.8"H
- Counter-top design (ABS white)
- Includes:**

- 14 clear plastic drawers in 3 sizes:
- (10) 6.4"L x 3.4"W x 1.5"H,
- (3) 8.8"L x 6.4"W x 1.5"H,
- (1) 8.8"L x 6.4"W x 3.3"H
- and 20 adhesive I.D. labels

Part No.	Description	1	10	50
319600	20-drawer cabinet	\$19.95	\$17.95	\$15.95
2213675	14-drawer cabinet	29.95	26.95	23.95
319601	Drawer for cabinet	.49	.45	.39
319611	Drawer divider for cabinet	*.19	.15	

Included with every kit on page 29!

\* Order in multiples of 10

## Breadboard Power Supply

This power supply is a very simple pre-assembled board that takes a 6-12V input and outputs a selectable 5V or 3.3V regulated voltage. All headers are 0.1" pitch for simple insertion into a breadboard. It can be powered from a 2.1mm DC power jack or from a USB port. No assembly required.

- Output: 3.3V/5V @ 500mA max.
- Input: 6-12V (power jack) or 5V (USB)
- 0.1" pin spacing perfect for breadboards
- On/Off switch
- Power status LED

Part No.	Size (L" x W")	1	5
2157853	1.7 x 1.2	\$7.95	\$6.95

## JAMECO ValuePro Plastic Fliptop Boxes

- Clear plastic box with lid
- 2156164:** Bucket style w/ handle
- 100256/148902:** includes removable dividers
- 100256:** 18 compartments
- 148902:** 12 compartments

Part No.	Size (L" x W" x H")	1	10	25
2156164	5.2 x 4.5 x 5.0†	\$3.95	\$3.55	\$3.19
2207216	6.1 x 3.5 x 1.2*	2.69	2.25	1.75
100256	8.4 x 4.5 x 1.4	2.95	2.49	1.95
2156172	8.7 x 6.5 x 2.3†	4.75	4.39	3.95
148902	10.2 x 4.7 x 1.6	4.95	4.49	3.95
2156181	11.0 x 6.7 x 2.3†	5.95	5.35	4.79

\* Manufacturer: Velleman † No dividers

\* Enclosures and Boxes — Enter Web Code UAL

## JAMECO ValuePro Digital Design Lab

- 1580 tie points
- Fixed power supply: +5VDC @ 1.0A
- Two 7-segment displays (digit height: 0.3")
- Digital voltmeter
- One-year warranty

### Solderless Breadboard

- Interconnected nickel-plated tie points, fitting all DIP sizes and all components with AWG #22-30 (0.3-0.8mm) solid leads

### DC Power Supplies

- DC supplies equipped with short-circuit protection
- Variable DC power: 0 to ±15V @ 0.3A

### Function Generator (6 ranges)

- Sine/triangle wave output: 0-5Vp-p variable
- Frequency ranges: 0.1Hz-2Hz, 1Hz-20Hz, 10Hz-200Hz, 100Hz-2kHz, 1kHz-20kHz
- Square wave output: 0-15Vp-p

### Universal Counter

- 1Hz-100MHz, with 8-digit 7-segment LED display

**Includes:** Power cord and manual

Part No.	Description	Size (W" x D" x H")	Wt. (lbs.)	1	5
75839	Digital lab	10.6 x 13.3 x 5.0	8.1	\$489.95	\$439.95
1952599	Replacement breadboard	4.5 x 6.75 x 0.37	0.5	29.95	26.95

\* Web Code: LAJ



International 115/220VAC Switchable

## JAMECO ValuePro Digital/Analog Design Labs

### Solderless Breadboard

- 2712 connections; fits AWG #22-30 (0.3-0.8mm)

### DC Power Supplies

- Fixed DC output: +5VDC @ 1A; -5VDC @ 300mA
- Variable DC output: 0 to ±15V @ 500mA (P/N 136267) and 0 to ±15V @ 1A (P/N 1919211)
- Input power: 110/220VAC @ 50-60Hz (switchable)

### Function Generator (6 Ranges)

- Triangle wave output: 0-5Vp-p variable
- Frequency ranges: 0.1Hz-2Hz, 1Hz-20Hz, 10Hz-200Hz, 100Hz-2kHz, 1kHz-20kHz, 10kHz-200kHz
- Sine wave output: 0-5Vp-p variable

- Other Features** • 2.5" dia., 8Ω, 25W speaker • 2 banana sockets, 2 BNC jacks
- 2 pulse switches (2 sets of outputs: A, A, B, B) • 2.5" dia., 8Ω, 25W speaker
- Two 7-segment LED displays (digit height: 0.3") • 2 banana sockets, 2 BNC jacks

**136267:** • 8 data switches • 8-bit red LEDs • 100MHz universal counter

• Includes power cord, manual and UC-03 60-pin header

**1919211:** • 16 data switches • 16-bit red LEDs

• Includes power cord, manual and jumper wires

\* Web Code: LAJ

Part No.	Description	Size (W" x D" x H")	Wt. (lbs.)	1	5
136267	Digital/analog lab	12.8 x 9.8 x 3.7	8.5	\$499.95	\$449.95
1919211	Digital/analog lab*	13.0 x 10.5 x 3.5	9.1	549.95	499.95

\* Manufacturer: Sun

## SUPER SNOOPER BIG EAR KIT

Learn how amplifiers take a small signal and boost it to drive a small speaker or headphones. Provides up to 1 watt of low distortion audio power. Harmonic distortion is 0.2% with a voltage gain of up to 46dB. Requires assembly and 9V battery

Part No.	Description	1	5
151204	AA-ID	\$12.95	\$11.49



## BAY AREA CIRCUITS PCB CREATOR

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- Get easy quotes and ordering options
- Gerber files available at no cost after PCB order

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JAMECO ValuePro



## Metal and Plastic Enclosures

The prototype builder boards on pg 134 are designed to fit into our ABS plastic and aluminum enclosures, metal cabinets and heavy-duty instrument cases. The pre-cut boards have 2 or 4 mounting holes compatible with the PC board mounting hardware (P/N 106551, pg 134) and adhesive standoff (P/N 2191592).

**Board description:** Laminated glass epoxy 1/16" thick fire retardant per FR-4 specs. Copper-clad and solder mask one side. Drilled holes: .035" diameter on .080" square pad. Pads spaced on .10" x .10" grid.

See page 39 for Knobs and page 77 for Hardware

\* Web Code: UAL



\*All boards sold separately, see pg 134; multiple boards shown

## ABS Plastic Enclosures

Lid for precision fit (adds 0.4" height). Complete with four screws and lid. All sizes below are interior dimensions.

Part No.	Cross Ref. No.	Size (L x W x H)	1	10	50	100
18922	H2855	3.1" x 2.0" x 0.9"	\$3.49	\$3.19	\$2.89	\$2.49
18914	H2853	4.9" x 2.5" x 1.5"	3.95	3.59	3.19	2.75
18893	H2851	6.0" x 3.5" x 1.9"	4.95	4.49	3.95	3.49
18906	H2852	7.5" x 4.3" x 2.3"	7.49	6.79	5.95	5.49

## ABS Enclosures with Clear Top

Includes screws for mounting boards, rubber gasket for a tight seal on your equipment and drilled holes for mounting.

Part No.	Cross Ref. No.	Size (L x W x H)	1	10	50	100
141832	203C1	4.9" x 3.4" x 2.4"	\$9.95	\$8.95	\$7.95	\$7.29
141841	203D1	6.5" x 3.4" x 2.2"	9.95	8.95	8.49	7.95
141859	203F1	7.3" x 5.7" x 3.0"	14.95	13.95	12.95	11.95

## ABS Heavy-Duty Instrument Cases

P/N 18877 includes ventilation and speaker sound slots.

Part No.	Cross Ref. No.	Size (L x W x H)	1	10	50	100
18869	H2505	7.9" x 6.3" x 2.5"	\$8.95	\$7.95	\$7.19	\$6.49
18877	H2507	10.0" x 7.5" x 3.1"	9.95	8.95	7.95	7.29

## ABS Plastic Lip Top Enclosure

PCB standoffs molded into the case with a lip top for a precision fit. Painted black with a satin texture finish and protection against dust and splashing water. Assembly screws and lid included.

Part No.	Mfr. Part No.	Size (L x W x H)	Color	1	10	50
2138206	1551GBK	2.0" x 1.4" x 0.8"	Black	\$2.25	\$1.95	\$1.75

SERPAC

## Specialty Enclosures



### A Series — with PCB Boss Mounts

- 4-pc design • Interchangeable end panel
- 4-insert areas for customized I-plates

Please Note: Images used are representative. Color and shapes may vary by model.

Part No.	Mfr. Part No.	Color	Size (L" x W" x H")	1	10	100
373456	A-42-BK	Black	7.12 x 5.00 x 1.62	\$7.95	\$7.19	\$6.39

### C Series — with Pinch-Fit for PCBs

- Simple 2-piece design • 2-insert areas for customized I-plates

Part No.	Mfr. Part No.	Color	Size (L" x W" x H")	1	10	25
675331	C-4-BK	Black	2.13 x 1.38 x 0.58	\$2.95	\$2.69	\$2.39

### S Series — Two-piece Standard Enclosures

- 2-piece design • 2-insert areas for customized I-plates • With screws

Part No.	Mfr. Part No.	Color	Batt. Holder	Size (L" x W" x H")	1	10	25
675462	111-BK	Black	None	3.61 x 2.27 x 1.51	\$3.95	\$3.49	\$2.95
2202108	341BLK*	Black	None	4.38 x 3.25 x 1.51	3.95	3.59	3.19
675489	131-BK	Black	None	4.38 x 3.25 x 1.51	5.95	5.49	4.95
675542	173-BK	Black	None	6.88 x 4.88 x 2.51	10.95	9.95	8.95
675551	193-BK	Black	None	9.50 x 6.34 x 2.51	12.95	11.95	10.95

\* Drilled, ValuePro

## Metal Enclosures

- Mounting screws and rubber feet included
- Glossy black textured steel top cover and ivory aluminum base

Part No.	Cross Ref. No.	Size (L x W x H)	1	10	50	100
208901	B2741A	7.5" x 9.8" x 3.2"	\$7.95	\$7.49	\$6.95	\$6.49
208911	CMC11922	5.9" x 5.3" x 3.0"	8.95	8.49	7.95	6.95
209350	B2746A	6.3" x 7.6" x 2.5"	10.95	9.95	8.95	7.95
208929	B2744A	7.3" x 6.3" x 2.8"	11.95	10.95	9.95	8.95
209358	SY0207	7.5" x 9.8" x 3.2"	15.95	14.49	12.95	11.95

## Die-Cast Aluminum Enclosures

Made from aluminum, an excellent heat sink, these cases are great for high temp circuits (up to 600°C). Includes screws.

Part No.	Cross Ref. No.	Size (L x W x H)	1	10	50	100
11957	B5002	3.9" x 2.0" x 1.0"	\$7.95	\$7.49	\$6.49	\$5.95
11965	03-125B	4.7" x 2.6" x 1.4"	10.95	10.49	9.49	8.95
2191859	BOX3-1455N	6.3" x 4.6" x 2.1"	20.95	18.95	16.95	15.49
2191867	BOX3-1455N-BK	6.3" x 4.6" x 2.1"	22.95	20.95	18.95	17.95
11973	03-125C	7.5" x 4.3" x 2.4"	19.95	19.49	17.95	16.95

## Aluminum Enclosures

The enclosure comes in two pieces that slide together.

Part No.	Cross Ref. No.	Size (L x W x H)	1	10	50	100
11870	H2300	4.0" x 2.0" x 2.8"	\$7.95	\$6.95	\$5.95	\$4.95
11886	H2320	5.0" x 4.0" x 3.0"	8.95	7.95	6.95	5.95
11894	H2335	7.0" x 6.2" x 4.6"	9.95	8.95	7.95	6.95

## Rugged Diecast Aluminum Alloy Enclosures

Protects from dust and splashing water, while also providing EMI/RFI shielding. Designed to meet IP54 rating. Unpainted with a vibra finish. Assembly screws included.

Part No.	Mfr. Part No.	Size (L x W x H)	Cover	1	10	50
2138169	1550A	3.5" x 1.4" x 1.2"	Lid top	\$7.49	\$6.95	\$6.25
2138290	1590B	4.4" x 2.3" x 1.1"	Lip top	8.49	7.95	7.25
2138302	1590BB	4.7" x 3.7" x 1.2"	Lip top	11.49	9.95	8.95

## BeagleBone & BeagleBone Black Enclosure

- Cut-outs for the DC power, Ethernet, microSD card, HDMI port, USB host and USB debug ports
- 6 laser cut acrylic pieces, 4 plastic standoffs, 8 hex-nuts and 8-1/2" 4-40 screws
- See Web for BeagleBoard

Part No.	Mfr. Part No.	Inner Dimensions	Outer Dimensions	1	5
2184270	699	1.18" x 2.2" x 3.78"	2.75" x 1.73" x 3.78" ...	\$19.95	\$18.95

antone

## 5" x 8" x 1.8" Aluminum Enclosure

- Fan 40 x 40 x 10mm (5DVC, 0.10A, 4.6CFM)
- e-SATA 20" cable
- e-SATA connector to SATA 1/11
- LED indicator (green) • ON/OFF switch
- Mini- DIN male 4-pin power connector
- Hardware, screws and washers for mounting

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Part No.	Description	1	10
2220074	Aluminum enclosure	\$5.95	\$5.39



For screws, nuts, washers, see page 77-78

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# Prototyping PC Boards & Terminals

3 LEVELS OF SAVINGS		
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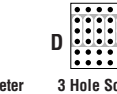
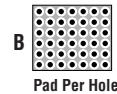
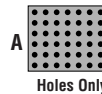
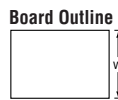
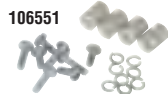
## General Purpose Prototyping Boards

Select the prototype board that fits your needs from our comprehensive product listing. Prototyping boards with punched holes are convenient, economical tools for assembling circuit components and trying cost-effective alternatives to custom designs.

- 0.062" board thickness
- 0.1" hole spacing
- 0.08" pad size
- PCB material epoxy glass
- Plated through pads are double-sided

\* Web Code: PBH

See PCB enclosures on pg 133, and mounting hardware (recommend P/N 106551) below



Part No.	Product No.	Size (W" x L")	Fits Enclosure(s) (see page 133)	Circuit Pattern	Hole Pads	# Holes x Dia.†	Power/Ground Buses	Connector I/O or Edge	# Mounting Holes x Dia.	Wt. (lbs.)	Pricing			
											1	10	50	100
105102	G/S(PCB-365)-R	1.50 x 3.50	11957	C	Single-sided	365 x .038"	4	None	2.0 x .140"	.02	\$6.95	\$5.95	\$4.95	\$3.95
105100	G/S(PCB228)-R	1.60 x 2.70	18922	B	Single-sided	288 x .035"	None	None	2.0 x .115"	.02	5.95	5.49	4.95	4.49
105129	2853PCB-R	2.00 x 4.40	18914, 11965	C	Single-sided	669 x .038"	4	None	4.0 x .140"	.03	8.49	7.59	6.75	5.95
2213421	FIT00991	2.28 x 3.07	—	B	Single-sided	572 x .038"	None	None	4.0" x .118"	.03	1.65	1.45	1.29	1.15
105111	PCB-102-R	2.40 x 3.40	11870	C	Single-sided	637 x .038"	4	None	2.0 x .140"	.03	7.95	7.19	6.49	5.95
263207	PCB-463-R	2.40 x 4.10	—	B	Plated through	640 x .031"	None	None	4.0 x .120"	.05	8.95	7.95	6.95	5.95
263215	PCB-858-R	2.50 x 4.25	18893	D	Plated through	640 x .042"	None	D-sub 25/USB/RJ45	4.0 x .120"	.05	8.95	7.95	6.95	5.95
105153	2851PCB-R	3.10 x 5.50	18893	C	Single-sided	1450 x .035"	7	None	4.0 x .140"	.07	9.95	8.95	7.95	6.95
263223	PCB-69-R	3.30 x 3.70	—	B	Single-sided	900 x .042"	None	None	4.0 x .120"	.05	7.95	7.49	6.25	5.49
105137	PCB-1266-R	3.30 x 4.50	11886	C	Single-sided	1266 x .035"	4	None	4.0 x .140"	.06	7.49	6.49	5.59	4.75
105162	2852PCB-R	3.60 x 7.00	18906, 11973	B	Single-sided	2225 x .035"	4	None	4.0 x .140"	.10	13.95	12.49	10.95	9.95
2131186	EGS3-H*	3.90 x 6.30	—	D	Single-sided	784 x .041"	2	DIN41617/41612	4.0 x .120"	.12	7.95	7.25	6.59	5.95
21531	JE417**	4.20 x 6.50	—	C	Plated through	2126 x .042"	2	D-sub 9/15/25/37	8.0 x .120"	.12	10.95	9.95	8.95	7.95
206587	PCB-586-R	4.30 x 6.80	209350	C	Single-sided	2550 x .042"	5	None	4.0 x .140"	.07	9.95	8.95	7.95	6.95
21435	JE401-R	4.50 x 6.50	18869	B/D	Single-sided	2360 x .042"	2	None	None	.12	16.95	15.49	13.95	11.95
206579	PCB-578-R	4.60 x 4.30	208911	C	Single-sided	1684 x .042"	5	None	4.0 x .140"	.07	7.95	6.95	5.95	5.29
105180	PCB-135-R	5.00 x 6.50	18869	C	Single-sided	2829 x .035"	7	None	8.0 x .120"	.13	13.95	12.49	10.95	9.95
21478	JE407-R	5.00 x 13.25	—	B	Plated through	6063 x .038"	None	None	8.0 x .120"	.28	39.95	35.95	32.95	28.95
206594	PCB-594	5.50 x 8.00	209358	C	Single-sided	3906 x .042"	5	None	4.0 x .140"	1.0	11.95	10.95	9.95	8.95
105187	2507PCB	6.10 x 8.80	18877	C	Single-sided	4771 x .035"	7	None	8.0 x .140"	.21	16.95	15.49	13.95	11.95
263232	PCB-7038-R	8.30 x 11.9	—	B	Plated through	8819 x .042"	10	5	4.0 x .115"	.40	39.95	35.95	31.95	27.95



## Vector Prototyping Boards

43140	64P44XXXP	4.50 x 6.50#	18869	A	Drilled only	2860 x .042"	None	None	None	.09	\$8.95	\$8.49	\$7.95	\$7.49
52943	84P44WE	4.50 x 8.50	18877	A	Drilled only	3740 x .042"	None	None	None	.15	12.95	12.45	11.95	11.49
37612	169P44XXXP	4.50 x 17.0#	—	A	Drilled only	7524 x .042"	None	None	None	.25	17.95	16.95	16.49	15.49
37621	169P84WE	8.50 x 17.0	—	A	Drilled only	14,448 x .042"	None	None	None	.53	29.95	28.95	27.95	26.95
106551	20 pieces; PC board mounting hardware (4 spacers, 8 screws and 8 washers) used with all above boards										2.95	2.59	2.29	1.95

\* Manufacturer: Velleman \*\* PC/XT 8-bit # PCB material: phenolic † All 0.042" Diameter hole boards use terminals P/Ns 34147, 34155 and 34163 (below)

† Manufacturer: DFRobot



## .042" Diameter Copper Alloy Wire Wrap and Push-In Terminals

\* Web Code: XCE

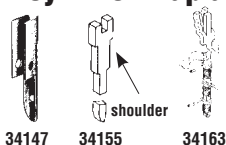
34147: Push-In Micro-Klip Terminals

34155: Miniwrap Wiring Terminals • Shoulder: .045"

• Two-prong with square tail for wire wrapping

34163: Klipwrap Wiring Terminals

• Three-prong with square tail for wire wrapping



Part No.	Mfr. Part No.	Height Above .062" Board	Length Below .062" Board	Post Size	Overall Length	100 pc. units	
						1	10
34147	T421-1/C	.200	.097	.032" x .045"	.36"	\$8.95	\$7.95
34155	T44/C	.065	.530	.025"Sq.	.69"	9.95	8.95
34163	T49/C	.200	.530	.025"Sq.	.83"	16.95	15.45



## BusBoard Breadboards and Prototyping Boards

- Precision-drilled
- Precision-etched

### Solderless Plug-In Breadboards

These solderless "plug-in" breadboards provide a quick way to build and test circuits, and can be transferred directly to the protoboards right away.

Part No.	Product No.	Size (L" x W" x D")	Points	1	10	50
2125018	BB300	3.3 x 1.4 x 0.3	300	\$4.95	\$4.49	\$3.95
20601	WBU-301	3.3 x 2.1 x 0.3	400	5.95	5.39	4.79
2123830	BB400T*	3.3 x 2.1 x 0.3	400	5.95	5.39	4.79
2125026	BB830T*	6.5 x 2.2 x 0.3	830	7.95	7.49	6.95

\* Transparent



2125026

### Solderable PC Protoboards

- High-quality FR4 glass epoxy PCBs for long life
- Anti-tarnish protective coating for easy soldering

2127267



Part No.	Product No.	Size (L" x W" x D")	Points	1	10	50
2125042	SB300	3.0 x 1.20 x 0.06	300	\$4.95	\$4.49	\$3.95
2125051	SB400	3.0 x 1.90 x 0.06	400	5.95	5.49	4.95
2191402	SB404	3.75 x 1.85 x 0.06	540	4.95	4.49	3.95
2191411	SB830	7.25 x 1.85 x 0.06	1258	6.95	6.25	5.59
2125034	BR1	7.0 x 1.85 x 0.06	830	6.95	6.49	5.95
2127241	PR3U	6.3 x 3.9 x 0.06	2356	10.95	9.49	8.95
2127267	ST3U	6.3 x 3.9 x 0.06	2356	9.95	9.49	8.95



## PT Series Prototyping Boards

- Features power buses that connect to a power jack (recommended P/Ns 101178 and 101187, pg 96)

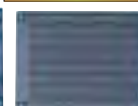
Part No.	Cross Ref.	Size (L" x W")	Hole Pads	# Holes x Dia.	# Mntg Holes x Dia.	1	10	50
645677	PB-456	3.5 x 2.5	Double-sided	456 x .036"	4.0 x .140"	\$9.95	\$8.95	\$7.95
262511	PB-1135	5.0 x 3.7	Double-sided	1135 x .036"	4.0 x .140"	12.95	11.95	10.95
262537	PB-1931	6.0 x 4.9	Double-sided	1931 x .036"	4.0 x .140"	11.95	10.95	10.49



645677



262511



262537

\* Web Code: PBH

# Prototype Boards, Circuit Boards & Accessories

## DATAK Pre-Sensitized Circuit Boards & Chemicals

### Circuit Boards

- Pre-coated circuit board
- 1/16" thick

\* Web Code: CTB

156751



Part No.	Mfr. Part No.	Description	Size (W" x L")	1	10	50
2097117	14-024	Single sided	2.0 x 4.0	\$3.95	\$3.49	\$3.19
156751	14-034	Single sided	3.0 x 4.0	5.49	4.95	4.49
2161326	14-046	Single sided	4.0 x 6.0	7.95	7.49	6.95
2161334	14-066	Single sided	6.0 x 6.0	10.95	9.95	8.95
156742	14-234	Double sided	3.0 x 4.0	6.95	6.49	5.95
2161342	14-266	Double sided	6.0 x 6.0	11.95	10.95	9.95

### Copy Sheets and Chemicals

2097070	12-500	Clear copy sheets (8.5" x 11.5") 5 pk.	\$5.49	\$4.95	\$4.49
70201	ER3*	Dry concentrated etchant (makes 1 pint)	7.95	7.49	6.95
156734	12-404*	4 oz. positive developer	24.95	22.95	19.95
2097088	12-800	Tin plating copper kit†	16.95	15.95	14.95

\* Shipped via ground – available in continental U.S. only

† Includes ER-18 tinnit solution, 8"x6"x2" pan, 16 oz. bottle

## GG Prototype Boards

\* Web Code: PBH

### Export Design Phenolic Prototype Board

Accommodates all types of ICs, transistor packages and passive parts. Lands and bus bars are tin plated. 0.1" centers.

Part No.	Mfr. Part No.	Size (W" x L" x Thick")	1	10	50
616631	22-504	3 1/8 x 5 1/16 x 1/16	\$6.25	\$5.59	\$4.95

### Experimenter's Phenolic Prototype Boards

616649: Copper plated with 94 five-point terminals and two 40-point bus strips

616673: Single land pattern

Part No.	Mfr. Part No.	Size (W" x L" x Thick")	1	10	50
616649	22-508	2.0 x 6.0 x 1/16	\$13.95	\$12.95	\$11.95
616673	22-512	3.38 x 6.75 x 1/16	6.95	6.49	5.95

### Perforated Bare Phenolic Prototype Boards

Unexcelled for prototypes, breadboards, hobby or science projects. Bare phenolic board with no copper clad.

- 0.100" spacing
- 1/16" thick

Part No.	Mfr. Part No.	Size (W" x L")	Hole Dia.	1	10	25
616681	22-514	2.25 x 6.0	.042	\$6.59	\$6.19	\$5.69
616690	22-516	4.50 x 6.0	.042	5.95	5.49	4.95

### DC VOLTAGE MONITOR KIT

- 7 LEDs to monitor 12VDC in 1V, 1/2V or 1/4V steps
- Can also be built to monitor 8V or 5V in 1/4V steps
- Great for boats, motor homes, model planes, or race car Ni-Cd batteries
- All parts and instructions included
- Size: 1.3" x 2.7"

Part No.

181833

1

5

\$9.95

\$8.95

## BPS Through-Hole Prototyping Boards

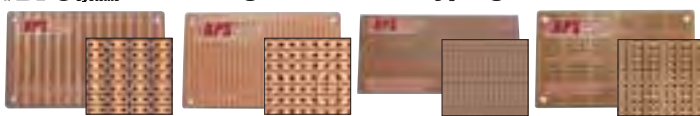


Fig. 1

Fig. 2

Fig. 3

Fig. 4

- High-quality FR4 glass-epoxy circuit board
- 1 oz./ft<sup>2</sup> copper with anti-tarnish coating for easy soldering
- 0.037" drilled holes on 0.1" (2.54mm) centers

Part No.	Mfr. Part No.	Description	Fig.	Size (W" x L")	1	10
2191461	PR2H1	Single-sided	1	1.97 x 3.15	\$3.95	\$3.59
2191488	ST1	Single-sided	2	1.97 x 3.15	3.95	3.59
2191470	PR2H2	Single-sided	1	3.15 x 3.94	6.95	6.25
2191496	ST2	Single-sided	2	3.15 x 3.94	6.95	6.25
2191429	SB1660	Single-sided	3	3.65 x 7.25	10.95	9.95
2191445	PAD1	Double-sided	4	1.97 x 3.15	4.95	4.49
2191453	PAD2	Double-sided	4	3.15 x 3.94	7.19	6.25

## Photofabrication, Exposure and Economy Etching Kit

The kits below allow you to produce professional printed circuit boards quickly and at a lower cost than a professional design house.

\* Web Code: MGC

### 2121017: Photofabrication kit

- 3 single sided presensitized PCB boards (3" x 5", 4" x 6" and 6" x 6")
- Instruction sheet
- Chemicals: developer and ferric chloride
- Foam brushes, development tray, rubber gloves

### 2121025: Exposure kit

- Fluorescent light fixture w/ stand
- Instruction sheet
- Daylight fluorescent bulb
- Acrylic weight for artwork

### 2121033: Economy Etching kit

- 5 liter etching tank
- Instruction sheet
- Air pump and tubing, spraying unit, vinyl gloves

Part No.	Description	1	5
2121017	416-K photofabrication kit*	\$62.95	\$57.69
2121025	416-X exposure kit	73.95	68.95
2121033	416-ES economy etching kit	68.95	62.95

\* Shipped via ground – available in continental U.S. only

## Jameco ValuePro Prototyping Developer Kit

The Jameco prototyping developer kit includes everything you need to get started with prototyping your own PCB.

- 2 precoated circuit boards, 3" x 4" x 1/16" (P/N 156751, above left)
- 4 oz. positive developer concentrate (P/N 156734, above left)
- 32 oz. etching solution (P/N 616438, pg 130)

Part No.	Description	1	5
2113244	Prototyping developer kit*	\$46.95	\$42.95

\* Shipped via ground – available in continental U.S. only

## GG Bare Copper Circuit Boards – Single Sided

1 oz. copper on base of either fiberglass or reinforced epoxy board.

Part No.	Mfr. Part No.	Size (W" x L" x Thick")	1	10	50
616471	22-250	3" x 5" x 1/16"	\$3.95	\$3.69	\$3.49
616489	22-260	4" x 6" x 1/16"	4.95	4.49	3.95
616497	22-261	6" x 6" x 1/16"	4.95	4.49	3.95
616500	22-263	6" x 9" x 1/16"	5.49	4.95	4.49
616518	22-264	8" x 10" x 1/16"	9.95	8.95	7.95
616534	22-268	11" x 14" x 1/16"	14.95	13.95	12.95

\* Web Code: CTB

## Jameco ValuePro Copper-Plated Blank Circuit Boards

Single & double-sided boards are copper plated.

- Copper thickness: 35µm
- Total copper weight: 1 oz per side
- 1.6mm (1/16") thick • PCB material: phenolic

Fig. 1

Fig. 2

Fig. 3

Part No.	Cross Ref. No.	Description	Fig.	Size (L" x W")	1	10	50
169279	PCBS3X6	Single-sided	3	2.9 x 5.9	\$2.95	\$2.69	\$2.39
169288	PCBS6X6	Single-sided	2	5.9 x 5.9	3.95	3.49	2.95
169296	PCBS12X12	Single-sided	1	11.8 x 11.8	11.95	10.95	9.95
169309	PCBD3X6	Double-sided	3	2.9 x 5.9	3.95	3.49	2.95
169317	PCBD6X6	Double-sided	2	5.9 x 5.9	6.95	6.39	5.59
169325	PCBD12X12	Double-sided	1	11.8 x 11.8	19.95	17.95	15.95

## GG Positive Pre-Sensitized Circuit Boards

1 oz. copper (.0014") on an epoxy glass FR-4 board, UL94V-0 rated. The peel-off coating protects the board while handling or cutting prior to exposure. Use with developer mixed 1:9 with water (recommend P/N 616411, pg 130).

\* Web Code: CTB

Part No.	Mfr. Part No.	Description	Size	1	10	50
616251	21-334	Single-sided	4" x 6"	\$6.49	\$5.95	\$5.49
616260	21-336	Single-sided	6" x 6"	7.95	7.29	6.49
616307	21-353	Double-sided	6" x 9"	13.95	12.95	11.95

\* For additional products, availability and specifications visit [Jameco.com](http://www.Jameco.com) and enter the Web Code in the product search box

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NAME BRANDS	HOUSE BRANDS	SPECIAL BUY

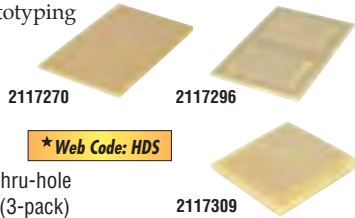
Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)



## BoardworX Surface Mount Proto Boards

BoardworX utilizes a new SMT prototyping system called the "Universal Grid" concept which allows fast and easy prototyping of almost all surface mount parts on a single board (except BGAs)

2117270/2190531: Surface mount only  
2117296/2190557: Surface mount and thru-hole  
2117309/2190565: Surface mount only (3-pack)



\* Web Code: HDS

Part No.	Mfr. Part No.	Size (L" x W")	Grid Spacing (Top/Bottom)	1	10
2117270	SMT-100	3.0 x 2.0	0.02"/0.025"	\$14.95	\$13.49
2190531	SMT-1100*	3.0 x 2.0	0.02"/0.025"	14.95	13.49
2117296	SMT-300	3.0 x 2.0	0.02"/0.025"	14.95	13.49
2190557	SMT-1300*	3.3 x 2.0	0.02"/0.025"	14.95	13.49
2117309	SMT-400	1.0 x 0.95	0.02"/0.025"	7.95	7.19
2190565	SMT-1400*	1.0 x 0.95	0.02"/0.025"	7.95	7.19

\* Lead-free solder mask with silkscreen and through-board connection vias

## BELLIN DYNAMIC SYSTEMS, INC. Surface Mount Proto Boards

Easy, cost-effective and versatile Snap-Apart™ solution from Bellin Dynamic Systems.

- Board thickness: 0.031"
- Size: 7.6"L x 5.0"W
- Compatible w/ .100" single/dual row male headers (see pg 54)



### Small SMT

Part No.	Mfr. P/N	Board Description	1	5
215491	B502	160 SMT pattern, SOT/SOIC/TSOP/MSOP/DPAK & more ...	\$39.95	\$36.95
227344	B513	300 SMT pattern, SC90, SOT23-6, 323-6, TSOP, MSOP8, 10+	49.95	44.95

\* Web Code: HDS

### SOIC

215520	B505	60 SOIC SMT pattern, SOIC 8, 14, 16, 24, 32, 40 & more ..	\$49.95	\$44.95
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### Fine Pitch Dual Row

323889	B516	54 SMT pattern, 0.65mm TSSOP 14/16/20/28 to DIP 0.300/0.600	\$49.95	\$44.95
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## MICROCHIP PICKIT™ 2 Microcontroller Starter Kit

The PICKIT™ 2 microcontroller programmer is a low cost development programmer. It is capable of programming most of Microchip's Flash microcontrollers. New device support can be added by updating the operating system. The latest firmware is available on Microchip's website.

**Includes:** PICKIT™ 2 development programmer, demo board with 8-bit CMOS MCU, two starter CD ROMs and USB cable



Part No.	Mfr. Part No.	Description	1	5
697338	DV164120	Programmer starter kit .....	\$89.95	\$79.95

## MICROCHIP PICKIT™ 3 In-Circuit Debugger

The PICKIT 3 uses in-circuit debugging logic incorporated into each chip with Flash memory to provide a low-cost hardware debugger and programmer.

- USB (Full speed 12 Mbits/s interface to host PC)
- Real-time execution • MPLAB IDE compatible (free copy included)
- Built-in over-voltage/short circuit monitor
- Supports low voltage to 2.0 volts (2.0V to 6.0V range)

\* Web Code: SUP

Part No.	Mfr. Part No.	Description	1	5
2184632	PG164130	PICKIT 3 programmer/debugger .....	\$89.95	\$79.95



## BEST SELLING PROTOBOARDS

Part No.	Mfr. Part No.	Size (L x W)	1	10
105100	G/S(PCB228)-R	1.6 x 2.7	\$5.95	\$5.49
105111	PCB-102-R	2.4 x 3.4	7.95	7.19
645677	PB-456	3.5 x 2.5	9.95	8.95
206587	PCB-586-R	4.3 x 6.8	9.95	8.95
616690	22-516	4.5 x 6.0	5.95	5.49



## SENTRYBOARD™ SMT to DIP Adapter

\* Web Code: HDS

This adapter makes it easy to prototype with surface mount ICs on your solderless breadboard. Simply solder the IC onto the adapter and the pins will plug directly into your board.

- Multiple boards in one package that break away
- Each one includes a row of headers for use with breadboards



Part No.	Mfr. Part No.	Pitch	No. of Boards	1	10
2130263	204-0004-01	1.27mm	3 (one 8-pin, one 18-pin, one 28-pin) ..	\$8.95	\$7.95



## Surfboards®

\* Web Code: HDS

Mini breadboards for surface mount devices



Part No.	Mfr. Part No.	Description	1	10
207360	9081	For 8-pin SOIC .....	\$2.95	\$2.65
207378	9082	For 8-pin SOIC .....	4.95	4.49
207386	9161	For 14/16-pin SOIC; 0.1" pin spacing; 0.65"H .....	2.39	2.19
207394	9163	For 14/16-pin SOIC; 0.1" pin spacing; 0.65"H .....	5.95	5.39

## JAMECO ValuePro Dual-Sided SMT Adapter Boards

These surface mount adapters have different package topologies on either side so you can test multiple SMT chips using just one adapter board.

- 0.10" pin spacing
- Holes are plated-through
- Boards easily breakaway



Part No.	Size (L" x W")	Fits Packages	1	10
2178195	2.6 x 0.7	8/16/28-pin SOIC & TSSOP .....	\$9.95	\$8.95
2178208	3.4 x 2.3	SOIC, TSSOP, SOT, TO, HC and SMT passive .....	34.95	31.95



## USBtinyISP AVR Programmers

The USBtinyISP is a low-cost, simple solder kit, and has both 6 and 10-pin standard ISP cables. Works with AVRdude and AVRStudio-compatible & tested under Windows® XP, Linux & MacOS X.

**NOTE:** Does not do JTAG or high voltage programming.

- Max clock rate: 400kHz
- Read/write speed: 2kb/s, 1kb/s
- 2 status LEDs: "USB/Power Good" and "Busy"
- I/O buffering allows programming of 2V-6V targets
- Powered via 5V USB bus @ <100mA

**Includes:** 6 & 10-pin ISP cable

**Requires:** USB-A to USB-B cable (P/N 222608, pg 95, not included)

Part No.	Mfr.	Includes	1	5
2136788	Adafruit	PCB, enclosure, MCU and components (kit)	\$26.95	\$24.95
2157790	DFRobot	Assembled board .....	17.95	15.95



## USB AVR Programmer

This programmer emulates an AVRISP v2 on a virtual serial port, making it compatible with standard AVR programming software.

- In-system programmer (ISP)
- Extremely compact
- Compatible with Windows XP, Windows Vista, Windows 7 and Linux

**Includes:** 6-pin ISP programming cable and USB-A to mini-B cable

Part No.	Description	Size (L" x W")	1	5
2136420	USB AVR programmer	1.35 x 0.6	\$19.95	\$18.95



## TopMax II High Speed Universal Programmer



- USB interface
- 48-pin ZIF socket
- Input voltage: 5V, 3.3V, 2.7V, 1.8V
- No. of devices supported: 15,000+
- Supports: NAND Flash Memory, Standard Flash Memory, EPROM, EEPROM, Serial PROM, GAL, FPGA, MCU



\* Web Code: SUP

Part No.	Mfr. Part No.	Price
2110158	TOPMAXII .....	\$794.95



# Rack Mount Enclosures, Surge Protectors & USB Products



## FireWire Adapter Card

- 4-port • PCI bus
- Firewire 800 and hi-speed
- USB combo/Firewire adapter

\* Web Code: VBB

Part No.	Product No.	1	10
2209238	NN-8IS212-S2	\$29.95	\$26.95



## 6-Outlet Surge Protectors

- 20175: • Metal power strip
- Size: 12.3"L x 2.4"W x 1.3"H • 4' cord
- 216485: • Heavy-duty power cord (14AWG x 3)
- Size: 9.5"L x 1.7"W x 1.4"H • 4' cord
- Clamping voltage: 400V
- Max. surge voltage: 6500V
- RESET/OFF switch with built-in 15A circuit breaker



20175



216485

Part No.	Product No.	Spike Current (Max.)	1	10	25
20175	51W1-13206	4500A, 90 joules	\$13.95	\$12.49	\$10.95
216485	51W1-10206	4500A, 150 joules	11.95	10.95	9.95

\* DIN Mounting Rails Accessories — Enter Web Code MBM



## Computer Switchbox

- 2-port switchbox
- DB25 female (2 PCs to 1 printer)
- Size: 6.0"L x 5.8"W x 2.3"H
- Weight: 1.4 lbs.

\* Web Code: CAK



Computer Cables on page 138

Part No.	Cross Ref. No.	1	5
20095	40D3-17602	\$19.95	\$17.95



## 19" Rack Mount Enclosures

- Ventilation holes all side
- Finish: Flat black
- Front and back panels are steel with aluminum, pre-punched face plates
- 0.12" thick black front panel
- Need to assemble
- Top, bottom and sides are durable 0.035" steel
- All enclosures have handles except P/N 132813



Includes: Mounting screws

Part No.	Dimensions (In.)			Wt. (lbs.)	Pricing	
	H1	H2	D		1	5
149500*	3.50	1.70	15.80	8.0	\$34.95	\$31.95
132813	1.73	1.25	9.75	6.2	44.95	39.95
132840	3.46	2.88	11.75	9.1	59.95	53.95
2203590†	3.50	3.50	15.50	9.1	49.95	44.95
132848	5.22	4.75	11.75	10.6	64.95	59.95
132864	8.56	8.00	13.50	15.4	109.95	99.95

\* 2U fixed rack shelf (beige)

† Assembled with 2 fans

\* Rack Mount Products — Enter Web Code GAT

## Adjustable Timer Module

Adjustable from 1 sec. to 3 mins.

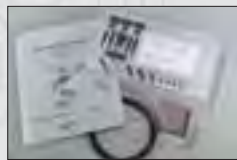
- Maximum rating: 12VDC @ 5A
- Reserve polarity protection
- Time adjusted with potentiometer



Part No.	Mfr. Part No.	1	5
2171292	THR-300	\$24.95	\$22.49

## FIBER OPTICS LAB KIT

Nine experiments include making a light guide, cable transmission, characteristics of connectors and splices, index-matching, transmitter and receiver designs, and termination techniques.



**Contains:** Fiber optic cable, optical light pipe, splices, connectors and polishing film, photodetectors, Tx/Rx electronics and 68-page guide.

Part No.	Mfr. Part No.	1	5
169914	IF-LMH	\$59.95	\$49.95
171272	Custom 207	5.95	5.49



## USB-A Cable with Bracket

- Add additional USB ports to your PC
- Dual USB-A female ports
- Supports data transfer rates of 12Mbps • 8"L cable



Part No.	Description	1	10	25
144813	(2) 1x5-pin connectors	\$4.95	\$4.49	\$3.95

\* Computer Brackets — Enter Web Code RAX

\* Surge Protectors — Enter Web Code CAC



## Analog DIN Rail Timer

- DIN rail/ back panel mount (17.5mm)
- 10 time ranges • 13 timing functions
- Output contact: SPDT (1C/O)
- Contact rating: 5A (NO), 3A @ 250VAC (NC)
- Faceplate (IP50), housing (IP40), terminals (IP20)



Part No.	Size	1	5	25
2193862	17.5mm	\$34.95	\$31.95	\$28.95



## Black/Yellow Flashlight

- General purpose handheld flashlight
- 6" overall length
- Uses 2 C-cell batteries (sold separately)



Part No.	Cross Ref. No.	1	10
2202116	FL6	\$1.95	\$1.75



## Mini USB Flash Drive

- USB flash drive in the shape of a Mean Well power supply!
- Perfect for storing, transporting and sharing your presentations, documents, photos, music, and more.
- Compatible with Windows® 2000, XP, Vista and 7; Linux; Mac® OS



Part No.	Description	1	10
2155356	8GB USB flash drive	\$9.95	\$8.95



## Pan & Tilt Assembly

- For horizontal surface mount
- Aluminum multifunction bracket
- 2157870: • Mini pan & tilt kit
- 15kg/cm @ 4.8V • Rotation: 0-180°
- 2144518: • 5.5kg/cm @ 6.0V
- Ball bearing servos
- 100-800mA • Rotation: 0-180°



Part No.	Mfr.	Mfr. Part No.	1	5
2157870	Dagu	RS002B	\$17.95	\$15.95
2144518	DFRobot	FIT0045	39.95	35.95



## Computer Service Tool Kit

Zippered pouch neatly holds 13 tools.

- Antistatic chip inserter
- Antistatic chip extractor
- Antistatic 3-prong parts/chip retriever/extractor
- Antistatic chip tweezers
- 1/4" nut driver
- 3/16" nut driver
- STAR screwdriver
- #0 Phillips screwdriver
- #1 Phillips screwdriver
- 1/8" slotted screwdriver
- 3/16" slotted screwdriver
- Extra parts tube



Part No.	Cross Ref. No.	1	10
2209060	400077	\$15.95	\$14.49



## Automotive Night Light

- Reading light with On/Off switch
- Powered via 12VDC cigarette lighter
- 2.5" diameter light with wide angle beam
- 5" long flexible cord for adjustment



Note: Not for use in 24VDC systems

Part No.	Mfr. Part No.	1	10
2202124	9585	\$1.95	\$1.75



## USB 2.0 4-Port Hub

Add multiple high performance USB 2.0 devices to your computer or laptop. Unique design allows for easy storage and use.

- Stylish compact size and light weight
- USB 2.0 up to 480 Mbps
- Plug-and-play, bus powered
- 1 upstream, 4 downstream ports



Part No.	Cross Ref. No.	1	5
2184085	HUZZ40	\$9.95	\$8.95



## Waterproof USB Video Borescope

Allows for easy surveying of hard-to-reach places with 4 adjustable LEDs on the top on the camera.

- Flexible 16' cord • 9.8mm camera
- Webcam and photo snap function
- Works with Windows® XP, 7, Vista and Mac iOS



Part No.	Cross Ref. No.	1	5
2177707	INSPECTOR-T1	\$34.95	\$31.95

\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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Order by Phone at 1-800-831-4242 or Online at [www.Jameco.com](http://www.Jameco.com)



JAMECO ValuePro

## Computer Cables and Adapters

\*Web Code: CCS



### Extension Cables

- All lines connected straight through

#### Male to Female

Part No.	Description	Lgth (ft.)	Color	1	10	100
2075971	DB9†	6	Black	\$1.95	\$1.49	\$1.25
199639	DB9*	6	Black	5.95	5.35	4.79
2179702	DB9*	6	Beige	4.49	3.95	3.49
25701	DB9*	6	Beige	5.95	5.35	4.79
148516	DB9*	10	Beige	6.95	6.25	5.49
181359	DB15	6	Gray	6.95	6.25	5.59
148532	HDDB15*	10	Beige	8.95	7.95	6.95
134042	HDDB15**	6	Beige	4.95	4.49	3.95
175291	DB25*	3	Black	3.49	3.15	2.89
67257	DB25*	6	Gray	4.95	4.49	3.95
39511	DB25*	10	Gray	5.95	5.49	4.95
177279	DB25*	15	Gray	6.95	6.25	5.59
101996	DB25*	25	Gray	9.95	8.95	7.95
181295	DB37	6	Gray	5.95	5.35	4.79

#### Male to Male

181666	DB9	10	Beige	\$6.95	\$6.25	\$5.49
181286	DB15	6	Gray	6.95	6.25	5.49
2209211	HDDB15	2.5	Black	3.95	3.59	3.25
66174	HDDB15	6	Beige	3.95	3.55	3.19
2155188	HDDB15*	6	Black	2.95	2.59	2.29
148523	HDDB15	10	Beige	6.95	6.49	5.95
174001	DB25*	3	Black	4.95	4.49	3.95
65788	DB25*	6	Gray	6.95	6.49	5.95

#### Female to Female

224267	DB25*	6	Gray	\$5.95	\$5.49	\$4.95
--------	-------	---	------	--------	--------	--------

- \*with thumbscrews \*\*male with thumbscrews/female w/ nuts
- †with thumbscrews, filters & green connectors

#### Serial Cables w/ Thumbscrews

132346	DB9 F to F	6	Beige	\$4.95	\$4.45	\$3.95
196366	DB9 F to F	10	Beige	5.95	5.35	4.95

#### AT F-M Adapter Serial Cables

109584	DB9 F to DB25 M	1	Beige	\$2.49	\$2.25	\$1.95
31722	DB9 F to DB25 M	6	Beige	4.95	4.49	3.95

#### Serial Null Modem Cables

- Gray • Pin-outs in ( )

Part No.	Description	Length (ft.)	1	10	100
181404	DB9 F to F (1 & 6-4; 2-3; 3-2; 4-6 & 1; 5-5; 7-8; 8-7)	6	\$5.55	\$4.95	\$4.49
180698	DB9 F to F (1 & 6-4; 2-3; 3-2; 4-6 & 1; 5-5; 7-8; 8-7)	10	6.75	5.95	5.45
180582	DB25 M to DB9 F (2-2; 3-3; 4-5 & 6; 5-7; 6 & 8-20; 7-8)	10	4.95	4.49	3.95

#### 6-Pin Mini DIN PS/2 & AT Cables

Part No.	Description	Lgth (ft.)	Color	1	10	100
112628	Male to male	10	Beige	\$5.95	\$5.49	\$4.95
28549	Male to female	6	Beige	4.75	4.25	3.95

\*Power Splitter & Adapter — Enter Web Code TAE

### DIN Male Printer & Keyboard Cables for Mac®

Part No.	Description	Lgth (ft.)	Color	1	10	100
1944994	8-pin (with EMI)	3.3	Black	\$1.95	\$1.75	\$1.49
10604	8-pin	6	Gray	3.95	3.49	3.05
130025	8-pin	10	Gray	4.95	4.49	3.95

### IEEE 488

73155	24-pin GPIB	3.3	Gray	\$24.95	\$22.49	\$19.95
115782	24-pin GPIB	6.6	Gray	29.95	26.95	23.95

### SATA Data Cable

Part No.	Description	Length (ft.)	1	10	100
2114407	7-pin internal	1.6	\$2.95	\$2.65	\$2.39

### Disk Drive Cables

32686	40-pin (IDE)	1.5	\$1.95	\$1.49	\$1.25
32715	50-pin (SCSI)	1.5	3.95	3.49	2.95

### Ribbon Cable Assemblies

12408	DB25 M to F (28 AWG)	4	\$6.95	\$6.25	\$5.59
208582	DB9 M to F (28 AWG)	6	4.95	4.49	3.95

### USB-A Gender Adapter

Part No.	Description	Lgth (ft.)	Color	1	10	100
316806	Female to female	1.5	Black	\$2.95	\$2.65	\$2.39

### USB-A to DB9 Male Serial Cable/Adapters

387954	w/ jackscrews	2	Gray	\$16.95	\$15.95	\$13.95
2115346	w/ thumbscrews	6	Gray	18.95	16.95	14.55

### USB Cables

\*Web Code: NAV

326474	A M to M (2.0)	3	Beige	\$1.95	\$1.75	\$1.49
2150985	A M to M (2.0)	6	Blue	.99	.89	.75
222033	A M to M (2.0)	6	Black	2.95	2.59	1.95
222050	A M to M (2.0)	15	Black	2.75	2.49	2.25
326482	A M to F (2.0)	3	Beige	1.95	1.75	1.59
229771	A M to F (2.0)	6	Beige	2.95	2.65	2.39
222068	A M to F (2.0)	6	Black	3.25	2.95	2.25
229623	A M to F (2.0)	6	Clear	2.49	2.35	2.25
222076	A M to F (2.0)	10	Black	3.49	2.95	2.49
222084	A M to F (2.0)	15	Black	3.95	3.49	2.95
229711	A M to B M (2.0)	3	Beige	1.95	1.75	1.59
222608	A M to B M (2.0)	3	Black	1.95	1.75	1.59
229730	A M to B M (2.0)	6	Beige	2.95	2.49	1.95
2192675	A M to B M (2.0)†	6	Black	2.49	2.25	1.75
222010	A M to B M (2.0)	6	Black	2.95	2.49	1.95
229594	A M to B M (2.0)	6	Clear	2.95	2.49	1.95
229738	A M to B M (2.0)	10	Beige	3.25	2.95	2.25
222018	A M to B M (2.0)	10	Black	3.25	2.95	2.25
222026	A M to B M (2.0)	15	Black	3.49	2.95	2.49
673694	A M to 5-pin mini B	6	Black	2.95	2.59	2.19
2202183	A M to 5-pin mini B	6.6	Black	5.95	5.39	4.75
2144833	A M* to 5-pin mini B	2	Black	2.95	2.49	1.95
2135064	A M to micro-B	3	Black	2.95	2.59	2.29
2196086	A M to micro-B	3.2	White	2.95	2.59	2.29

†RFI filter \*Dual A = USB-A; B = USB-B; M = male; F = female

\*HDMI Cable — Enter Web Code DEM

## Apple USB Chargers, Data Cable, Earphones and Adapters

Part No.	Description	Price
2154935	Earphones with remote & mic	\$5.95
2151030	Charge kit (1ea. 2151048 & 2151056)	11.95
2151056	USB-A to Apple 30-pin, 36"	3.95
2196060	USB micro-B to Apple 8-pin adapter	2.95
2196078	Apple 30-pin to Apple 8-pin adapter	2.95

## FireWire 400 Cables

- 24K gold-plated connector • Color: black

Part No.	Description	Length (meter)	1	10	100
2202191	4-pin to 4-pin	3	\$6.95	\$6.25	\$5.59
2202221	6-pin to 4-pin	2	9.95	8.95	7.95
2202204	6-pin to 4-pin	3	11.95	10.95	9.95
2202212	6-pin to 4-pin	5	14.95	13.49	11.95
2202239	6-pin to 6-pin	2	6.95	6.25	5.59

\*Video Accessories — Enter Web Code YBE

\*USB Hubs — Enter Web Code NEM

\*PC Mount USB Connectors — Enter Web Code DAZ

## RS-232 to RS-485/422 Bidirectional Converters

- Cable length: 4000' max.
- Data rate: 100 kbps
- Controlled by RTS signal
- DCE and DTE selectable
- 4-wire full duplex or 2-wire half duplex
- Point-to-point and multidrop operations
- RS-485: terminal block and RJ11 connections
- Power consumption: 9V (1.35W max.)
- Input: 110VAC
- One-year warranty
- RS-232: DB25 female connector
- Size: 2.2"L x 3.2"W x 0.8"D
- 197931: Port powered

Part No.	Mfr. Part No.	Signals	1	5
117701	IC-485S	RS-232 to RS-485...	\$64.95	\$58.95
197931	IC-485SN	RS-232 to RS-422/485...	69.95	62.95

\*Bidirectional Converters — Enter Web Code KEM

## TTL Serial JPEG Camera with NTSC Video

- This camera module outputs NTSC video and can take snapshots of that video and transmit them over the TTL serial link. Take up to 640 x 480 resolution pictures and pre-compress them for quick and easy storage.
- Manually adjustable focus
  - 30MP CMOS
  - Progressive scan mode
  - Motion detection

Part No.	Mfr. Part No.	Size	1	5
2144340	P7030	1.25" x 1.25"	\$44.95	\$39.95

\*Cameras — Enter Web Code MBB





DIY Spider Robot

2190717



USB Arm Controller

2111960



Mini Robot

2150619



Crawling Micro Bug

200336



Line Tracing Robot

2200081



Tyrannosaurus

242923



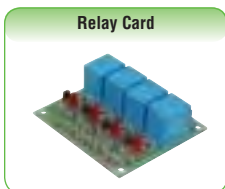
Construction Robot

358272



Running Micro Bug

200328



Relay Card

239476



RFID Proximity Card

2123936



Titan Tank

2128374



Terrain Tracked Robot

2128331



Robotic Arm

2095023



Mr. General

2150580



3pi Robot

2136403



J-Bot

2140285

## Quick Starter Kit for Raspberry Pi 2 Model B

★ Web Code: RPI

NEW  
MARKED IN PINK

After you've picked up your new Raspberry Pi 2 (sold separately, P/N 2223523), you'll need a bunch of accessories to get up and running. This starter bundle provides the 5V/2.1A USB power adapter (P/N 2217617), a sweet micro USB cable with in-line switch (P/N 2223945), an 8GB microSD card pre-loaded with the Raspbian OS, HDMI cable, Ethernet cable, 802.11b/g/n wireless USB adapter (P/N 2223953), a USB to TTL serial cable and a black plastic enclosure.

seed studio

Part No.	Mfr. Part No.	Description	Price
2223890	110060088	Starter kit, compatible with Pi 2 Model B and Pi Model B+ .....	\$59.95

## 3D Printer Pen

Extrude heated 1.75mm filament and draw your own 3D structures.

★ Web Code: TDP

- 26 watts, 350°F – 482°F
- Uses 1.75mm PLA/ABS
- Adjustable print speed and temp
- Standby function after 5 mins idle
- Size: 7.3"L x 1.7"W x 1.2"H

**Includes:** (3) 5m ABS filament samples and 12V/3A power supply

Part No.	Description	Price
2217019	3D printer pen .....	\$149.95

## ARDX v1.3 – Experimentation Kit

Using the latest R3 Arduino Uno and various included electronic components, you'll learn how to make 13 simple circuits without any soldering. You'll also get an experimenter's guide booklet along with breadboard layout sheets to make assembly easier.

- Full color experimenter's guide and layout sheets
- Over 75 components to explore 13 projects

**Includes:** Arduino Uno R3 and USB cable

Part No.	Mfr. Part No.	Price
2212007	170	\$99.95

## Electronic Kits

### Robotic and Computer Control Kits

★ Web Code: ERK

Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
2190717	ROB0103	DIY Spider Robot using your controller (Romeo recommended)	70	BEG	6.0 x 4.0 x 3.0	0.6	\$8.95	\$7.95
242923	21-601	Mechanical Wooden Tyrannosaurus kit	116	BEG	1.5 x 3 x 6.5	0.9	14.95	13.49
2200081	93559	PC Programmable Line Tracing Robot via drag/drop commands	42	BEG	4.9 x 3.5 x 2.2	0.6	29.95	28.49
2111960	535-USB	USB Arm controller for P/N 2095023	1	BEG	5.5 X 1.8 X 7.5	0.3	39.95	35.95
358272	70162	Design a robot w/ this RC Robot Construction set! Lift, scoop and drop all kinds of stuff.	144	BEG	6.5 x 3.5 x 3	1.0	54.95	49.95
2150619	RS014-USB	2-in-1 Mini Robots include IR compound eye, 4 mini servos and universal remote. Tools included	22	BEG	3 x 3 x 5	1.0	59.95	54.95
200328	MK127	Light-Following Running Micro Bug kit	26	INT	4.0 x 2.4	0.2	11.95	10.95
200336	MK129	Light-Seeking Crawling Micro Bug kit	29	INT	4.0 x 2.4	0.2	16.95	14.95
239476	K2633	Relay Card kit (req. pwr supply P/N 133891 pg 91)	29	INT	3.0 x 2.7	0.4	19.95	17.95
386708	21-880	Line Tracking Robot Mouse (solder required)	130	INT	3 x 3 x 3	0.9	22.95	20.95
2130600	K8015	Multi-function Relay Switch with 14 different functions and pushbutton control	37	INT	3.4 x 1.5 x 1.0	0.5	27.95	25.95
358352	75020	Line Tracing Snail Robot kit	40	INT	6.9"H	2.0	39.95	35.95
2123936	MK-179	RFID Proximity Card Reader kit, include 2 tags EM4100 compatible (more tags on pg 143)	52	INT	2.6 x 2.4 x 0.8	0.5	29.95	26.95
2128374	21-531N	Titan Tank kit, IR remote control, 4-ch selection for battle, 4xAAA & 4xAAA batteries required	121	INT	6.5 x 6.5 x 3.6	1.5	39.95	35.95
2128331	OWI-536	3-In-1 All Terrain Tracked Robot; transform to a forklift, rover or gripper; wired remote control	120+	INT	—	2.2	59.95	53.95
2095023	OWI-535	Robotic Arm. 5 DoF, base rotates 270°. Lifts 100g. 12.6" reach	87	INT	6.3 x 15 x 9	2.5	59.95	53.95
2150580	RS002	Mr. General mobile robot platform features compound IR eye, 2 servos for pan/tilt and 2 cont. rotation servos. MCU & batteries not included	206	INT	7.5 x 4.8 x 4	1.5	59.95	54.95
2136403	975	3pi Robot with 2 gear motors, 5 reflectance sensors, LCD, buzzer, connected to an ATmega328 microcontroller	1	INT	3.7" Dia.	0.18	99.95	89.95
2140285	J-BOT	Build your very own customizable robot with ultrasonic sensors, 4WD platform, breadboard, MotorShield kit and much more	22	INT	9.5 x 7 x 8	3.6	159.95	144.95
2170273	PACE ROBOT	Personal & Classroom Electronic Robot. Grades 4-12	200+	INT	8.0 x 8.0 x 4.0	6.2	299.95	274.95

★ For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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139



## Electronic Kits (Continued)



### Robotic and Computer Control Kits (Continued)

★ Web Code: ERK

Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
2157124	J-Bot v2	Build a customizable mobile robot with ultrasonic sensor, 4WD chassis, breadboard and Romeo microcontroller w/ built-in motor control	17	INT	9.5 x 7 x 8	3.8	\$159.95	\$144.95
2157116	258	Egg-Bot Deluxe is an open-source robotic arm that can draw on spherical shapes like eggs, ping-pong balls, golf balls and christmas ornaments up to 4.25" diameter. No soldering/programming required. PC/Mac required to create designs	126	INT	11 x 7.5 x 6	2.8	199.95	189.95
386610	21-886	Terrain Escape Robot kit with infrared emitting diode and receiver module (4 x AAA required)	86	EXP	5 x 5 x 5	0.9	22.95	19.95
2190101	RS032	Playful Puppy Quadruped Robot w/ 10 servo motors. Arduino compatible. (7.4V @ 2.2Ah LiPo recommended P/N 2167787, see Web)	85+	EXP	7 x 4.5 x 5	1.3	149.95	139.95



Egg-Bot Deluxe

2157116



Terrain Escape Robot

386610



Playful Puppy

2190101



Electronic Cricket

2136956

### Audio Transmitters, Amplifier, Sound Generator and Detection Kits

★ Web Code: AAK

Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
2136956	MK104	Electronic Cricket kit. Activated by darkness; effect, tone and light sensitivity adjustable	25	BEG	2.2 x 1.6 x 1.0	0.11	\$7.95	\$7.49
2131012	MK120	Infrared Light Barrier kit with 85dB audible alarm and visible LED alert	46	BEG	2.2 x 1.6/3.9 x 2.0	0.18	11.95	10.95
2130984	MK136	Super Stereo Ear audio amplifier boosts sound up to 50 times louder	35	BEG	2.4 x 2.1 x 1.7	0.15	11.95	10.95
2130731	MK171	Voice Changer kit. Add effects to your voice with robotic, vibrato, high-low effects and more	36	BEG	3.0 x 1.8	0.11	12.95	11.95
2130870	MK113	Siren Sound Generator. 4 different sounds with pitch adj. (9V required)	17	BEG	2.4 x 1.6	0.1	13.95	12.49
2196588	MK190	2x5 watt amplifier: 3.5mm stereo input jack, screw terminal output	25	BEG	2.6 x 2.1 x 1.0	0.2	16.95	15.49
2123944	MK-182	Digital Echo Chamber kit. Echo effect, line-in & out, output 8Ω, 500mW (9V required)	63	BEG	3.35 x 2.76 x 0.78	0.5	24.95	21.95
2151671	VM144	Telephone ring detector with relay output. Pre-assembled. (12V/0.1A supply required)	1	BEG	3.2 x 2.2 x 1.4	0.3	39.95	36.95
147571	MK103	Voice Activated kit. Requires 8-15VDC Power Supply or 9V battery, sound activates 4 flashing LEDs	33	INT	2.5 x 1.6 x 1.4	0.1	6.95	6.25
117612	K1803	Univ. Mono Pre-Amp kit (req. 10-30VDC pwr supply)	17	INT	1.2 x 1.8	0.3	10.95	9.95
662670	EBST-11	Audio Stereo Amplifier kit. 1 watt (9V required)	32	INT	2.8 x 2.3	0.2	11.95	10.95
151204	AA-1	Super Snooper Big Ear Audio Amplifier kit (9V req.)	17	INT	1.8 x 1.0 x 0.6	0.1	12.95	11.49
127255	K4001	7-Watt Amplifier kit. Requires 15VDC @ 500mA power supply, music output power: 7 watts, 4Ω	22	INT	2.2 x 1.4	0.3	15.95	14.49
211772	MK118	FM Radio kit, 88-108MHz (12VDC, 2.1mm req.)	65	INT	4.8 x 3.3	0.3	29.95	26.95
151239	FMST-100	FM Stereo Transmitter Mini kit, 9V battery	37	INT	2.7 x 2.0	0.2	32.95	29.95
129138	K4003	30W Stereo Pwr Amp. (req. 1x 24VCT @ 2A pwr supplies)	38	INT	2.8 x 2.0	0.7	32.95	29.95
2130491	K4305	20-LED Stereo VU Meter. -20dB to +3dB, 10-15VDC/0.25A via solder pad	45	INT	1.5 x 2.7 (x2)	0.5	34.95	31.95
127562	K4401	Sound Generator kit with 10 unique sounds	61	INT	2.8 x 2.8	0.4	39.95	35.95
2120815	K8098	Audio Analyzer, display EMS/peak power, mean/peak dB, audio spectrum	73	EXP	5 x 2.5 LCD	0.6	69.95	62.95
2120823	K8095	MP3 Player kit, create your own jukebox, sound effects, mp3 and more! SD card operation, Hi-quality VLSI decoder, vol. control, up to 32GB, up to 1024 folders with 16,348 songs each	100	EXP	5.11 x 3.9	0.7	89.95	80.95



IR Light Barrier

2131012



Super Stereo Ear

2130984



Voice Changer

2130731



Siren Sound Generator

2130870



Digital Echo Chamber

2123944



Telephone Ring Detector

2151671



2x5 Watt Amplifier

2196588



Stereo Power Amplifier

129138



Sound Generator

127562



Audio Analyzer

2120815



Logic Probe

662725



Analog pH Meter

2213288

### Test and Measurement Kits

★ Web Code: TMK

Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
2136930	MK105	Signal Generator. 1KHz fixed freq. 0-100mVrms pot adj. 9V battery required	30	BEG	2.2 x 1.6	0.1	\$8.95	\$7.95
662725	EBLOG-300A	Logic Probe kit. 3V-16VDC, detect high, low, pulse signal	14	BEG	4.0"L x 0.75"Dia.	0.1	11.95	10.95
2175568	EDU06	Oscilloscope Tutor: Learn about AC, DC, sine and square waves, power supply ripple, full and half-wave rectifiers, oscillators and more. O-scope required.	37	BEG	4.6 x 2.9 x 0.9	0.3	29.95	28.49
2213288	SEN0161	Analog pH meter kit to test water quality and other measurements	3	BEG	1.69 x 1.26	0.2	32.95	29.95
2181343	M-2666K	Deluxe Digital Multimeter kit. 3½-digit display and AC/DC current up to 20A	135	BEG	7.5 x 3.5 x 1.3	1.8	47.95	42.95
129091	K7102	Metal Detector kit. Sensitive within 8cm (req. 9V battery)	22	INT	2.1 x 2.1	0.4	18.95	16.95
20685	JE2206	Function Generator kit. 1-100kHz in 4 ranges	21	INT	4.1 x 1.5	0.1	29.95	26.95





## Electronic Kits (Continued)



★ Web Code: PSM

### Power Supply and Motor Kits

Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
2115750	34020	Breadboard Vreg kit. 6-18Vin, 5V @ .5A out, 2.1mm jack	12	BEG	2.2 x 0.6	0.1	\$8.95	\$7.95
181833	VM-1	DC Voltage Monitor kit with 7 LED display	46	BEG	2.7 x 1.3	0.2	9.95	8.95
2119751	C-8051	Adjustable Gear Motor kit. 4k-14k RPM	22	BEG	4.3 x 4.9	0.2	12.95	11.49
2184229	815	16-channel 12-bit PWM/servo driver with I <sup>2</sup> C interface. PCA9685. 5V tolerant	7	BEG	2.5 x 1	0.1	17.95	15.95
117621	K1823	1.5A @ 1.5-35VDC Power Supply kit	12	INT	2.1 x 2.1	0.3	13.95	12.49
2137166	K8042	Symmetric 1A Power Supply kit. Output of 1.2-18VDC depends on AC transformer (not incl.) see web	46	INT	3.1 x 2 x 0.9	0.5	19.95	17.95
20626	JE215	Dual Adjust Regulated Power Supply kit, 5-15VDC	48	INT	5.1 x 3.5 x 2.0	2.1	29.95	26.95
127829	GMC-1102	Motor Speed Control kit. Powers up to 5A @ 100VDC	35	INT	3.6 x 2.3 x 1.2	0.3	49.95	44.95
358248	70097	Twin Motor Gearbox kit. 58:1 & 203:1	61	EXP	3.0 x 4.0	0.3	12.95	11.49
120539	K8004	DC Pulse Width kit. Proportional DC to PWM	40	EXP	3.3 x 1.9 x 1.8	0.5	26.95	23.95

★ Web Code: DLK

### Distance and Light Kits

Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
2131207	MK135	Electronic Decision Maker kit. Rapidly flashes lights until it slowly stops at one	19	BEG	2.2 x 1.2 x 1.4	0.1	\$7.95	\$6.95
147635	MK100	Flashing Christmas Tree kit. 16 LEDs, 9V battery req.	30	BEG	4.0 x 2.4 x 1.0	0.1	7.95	7.39
2136972	MK109	Electronic Dice simulates the roll of a die and generates a random number	13	BEG	2.4 x 1.7	0.1	8.95	7.95
2130933	MK147	Dual white LED stroboscope creates a powerful flash effect. Speed adjustable 1-60 flashes/sec. 9V battery not included.	21	BEG	2.2 x 1.3 x 1.6	0.1	8.95	7.95
2136964	MK131	4-way Traffic Light kit. 12 LEDs with realistic operating and adjustable delay	63	BEG	2.0 X 1.4 X 4.5	0.2	10.95	9.95
2136999	MK112	Electronic Brain Game kit just like Simon Says. Visible/audible modes. 4 skill levels. 3xAAA not included.	28	BEG	2.0 x 2.6	0.2	10.95	9.95
157964	LED1007	Infrared Illuminator kit. 13.2VDC, 8' dia. @ 24'	41	BEG	2" Dia.	0.1	13.95	12.95
236081	MK145	Halloween Pumpkin with 25 yellow LEDs	71	BEG	2.48 x 2.24	0.2	14.95	13.49
2130802	MK150	Shaking Dice kit. Just give it a shake and the LEDs will automatically light a value	23	BEG	3.0 x 1.8	0.2	14.95	13.49
2136534	091	Larson Scanner kit. Create the scanning LED effect from Battlestar Galactica or Night Rider	22	BEG	5.0 x 1.5 x 1.0	0.1	15.95	14.49
2136542	080	Deluxe Menorah kit. (9) 10mm yellow LEDs, press button to light another candle, soldering required	28	BEG	5.0 x 1.5 x 4.25	0.1	16.95	14.95
2137191	MK119	Game of Roulette. 37 LEDs, a spinning sound and "winner" tune for each color. Pushbutton operation	66	BEG	3.6 X 1.3	0.2	24.95	22.95
147580	MK102	Flashing LED kit. 2 red 5mm LEDs, 9V battery req.	23	INT	1.3 x 1.4 x 0.6	0.1	5.95	5.49
147555	MK101	Flashing LED Sweetheart kit. Flashes 25 T1 (3mm) red LEDs, 9V battery required	46	INT	1.3 x 2.3 x 1.3	0.1	9.95	8.95
211781	MK130	3D Flashing Christmas Tree kit. 16 LEDs	36	INT	3.1 x 3.5 x 4.0	0.1	10.95	9.95
200310	MK124	Scrolling Message kit. 16 characters	76	INT	3.5 x 2.6 x 1.8	0.2	21.95	19.95
147643	K4304	10-LED Mono VU Meter kit	36	INT	2.7 x 1.4	0.3	23.95	21.95
177092	IR-10	Infrared Transmitter & Receiver kit, 9V battery req.	26	INT	1.0 x 0.8	0.1	24.95	22.95
2136551	800820	Meggy Jr. RGB. Develop a handheld pixel-scale video game, 8x8 RGB matrix, includes one pre-programmed game, reprogrammable	80	INT	6.0 x 1.5 x 3.5	0.9	84.95	79.95
2217414	KIT101E1P	4x4x4 RGB Rainbow Cube. Requires Rainbduino platform (P/N 2217422)	115	EXP	4.0 X 4.0 X 4.0	0.4	69.95	66.95
2186822	K8018B	5x5x5 Blue LED Cube. Connet to your PC (USB) and create your own effects w/ free software	170	EXP	4.3 X 4.3 X 5.9	0.6	104.95	99.95

#### Breadboard Voltage Regulator



2115750

#### Gear Motor Kit



2119751

#### PWM/Servo Driver



2184229

#### Symmetric Power Supply Kit



2137166

#### Dual Adjust Power Supply



20626

#### Twin Motor Gearbox



358248

#### Electronic Decision Maker



2131207

#### Electronic Dice



2136972

#### 4-Way Traffic Light



2136964

#### Brain Game



2136999

#### LED Stroboscope



2130933

#### Larson Scanner



2136534

#### Game of Roulette



2137191

#### 3D Flashing Christmas Tree



211781

#### LED Sweetheart Kit



147555

#### Scrolling Message Kit



200310

#### Mono VU Meter



147643

#### Meggy Jr. RGB



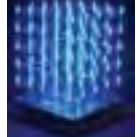
2136551

#### Rainbow Cube



2217414

#### 5x5x5 LED Cube



2186822

★ For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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## Electronic Kits (Continued)



### Alternative Energy – No Batteries Required

★ Web Code: NRG

Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
2112014	OWI-MSK671	Super Solar Racing Car for ages 10 and up. Assembly is a snap. 1.1VDC panel & motor	11	BEG	2.1 x 1.0 x 0.6	0.2	\$10.95	\$9.95
2112006	MSK670	Frightened Grasshopper kit. Solar powered	7	BEG	1.75 x 1.0 x 0.6	0.1	11.95	10.95
2128340	OWI-750	Salt Water Fuel Cell Car. Magnesium metal sheet (3 incl.), provides 5-7 hrs continuous play	20	BEG	3.0 x 1.6 x 0.7	0.5	16.95	14.95
2097521	MSK610	6-in-1 Educational Solar kit. Create a solar car, airboat, windmill & more. No tools required	33	BEG	4.75 x 2.4 x 3.4	0.5	19.95	17.95
2112090	MSK679	Solar-Powered Solar System kit. Build, paint and watch the solar system come to life using solar energy	70	BEG	4.4 x 3.7 x 3.2	0.5	21.95	19.95



2112006



2112014



2128340



2112090

### Time and Clock Kits

★ Web Code: TCK

Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
2170839	264	Real Time Clock Breakout – includes PCB, battery, header, crystal, caps, resistors & DS1307	8	BEG	0.95 x 1.2 x 0.2	0.02	\$11.95	\$10.95
2157079	MTRTC001	ChronoDot Real Time Clock module (DS3231SN)	4	BEG	1.2" Dia.	0.4	18.95	16.95
2187323	MK188	1 second to 60 hour pulse-pause timer. Relay: 16A max. Use 12-24VDC via terminals	30	BEG	3.2 x 1.8 x 0.9	0.2	26.95	24.95
2130520	VM141	Start-Stop Timer kit with a wide timing range, easy time setting, LED animation during operation and on-board start-stop buttons	40	BEG	2.8 x 1.8 x 0.8	0.2	37.95	33.95
2207831	ANGCLKV1	Angular Clock uses analog panel meters to display time. Clear acrylic enclosure	48	BEG	7.0 x 2.5 x 2.5	0.8	59.95	54.95
2136569	950+966	Desk/mantle LED shadow clock with 12 red, 30 green and 30 blue LEDs to mark hours, minutes and seconds	147	INT	8.8 x 2.3 x 4.5	1.1	89.95	80.95



2170839



2157079



2187323



2130520

### Miscellaneous

★ Web Code: ERK

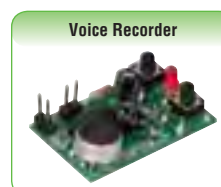
Part No.	Mfr. P/N	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Wt. (lbs.)	Pricing	
							1	5
358299	70100	Tank Track and Wheel set. 3 track lengths	40	BEG	—	0.5	\$9.95	\$8.95
2161617	SP-1A	Learn to Solder Flashing Siren kit. Same as P/N 2124218 (below), w/o 25W iron and wire cutters	23	BEG	4.9 x 2.5	0.3	10.95	9.95
2119734	C-9701	20 second voice recorder, assembled, 1 msg.	1	BEG	1.4 x 0.9 x 0.5	0.1	14.95	13.49
2124218	MKEL4	The Learn to Solder Flashing Siren kit teaches you the basics of soldering & includes 25W iron, wire cutters and solder. 9V battery not included	25	BEG	4.9 x 2.5	0.8	18.95	17.95
2124200	FO-30K	This kit teaches the fundamentals of fiber optics. You can transmit your voice or a 1kHz signal through the 3 ft. fiber optic cable	56	BEG	Rx: 1.3 x 4 x 1 Tx: 1.3 x 4 x 1	0.4	24.95	22.49
2214483	SM200K	Learn and practice soldering SMT with the Surface Mount Technology kit	38	BEG	4.5 x 3.0	0.3	24.95	22.49
2192333	OWI-MSK615	14-in-1 Educational Solar Robot. Ages 10 and older	40+	BEG	—	1.2	29.95	27.95
2143865	ROV5-1	Rover 5 Tracked Chassis. Height adjustable by 1.5" and has max speed of 10 in/sec. 87:1 gears.	5	BEG	9.5 x 9 x 3	2.2	49.95	44.95
2109747	29140	Introduction to sensors includes PING ultrasonic, 2-axis accelerometer, color sensor and PIR motion sensor	4	BEG	—	0.1	84.95	79.95
2114520	70108	Tracked Vehicle Chassis kit. 2 gear ratios, 58/203:1	57	INT	2.8 x 2.4 x 1	0.6	22.95	20.95
2114546	70168	Double Gearbox, 4-speed, independent left/right	116	EXP	2.8 x 2.4 x 0.9	0.3	12.95	11.49
2146572	VM110N	Control your electronics from your computer w/ this USB Interface, 7 inputs and 10 outputs	1	EXP	5.7 x 3 x 0.8	0.6	99.95	89.95



2207831



2136569



2119734



2161617



2124200



2214483



2192333



2143865



2109747



2114520



2114546



2146572

# Parallax Kits, Sensors, RFID Products & Wireless Interface Devices

## Kits, Sensors and Modules



\*Web Code: MBS

### BASIC Stamp and Propeller Series Kits

Part No.	Mfr. Part No.	Description	1	5
387997	28832	USB Boe-Bot full kit, completely reprogrammable and uses a BASIC Stamp module, expandable for different robotic projects	\$169.95	\$159.95
387971	27807	BS2 Educational Starter kit, USB version, includes Board of Education, BASIC Stamp 2 module & guide to complete over 40 activities	159.95	149.95
2109165	28803	Board of Education full kit, USB version, includes carrier board, BASIC Stamp 2 module, designed for those already familiar with programming Stamp modules	99.95	89.95
2109202	90005	BASIC Stamp Activity kit, learn electronics and programming, includes What's a Microcontroller? guide, components for over 40 hands-on activities, USB to serial adapter and homework board w/ BASIC Stamp 2 MCU	109.95	99.95
2191998	32500	ActivityBot Robot kit teaches programming the multicore Propeller in C with easy to follow tutorials. High speed servos with optical encoders, PING sensor, mini audio jack & XBee header. No soldering required.	229.95	209.95

### Sensors, Modules and Accessories

For more Sensors, see pg 73-74, 145

\*Web Code: PXS

2111935	32213	X-band motion detector. Detection from 8-30ft. 10.525 GHz, 4-pin SIP interface, 5VDC	\$39.95	\$36.95
282870	28017	2-axis Accelerometer, measures $\pm 3g$ on each axis, simple pulse output of g-force for each axis, 6-pin DIP module, analog output for temperature	39.95	35.95
2109667	28526	3-axis accelerometer, digital output, SPI or I <sup>2</sup> C, sensitive select $\pm 2g/\pm 4g/\pm 8g$	39.95	35.95
282861	28015	PING Ultrasonic Range/Distance Finder, 0.5" - 10 ft., 5VDC, 3-pin header	34.95	31.95
2109413	570-28015	PING Mounting Bracket kit, includes Parallax standard servo, use w/ P/N 282861	34.95	31.95
2127081	28380	ColorPAL color/light sensor, detects a full range of colors and outputs data as RGB components	29.95	26.95
2109245	28031	USB to Serial (RS-232) Adapter, DB9 male socket, includes USB-A to mini-B cable, USB 1.1 and 2.0 compatible	19.95	17.95
2109456	28030	USB to serial (RS-232) adapter, DB9 male & USB mini-B port, use cable P/N 673694	19.95	17.95
2150256	28995	Sharp IR distance sensor GP2Y0A21YK0F, 10-80cm, 5V operation, 3-pin JST male header	15.95	14.49
2111901	29132	Sound impact sensor detects sound from up to 3m away, 3-pin SIP, 5V, digital output	12.95	11.95
2205018	28032	Wide angle PIR sensor, 180°, range up to 30 ft., 3-6VDC	14.95	13.49
2082927	555-28027	PIR Sensor kit, single bit high/low output, detection range up to 20 ft.	13.95	12.49
2082855	27800	Modular 2-axis joystick, dual 10k pot with common ground, 1.64" x 1.2" x 1.1"	8.95	7.95
2203670	SFH5110-38	Infrared receiver, 38kHz, 940nm, 6.3V, 3mA	1.09	.89
2109624	28109	Boe-Bot/SumoBot wheel & tire set, 1 wheel & 2 rubber band tires	5.95	5.39
2109763	605-00004	Piezo film vibration sensor, use as flexible switch, freq. response device	3.95	3.59

## RFID, Wireless Interface Devices & Embedded Networking Solutions

### RFID Read/Write Modules and Tags

\*Web Code: RAD

Part No.	Mfr. Part No.	Description	1	5
2109851	28161	RFID passive tag, blue eye key fob, EM-4100 family	\$2.95	\$2.75
2109739	28141	RFID passive tag, 54mm x 85mm rectangle, EM-4100 family	3.95	3.59
2123522	28441	RFID read/write module card, 2.1" x 3.3", EM4x50 family compatible only with read/write module (P/N 2123514, below)	4.95	3.95
2123514	28440	RFID read/write module, serial, use card 2123522, supports passive tags	59.95	53.95
2007169	32390	RFID Reader kit, serial card reader, includes 4 different passive tags	59.95	53.95
2190872	DFR0231	NFC module for Arduino. PN532 controller, UART interface, supports ISO1443A/NFC MIFARE® and ISO 14443B in R/W mode only	21.95	19.95

### Wireless Interface Devices

\*Web Code: WID

2160753	F301-SGP-D024-01	10-position single row female header w/ 2mm pin spacing, mates w/ Xbee chips	\$ .99	\$ .89
2113412	32403	XBee adapter board raw PCB with 40-pin single row header and 2mm sockets	6.95	6.25
2159331	TEL0002	USB Bluetooth v2.0 dongle, PC/MAC compatible, 33' range max. upto 3 Mbps	4.95	4.49
2123611	32401	XBee adapter board, 3.3/5V, Vreg & Logic converter included	21.95	19.95
2159285	DFR0050	XBee USB adapter: supports X-CTU and can be used as USB-TTL adapter, 5V	22.95	20.95
2129326	A000021	XBee/Zigbee Shield for Arduino, communicate wirelessly using an Arduino board up to 300 feet outdoors	22.95	20.95
2113375	32404	XBee PCB antenna, 1mW, 2.4GHz, 300' line of sight, 802.15.4 network	29.95	26.95
2113421	32400	XBee adapter board, USB interface, PCB mount, 0.1" spacing, soldering required	34.95	31.95
2123581	32409	XBee, Zigbee series 2, 1.25mW, wire antenna, <400 ft. line of sight range	34.95	31.95
2144438	TEL0023	Bluetooth Bee in XBee footprint, 30m max range, CSR BC417143, v2.0+EDR, 2.4-2.48GHz	29.95	26.95
2144446	TEL0026	Bluetooth module, 3.5-8V. v2+EDR, 2.4-2.48GHz, 30m max range, can be paired	32.95	29.95
2113391	32406	XBee chip antenna, 60mW, 2.4GHz, <1 mile range line of sight, 802.15.4	39.95	36.95
2123590	32408	XBee, Zigbee series 2 pro, 63mW, wire antenna, <2 mile line of sight range	44.95	39.95
2171225	32440	XBee Wireless Pack: (2) Series 1 802.15.4 modules, (1) USB adapter, (1) 5V/3.3V adapter	99.95	89.95
2189636	APRIL	Electric Imp Breakout Brd, SD card socket for use w/ WiFi card P/N 2189610, 3.3V input	13.95	12.49
2189610	IMP001-US-R-ENG	Electric Imp - Imp Card, WiFi module, 6-pin, ~70kB RAM, 6 I/Os, two I <sup>2</sup> C channels, SD card form	29.95	26.95
2124322	WIZ110SR	Serial to Ethernet module, 10/100Mbps Ethernet max 230Kbps serial	32.95	30.95

\*WIZnet Embedded Internet Devices — Enter Web Code WHZ

For Additional BASIC Stamp Modules, See Page 7



\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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# Arduino Boards & Accessories



## Arduino Microcontrollers, Kits, Shields & Accessories

Arduino is an open-source physical computing platform based on a simple microcontroller board. Create interactive objects that can read inputs from a variety of switches, sensors and computers to control lights, motors and other physical outputs. The shields are expansion boards that sit atop an Arduino and broaden the functions, from motor control to prototyping.



### Microcontroller Boards

\* Web Code: ARD

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W" x H")	Pricing	
					1	5
2151259	KitPro	BB-Arduino	Build an Arduino compatible circuit, Atmega328P, assembly required, breadboard/PCB not included	—	\$12.95	\$11.95
2115768	Solarbotics	KARDW	Arduweeny microcontroller kit, Arduino compatible, Atmega328, 7+ pieces, assembly/soldering required	1.6 x 0.54	14.95	13.49
2157765	DFRobot	DFR0159	DFRduino Pro Mini V1.2 (Arduino Pro Mini compatible) MCU board with 16MHz ATmega328, 14 digital I/O pins, 8 analog inputs, reset button, and holes for mounting pin headers	1.3 x 0.7	19.95	17.95
2184261	Adafruit	659	FLORA Arduino compatible wearable electronic platform. 3.5-16VDC, USB-mini	1.75"Dia.	29.95	26.95
2151486	Arduino	A000066	Uno Rev. 3, ATmega328 (DIP), 14 digital I/O, 6 analog I/O, USB, ICSP, 32k flash	2.7 x 2.1	32.95	29.95
2163840	Arduino	A000073	Uno SMD Rev. 3, same as Rev.2 but has ATmega16U2 USB Serial converter & 1.0 pinout, USB-B	2.7 x 2.1	34.95	31.95
2207700	Arduino	A000053	Arduino Micro: ATmega32U4 based, 6-20VIn, 20 I/O (7 PWM), 12 analog input, 32k flash, ICSP, µUSB connection	1.9 x 0.7	32.95	29.95
2163778	Arduino	A000057	Leonardo with headers, 20 digital I/Os, 7 PWM channels, 16MHz crystal, 32k flash, 2.5k SRAM, microUSB	2.7 x 2.1	34.95	31.95
2170222	Arduino	A000062	Due, with 32-bit ARM core MCU, 54 digital I/Os, 12 analog inputs, 4 UARTs, 84MHz clock, 512kB flash	4.3 x 2.1	54.95	49.95
2121148	Arduino	A000005	Nano v3.1, ATmega328, 14 digital I/O (6 PWM), 8 analog input, 0.6" wide breadboard-ready, USB mini-B	0.7 x 1.7	49.95	44.95
2213245	DFRobot	DFR0267	Bluno-BLE: Uno-compatible board with built-in Bluetooth 4.0 LE. USB/7-12VIn, App-ready for Android & iOS	2.4 x 2.1	49.95	44.95
2173706	DFRobot	DFR0225	Romeo V2 All-in-One controller, integrated 2-way DC 2A motor driver and Xbee socket, based on ATmega32U4	3.5 x 3.3 x 0.55	44.95	39.95
2152366	Arduino	A000067	Mega2560 Rev. 3, 54 digital I/O (14 PWM), 16 analog input, 256k flash. ATmega16U2 USB-Serial converter	4.3 x 2.1 x 0.6	43.95	39.95
2170767	Secret Labs	Netduino Plus 2	32-bit microcontroller w/ 22 GPIOs combined w/ SPI, I2C, 4 UARTs (1 RTS/CTS), 6 PWM channels & six 12-bit ADC channels	2.8 x 2.1	69.95	62.95
2193441	Arduino	A000008	Yún. Built in Ethernet & WiFi, µSD slot, 20 digital I/O. Atheros AR9331 runs Linux	2.7 x 2.1	84.95	76.95
2213261	DFRobot	DFR0100	Beginner Kit for Arduino: DFRduino Uno R3, proto shield, USB cable, breadboard, sensors, power and passive components, 8 online starter lessons	—	54.95	49.95
2121121	KitPro	KIT-GSA	Get Started w/ Arduino kit, includes book, Arduino Uno, breadboard, LEDs, switches. No solder required	—	69.95	62.95
2199543	KitPro	KIT-AC-OSHG	Absolute Beginners Savings Arduino kit, includes Arduino Uno R3, breadboard, resistors, LEDs, switches, jumper wires and USB cable. Courses at <a href="http://opensourcehardwaregroup.com">opensourcehardwaregroup.com</a>	2.7 x 2.1	59.95	56.95
2212007	Adafruit	170	Experimentation Arduino kit, includes Arduino prototyping bundle, experimenter's guide, cables & many other passives	2.7 x 2.1	99.95	89.95
2208454	Intel	E000037	Intel Galileo: Quark SoC X1000, 32-bit, R3 shield-compatible, 5V, 14 digital I/O (6 PWM), 6 analog input, µSD slot, USB host/client, 80mA per I/O, 800mA on 3.3V and 5V pin	4.2 x 2.9 x 0.9	109.95	99.95
2171188	Arduino	K000007	Arduino Starter kit includes Uno Rev. 3 & 38 other components w/ book of 15 projects to learn and build	—	119.95	109.95
2193467	Arduino	A000078	Arduino Robot: Leonardo based, includes color TFT screen, 5 buttons, compass, IR floor sensors, µSD reader & more	7.5"Dia. x 3.9	279.95	259.95

### Shields for Arduino (Arduino sold separately)

\* Web Code: AOS

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W" x H")	Pricing	
					1	5
2152438	Arduino	A000082	Arduino Prototyping Shield PCB Rev. 3, compatible with new Arduino R3 pinout. PCB only.	2.7 x 2.1	\$5.95	\$5.39
2159277	DFRobot	DFR0019	Prototyping shield with mini breadboard. SOIC-14 pad, ICSP header, GND/5V rails (assembled)	2.7 x 2.1	12.95	11.49
2152446	Arduino	A000083	Arduino Proto Shield Rev. 3, 2 mini pushbuttons, 3 LEDs and a few resistors. Design your own shield!	2.7 x 2.1	17.95	15.95
2193459	Arduino	A000096	1.77" TFT LCD color display w/ µSD slot, 160x128px. AVR-based Arduino compatible. 5VDC	2.33 x 1.66	29.95	27.95
2152391	Arduino	A000077	Arduino Proto Shield Rev. 3 (assembled). Has reset button, ICSP connector and pass-through headers	2.7 x 2.1	21.95	19.95
2152411	Arduino	A000080	MEGA Rev. 3 Protoshield printed circuit board, PCB only. For full protoshield kit, see P/N 2152420 below	4.0 x 2.1	6.95	6.25
2152420	Arduino	A000081	MEGA Rev. 3 Protoshield kit, multilayer PCB design, w/ ICSP header slot, two SOIC prototyping areas, and prototyping components: headers, resistors, LEDs, pushbuttons.	4.0 x 2.1	14.95	13.49
2144534	DFRobot	DFR0060	Screw Shield for Arduino. Convert female header pins to more secure screw terminals.	2.7 x 1 (x2)	9.95	8.95
2159314	DFRobot	DFR0131	Proto Screw Shield (assembled). Provides prototyping area & screw terminals for secure I/O connections.	2.65 x 3.17	16.95	14.95
2127582	Liquidware	DoubleWide	Replicate all Arduino pins into 2 locations so you can add 2 shields while having access to both at the same time. Shields sit side by side.	2.7 x 4.2	24.95	22.49
2184202	Adafruit	1141	Data Logging Shield. Built in RTC & µSD slot, 3.3Vreg. Additional libraries required.	2.7 x 2.1	24.95	22.49
2140402	Arduino	A000064	Wireless Proto Shield with XBee communication support. Up to 100-ft indoors/300-ft outdoors	2.7 x 2.1	22.95	20.95
2152260	DFRobot	DFR0144	Relay Shield controls up to 4 relays. Max. switching power: DC 90W or AC 360VA. Controllable with Arduino, Xbee or Bluetooth.	3.25 x 2.2	21.95	19.95
2167744	DFRobot	DFR0071	SD Card Breakout Shield for standard SD and microSD cards. Switch-selectable, allows mass storage	1.5 x 1.2	12.95	11.95
2144411	DFRobot	DFR0009	LCD Shield. 16x2, HD44780 compatible. White text, blue backlight, uses LCD4Bit library	2.7 x 2.1	16.95	14.95
2193651	Adafruit	1438	Motor/Stepper/Servo Shield v2.0. Supports 4 DC or 2 stepper motors. 4 H-bridges; 1.2A per bridge	2.7 x 2.1 x 0.4	24.95	22.49
2152403	Arduino	A000079	Arduino MotorShield Rev. 3. Dual full-bridge for inductive loads like relays, solenoids, DC/Stepping motors. 2A per ch., 4A max.	2.7 x 2.1	37.95	35.95



# Arduino Shields, Sensors & Accessories

## Arduino Microcontrollers, Kits, Shields & Accessories (Continued)



### Shields for Arduino (Arduino sold separately) Continued

★ Web Code: AOS

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W" x H")	Pricing	
					1	5
2157781	DFRobot	DFR0008	Input Shield with 2-axis mini joystick, 4 colored pushbuttons, XBee socket, ACP220 radio module ready	4.75 x 2.1	\$16.95	\$15.95
2128534	Robot Power	MEGAMOTO	High-power Motor Shield. 5-28V, 13A/30A peak, H-bridge or dual half-bridge	2.7 x 2.1 x 0.5	49.95	47.95
2157829	DFRobot	DRI0009	2-Amp Motor Shield. Allows drive of two 7-12VDC motors with 2A maximum current each way	2.3 x 2.2	19.95	17.95
2135734	Rogue Robotics	AP-RMP	MP3 playback module without stacking headers. Module only. Supports MMC/SD/SDHC up to 32GB	2.7 x 2.1	59.95	53.95
2163786	Arduino	A000058	WiFi Shield. Connects Arduino to the Internet wirelessly, 802.11b/g networks, WEP/WPA2 personal encryption	2.7 x 2.1	119.95	109.95
2153781	Parallax	35000	Board of Education Shield. Solderless breadboard prototyping & servo ports. Works with Uno & Mega	4.0 x 3.0	34.95	31.95
2184211	Adafruit	1272	Ultimate GPS Logger Shield w/ GPS module. -165dBm, 66-CH, RTC, µSD slot. Uno-compatible	2.7 x 2.1	59.95	53.95
2167779	DFRobot	TEL0051	GPS/GPRS/GSM Module v2. 4-band, AT-commands, 6-9VDC@0.1A, embedded SMD antenna	2.8 x 2.2	109.95	99.95

### Sensors, Accessories and Miscellaneous Kits

★ Web Code: AOA

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W" x H")	Pricing	
					1	5
2137756	Arduino	A000040	Stackable female header kit for shields. (2) 1 x 6 pos & (2) 1 x 8 pos, 15mm pin length, 0.1" spacing	—	\$1.95	\$1.75
2152180	DFRobot	DFR0062	Wii Chuck Adapter is Arduino compatible. Inserts into connector of a Nintendo Wii Nunchuck controller. 4-pin header allows access to 2-axis joystick, 2 buttons, and 3-axis ±2g accelerometer	1.0 x 0.25	3.95	3.59
2159453	DFRobot	DFR0028	Digital tilt switch sensor. 3-pin connection: output, power, ground	1.2 x 0.8 x 0.35	4.95	4.49
2159381	DFRobot	SEN0114	Soil moisture sensor. Reads moisture present, includes analog sensor cable	2.4 x 0.8 x 0.35	6.95	6.25
2206133	ValuePro	U13-C0438	Moisture sensor detects moisture level based on resistance. 3V/5V@35mA max., 4-pin (2mm) connector	2.4 x 0.8 x 0.2	5.95	5.49
2159445	DFRobot	DFR0034	Analog sound sensor. Detects sound intensity, input voltage: 5VDC	1.2 x 0.8 x 0.4	8.95	7.95
2206125	ValuePro	U13-C0439	Sound sensor detects sound strength. 4V-12V (5V typ.) 52-48dB sensitivity. Mic freq. 20Hz-16KHz	0.96 x 0.8 x 0.4	5.95	5.39
2159373	DFRobot	SEN0101	Color sensor with RGB sensor chip and 4 white LEDs. Digital TTL interface, 2.7-5.5V, TCS3200	1.2 x 1.2 x 0.6	10.95	9.95
2206096	ValuePro	U13-C0449	Ambient light sensor uses LM358 chip, 3V/5V@0.5-3mA, 20k to 1M ohm, 4-pin (2mm) header	0.96 x 0.8 x 0.4	4.95	4.49
2157845	DFRobot	DFR0077	RS-232 to TTL converter. 4-pin connection: 5V, GND, logic in (SRX), logic out (STX), 300 to 115200 bauds	1.7 x 1.4 x 0.5	10.95	9.95
2144454	DFRobot	DFR0017	Relay module. Arduino compatible. 150VAC/24VDC max switching voltage, 10A(NO) 5A(NC)	1.4 x 0.9 x 0.7	10.95	9.95
2206109	ValuePro	U13-C0443	Relay module. Arduino compatible. Peak: 250VAC/30VDC@10A, Pin1 is ON, Pin 2 is COM	1.7 x 0.9 x 0.8	5.95	5.39
2152315	DFRobot	DFR0107	IR remote and receiver kit. Includes 3-wire cable. Arduino compatible	3.4 x 1.6 x 0.3	10.95	9.95
2150441	Dagu	RS002A	Compound infrared sensor can be used as a range finder or movement tracker within 200mm, 4 pairs of IR phototransistors and (4) IR LEDs	1.9 x 1.2 x 0.5	8.95	7.95
2144462	DFRobot	SEN0019	Adjustable IR sensor switch. 3-80cm range, 5V@100mA. 18" cable w/ 3-pin connector.	1.76"L x 0.70"Dia.	10.95	9.95
2206150	ValuePro	U13-C0441	PIR motion sensor, 3V/5V @ 150µA max. Range: 0.25-19.5 ft. Hold time: 1-25 sec. Detection angle: 120°	1.6 x 0.8 x 0.4	9.95	8.95
2206168	ValuePro	U13-C0442	Ultrasonic range/distance finder. 3.3V/5V @ 15mA. Range: 0.2-19.5 ft. 30° FOV. PWM output	1.8 x 0.8 x 0.6	14.95	13.49
2213413	DFRobot	SEN0018	Digital infrared sensor: 3V/5V @ 40µA, 110° detection angle, 23 ft. max distance, HIGH/LOW output level	1.4 x 1.1 x 0.3	7.95	6.95
2184288	Adafruit	1260	FLORA RGB Smart Neo Pixel v2 (4 pack). 24-bit, 5-9VDC, chainable. 18mA constant current per LED.	0.5"Dia.	11.95	10.95
2152251	DFRobot	DFR0106	Light disk with 7 SMD RGB LEDs. 5V operation, 4-pin header, 6000mcd	1.42"Dia.	12.95	11.49
2159251	DFRobot	DFR0141	Light disc with 12 SMD RGB LEDs. Individual color/brightness configurable, 5V operation, 12C Assembly req.	2.5"Dia.	24.95	22.49
2134926	Arduino	A000009	Project enclosure, ABS plastic, fits: Uno-Duemilanove-Diecimila-NG or MEGA, Ethernet shield and battery	3.4 x 2.5 x 1.1	12.95	11.95
2134993	ValuePro	PROTO KIT	830-contact breadboard with 70-piece jumper wire kit for easy prototyping	6.5 x 2.5 x 0.3	14.95	13.49
2152340	Arduino	A000059	USB to 5V serial adapter board. Includes pins for RX, TX, 5V, ground and reset	1.7 x 1.0 x 0.4	16.95	14.95
2152243	DFRobot	DFR0065	FTDI basic breakout board for USB to serial communication. Uses DTR pin for hardware auto-reset when a new sketch is downloaded	1.6 x 0.8 x 0.4	17.95	15.95
2206141	ValuePro	U13-C0436	3-axis digital accelerometer (±1.5g), MMA7660FC-based, I²C, 3V-5.5V, 47µA max., 21 LSB/g sensitivity	0.96 x 0.8 x 0.4	9.95	8.95
2159461	DFRobot	DFR0143	3-axis analog accelerometer, with selectable sensitivity: ±1.5g/6g, 3 JST connectors, low pass filter	1.5 x 0.9 x 0.3	19.95	17.95
2190864	DFRobot	SEN0142	6 DOF I²C sensor. MPU6050 combines 3-axis gyroscope and 3-axis accelerometer. Get pitch, roll, yaw, quaternion, euler.	0.8 x 0.5 x 0.2	29.95	28.95
2207718	Arduino	E000019	Non-invasive AC current sensor. Clamp around the supply line and measure AC load up to 100A	2.3 x 1.4 x 0.8	18.95	17.95
2159496	DFRobot	DFR0126	Digital audio analyzer w/ graphic equalizer display filter giving your Arduino ears. Can be read in 7 different frequency bands	1.2 x 0.8 x 0.3	24.95	22.49
2117341	Solarbotics	50512	Basic breakout board. 3.3/5V, FTDI mini USB-B to serial 6-pin, works w/ Arduino & clone 5V Arduino boards can use as a USB port, FT232RL chip	1.4 x 0.7 x 0.3	22.95	19.95
2150521	Dagu	RS003HP	Wild Thumper high power switch for circuit protection. 6-20 bat. voltage, 2x15A H-bridge	2.4 x 1.9 x 0.8	19.95	17.95
2206117	ValuePro	U13-C0434	Ambient temperature sensor, 3.3V/5V (5V recommended), -40°C to +125°C, 1.5°C accuracy, 10KΩ zero power	1.0 x 0.8 x 0.4	5.95	5.49
2213376	DFRobot	DFR0023	LM35 analog linear temperature sensor. 0°-100°C with sensitivity of 10mV per °C. 3-pin output	1.2 x 0.9 x 0.3	4.95	4.49

Continued on next page

★ For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



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145

# Arduino Accessories & Alternative Energy Kits

3 LEVELS OF SAVINGS		
NAME BRANDS	HOUSE BRANDS	SPECIAL BUY



## Arduino Microcontrollers, Kits, Shields & Accessories (Continued)



## Sensors, Accessories and Miscellaneous Kits (Continued)

\* Web Code: AOA

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W" x H")	Pricing	
					1	5
2213368	DFRobot	DFR0067	DHT11 temperature and humidity sensor. 3.3V/5V, 0°-50°C ±2°C, 20-90%RH ±5%RH, 3-pin digital output	1.3 x 0.9 x 0.3	\$5.95	\$5.49
2159402	DFRobot	DFR0066	Humidity and temperature sensor with SHT1x sensor. Individually calibrated in a precision humidity chamber	1.6 x 1.1 x 0.3	27.95	24.95
217625	Sseed Studios	800116001	Mini DS3231 RTC with battery backup. Raspberry Pi ready. SIP-5 breakout	0.6 x 0.6 x 0.5	6.95	6.49
2159390	DFRobot	DFR0129	Capacitive touch kit, with iPod-style wheel touch, keypad touch and a grid touch pad, includes cables	—	24.95	22.95
2144665	PowerSwitch Tail	80135	Power cord switch. Control outlet with microcontroller, 3-prong, 15A @ 125VAC, 5V control signal	4.0 x 2.1 x 1.5	29.95	26.95
2144489	ValuePro	26015102353402	Conductive sewing thread. Size 92, 234/34 (4 ply), 50Ω/meter. Perfect for Lilypad or wearables	400' reel	39.95	35.95
2144500	DFRobot	DFR0018	9-pc analog sensor set for Arduino. Includes big push button, LED light module, ambient light, capacitive touch, LM35 temperature, magnetic, vibration, tilt and grayscale sensor. Each sensor has 12" wires	(1) 1.4" L x 0.8" W (8) 1.2" L x 0.8" W	44.95	39.95
2157757	DFRobot	KIT0003	Auto-watering kit with control board, temp/humidity sensor, moisture sensor, water tube, immersible pump, mini USB cable, 6xAA battery holder, DC adapter and enclosure	3.7 x 2.4 x 2.4	69.95	62.95
2167761	DFRobot	KIT0011	24-piece advanced sensor set, including sensors such as light, gas, sound, touch, accelerometer, and more	—	89.95	80.95
215232	Adafruit	1947	2.8" Color TFT Touchscreen, Arduino compatible, 18-bit GPU, 320x240 pixels, 262k color, LED backlit	2.73 x 1.98 x 0.15	49.95	47.95
2183859	EarthLCD	ARLCD	3.5" Color TFT Touchscreen with built-in Uno R3, 16-bit GPU, 320x240 pixels, 65k color, LED backlit	3 x 3 x 0.9	109.95	99.95

## Chassis/Mobile Platforms and Accessories

\* Web Code: MOB

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W" x H")	Pricing	
					1	5
2150547	Dagu	DG008	4WD plastic mobile platform with (4) 4.5V motors. No load speed is 90 ±10 rpm	6.25" L x 5.0" W	\$27.95	\$24.95
2210001	Dagu	DG007	Magician acrylic chassis. (2) gear motors w/ 65mm wheels & rear caster. 6VDC, 90 rpm. 4xAA required	6.85 x 4.33	19.95	17.95
2124285	DFRobot	ROB0003	4WD aluminum mobile platform with (4) 3-6VDC motors, speed: ~35"/sec.	7.9 x 6.7 x 4.1	59.95	54.95
2144420	DFRobot	ROB0025	4WD aluminum mobile platform with wheel encoder, (4) 4.5-6V motors, speed: ~26.7"/sec.	9.0 x 7.3 x 4.3	79.95	74.95
2146345	DFRobot	ROB0022	4WD aluminum mobile platform with Romeo (v1.1) microcontroller. Romeo is Arduino compatible and features built-in motor control, speed: ~35"/sec. (4) 3-6VDC motors included	7.9 x 6.7 x 4.1	84.95	79.95
2209932	Dagu	RS035	T Rex aluminum tank chassis can handle rough terrain. 45mm wide zinc tracks. 12V (typ.) 11A stall current	14 x 10.4 x 5.1	249.95	224.95
358336	Tamiya	70144	Ball caster set. (2) ball casters and height can be adjusted for various applications and projects.	1.1 x 1.1 x 1/1.4	6.95	5.95
2159921	DFRobot	RB-TIRE	Replacement tires only w/o rims to replace FIT0003 tires. 4 tires in the pack. Fits most wheeled platforms	2.58" Dia. x 1.07" W	2.49	2.25



## Alternative Energy Kits

\* Web Code: NRG

Horizon Fuel Cell Technologies has become the world's largest volume producer of commercial fuel cell products, serving customers in over 40 countries. Presently, Horizon produces extremely compact, lightweight and complex hydrogen generation solutions suitable for electronic hobbyists, including renewable energy science experiment sets and battery-free kits. Many of the kits are STEM focused and great for classrooms.



Part No.	Mfr. Part No.	Description	Price
2112170	FCJJ-16	Solar Hydrogen Education; invent clean energy applications using fuel cells and renewable hydrogen	\$89.95
2112161	FCJJ-11	Fuel Cell Car Science, reversible PEM fuel cell combines electrolysis & power conversion in an autonomous car	84.95
2206002	FCJJ-34	Salt Water Fuel Cell science education kit. Electric motor with fan, wire leads with plugs and tubing included.	69.95
2095007	FCJJ-23	H-Racer 2.0 is the world's smallest hydrogen fuel cell car equipped with remote-control steering and light emitting features with the car	109.95
2184755	FCJJ-33	Renewable Energy Science Lab. Includes WindPitch turbine, PEM fuel cell, energy monitor (FCJJ-24) and more	299.95
2163090	LWH22-10L-5	Hydrostik fuel cartridge, stores 15Wh of hydrogen energy in a solid-state, use with MiniPak power supply (P/N 2163073) and Hydrofill station (P/N 2153861)	29.95
2163073	FCHP-02	MiniPak hand-held hydrogen fuel cell power supply, delivers up to 2W DC power via 5V USB port, includes Hydrostik cartridge (P/N 2163090), 0.5W LED flashlight, USB connector tips/adapters, storage pouch	129.95
2153861	FCH-010	Hydrofill refueling station, fills the Hydrostik cartridge (P/N 2163090) with 99.9% hydrogen, produces 3 liters of hydrogen per hour, just add de-ionized or distilled water. 110-240VAC adapter supplied. ISO 22734	349.95

# DIY Workshop Kits & Club Jameco Projects

JAMECO KitPro

## DIY Workshop Kits & Club Jameco Projects

★ Web Code: FMB

### Forrest M. Mims III Kits and Book

See complete kit descriptions online, additional parts may be required

Part No.	Description	1	5
2155487	Atari Punk Console Kit: Sound synthesizer based on the 555 timer	\$26.95	\$24.95
2155508	Toy Organ Kit: Each button generates a different tone with tunable volume and pitch	39.95	36.95
2155495	The Fridge Alarm Kit w/ Forrest Mims Mini Notebook: Electronic Sensor Circuits & Projects	19.95	17.95
2155532	The Vibration Sensor Kit: Detect vibrations with a piezo speaker and signals via an LED	22.95	20.95

### Circuit Skills Web Supported Kits & Projects

★ Web Code: ERK

Part No.	Description	1	5
2113244	Etch your own printed circuit board. Includes (2) 3"x4" pre-coated boards & etch solution*	\$46.95	\$42.95
2117202	Build a waveform generator and learn the basics for laying out an enclosure. Soldering required	69.95	62.95
2121092	Build a basic guitar effect pedal while learning the basics for perfboard prototyping. Soldering required	24.95	23.95
2124197	Try your hand at a SMT project w/ 1206 components and you too can build a light reactive tone generator	34.95	31.95
2126272	Learn the basic functionality of an LED Color Organ ("sound-to-light") circuit. 3.5mm audio jack input	34.95	29.95

\*Shipped via ground to continental U.S. only

### Jameco Builds

★ Web Code: ERK

Part No.	Description	Price
2216606	Simple dual jumbo LED flasher. Potentiometer adjustable flash rate. 14 components. Mountable. 9V battery required.	\$5.95
2217174	Simple dual jumbo LED flasher breadboard project. Similar to 2216606, but no soldering involved. 9V battery required.	5.95
2155516	Build a compact USB charger w/ 5V output to charge small electronic devices. Soldering required	16.95
2155541	LED Color Organ Kit: Similar to 2126272 but includes PCB with labels. Mono channel.	39.95
2146329	4x4x4 LED Cube Kit: Advanced solder kit requires AVR programming for blue LED display visuals	79.95
2210651	8x8x8 Blue LED Cube w/ custom PCBs + 50 LEDs. Boards stack like shields on top of the Arduino Uno. Enclosure not included.	149.95
2210642	8x8x8 Green LED Cube w/ custom PCBs + 50 LEDs. Boards stack like shields on top of the Arduino Uno. Enclosure not included.	149.95
2210669	8x8x8 White LED Cube w/ custom PCBs + 50 LEDs. Boards stack like shields on top of the Arduino Uno. Enclosure not included.	149.95
2192309	Construct a simple DC motor. Classroom pack for 20 students. (For single kit, use P/N 2192296)	99.95
2216841	RFID Deadbolt Hack. Includes serial reader and 4 tags, ProMini MCU, ProtoDough for custom bracket. Lock not included.	119.95

### Club Jameco Projects

Earn with Club Jameco [www.ClubJameco.com/Earn](http://www.ClubJameco.com/Earn)

★ Web Code: CJK

Part No.	Description	Price
2160817	Super Simple Low Power AM Radio Kit: Learn basic RF concepts with this breadboard project	\$14.95
2169580	Easy Laser Alarm Kit: Senses light from a laser on a photocell to sound a buzzer when the beam is broken	19.95
2205991	Portable LED Strobe: 30 bright white LEDs and the flash rate is adjustable	24.95
2177918	Electronic Organ: 555 timer based capable of producing DO, RE, MI, ... notes. 9V battery not included.	22.95
2169571	8-Pin Programmer Kit: Program ATtiny series chips using an Arduino as the programmer	24.95
2170337	Free Charge Controller Development Kit- Participate in a collaboration to improve the design. See Web for full details.	24.95
2169109	Water Level Control: Sense high/low and trigger a relay. Pump not included.	24.95
2170530	Programmable Light Chaser: An animation controller for 32 LEDs; program to create animation patterns	24.95
2163962	Propeller Clock is a mechanically scanned LED clock in POV effect. (motor sold separately, see Web)	24.95
2168325	Metronome Kit: 7-seg display shows beats/min and allows you to switch between different time signatures	29.95
2170783	Line Following Robot: Follows a black line on a white surface that uses a differential drive systems to steer left and right	29.95
2170812	DIY geiger counter uses a PIN photodiode as a substitute for a Geiger-Mueller tube. Detect alpha and beta particles	32.95
2182661	Tripple Power Supply with Digital Monitor: Turn an unregulated 9V transformer into three selectable regulated output voltages of 5V, 9V and 12V.	34.95
2160681	Transformer Kit: Learn how to wind a simple step-up or step-down transformer	34.95
2190178	PID Temperature Controller: Designed around the ATmega328P microcontroller utilizing the Arduino Duemilanove bootloader.	39.95
2190080	Vein Finder: Uses bright red LEDs to illuminate your veins!	39.95
2169467	Magic Morse Code Trainer Kit: Easily learn Morse code and get immediate feedback	39.95
2168309	Fun Light Switch Box: Behavior of the lights vary depending on how the switches are set	69.95
2192093	DIY Robotic Hand Shadow. With additional parts, create a robot hand that mirrors yours	99.95
2168940	8x8x8 LED Cube: Includes 550 3mm blue LEDs. Driven by included Arduino Uno. Programming required	149.95
2172017	8x8x8 LED Cube: Includes 550 3mm green LEDs. Driven by included Arduino Uno. Programming required	149.95
2169539	8x8x8 LED Cube: Includes 550 3mm white LEDs. Driven by included Arduino Uno. Programming required	149.95



### Jameco's Workshop

Scan on your smartphone with a code reader app.



## OPEN SOURCE 8-DIGIT LED CLOCK KIT

- DS1307 RTC included. (DS3231 compatible)
- Included functions: 12 & 24 hour clock, 12 hour with AM/PM, full date, & stop watch function (using downloadable sample code on Web)
- USB/Serial programmer required (recommend P/N 2117341)



Part No.	Description	Price
2217078	Arduino-compatible clock kit	\$79.95

JAMECO KitPro

## HANDHELD UV LIGHT KIT

Check for counterfeit currency, security features on checks, credit cards or passports, or make fluorescent colors glow.

- Protoboard and enclosure allow for customized design

**Note:** Avoid looking directly at UV LEDs



Part No.	Description	Price
2223726	20-piece beginner level UV light kit	\$19.95

JAMECO KitPro

\*For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box

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147



# Muscle Wires, Compass Modules & Solar Products

3 LEVELS OF SAVINGS		
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## MONDO•TRONICS

## Flexinol® Shape Memory Alloy Actuator Wires

Small diameter nickel-titanium wires contract like muscles when electrically driven.

★ Web Code: WAU

- LT (low-temp) activate at 70°C
- HT (high-temp) activate at 90°C

Includes: Instructions and technical specs.



357931



357835



Part No.	Mfr. P/N	Length (meter)	Wire Dia. (microns)	Linear Resistance (Ω/m)	Typical Current (mA)	Deform Weight* (grams)	Recovery Weight* (grams)	Typical Rate**	Pricing	
									1	5
357931	075LT	1	75	200	100	815	80	40	\$8.95	\$7.95
357595	100HT	1	100	150	180	28	150	43	9.95	8.95
357472	100LT	5	100	150	180	28	150	33	26.95	24.95
141874	150LT	1	150	50	400	62	330	20	9.95	8.95
160055	375LT	1	375	8	2750	393	2000	4	12.95	11.49
357712	375HT	1	375	8	2750	393	2000	5	10.95	9.95

\* Multiply by 0.0098 to get force in Newtons

\*\* Cycles per minute, in still air, at 20° Centigrade

## Nitinol Wire and Springs

★ Web Code: WAU

Part No.	Mfr. Part No.	Description	1	5
357798	3-401	Nitinol SMA wire (1 meter L x 500µm Dia.)	\$16.95	\$15.49
357835	3-642	Nitinol tension springs (4pk.) 6.5mm OD x 26.5mm L x 750µm, black	39.95	35.95

Hook-Up Wire, Bus Bar, Magnet Wire and more on pages 42-44

## PowerFilm. Flexible Thin Film Solar Modules

★ Web Code: AEK

**Wireless Electronics Series** The Wireless Electronics Series offers a new opportunity to solve the old problem of limited power for wireless electronics in portable and remote applications. These modules are lightweight, paper thin and durable.

227985

Part No.	Mfr. Part No.	Operating Voltage	Operating Current (mA)	Size (L x W x T)		Pricing		
				Inches	mm	1	5	25
227985	SP3-37	3.0	22	2.5 x 1.5 x .01	64 x 37 x 0.2	\$3.95	\$3.59	\$3.29
227993	TX3-25	3.0	25	4.5 x 1.0 x .01	114 x 25 x 0.2	3.95	3.59	3.29
171061	MP3-37	3.0	50	4.5 x 1.5 x .01	114 x 37 x 0.2	5.95	5.39	4.79
228030	SP4.2-37	4.2	22	3.3 x 1.5 x .01	84 x 37 x 0.2	5.95	5.39	4.79
228056	MPT4.8-150	4.8	100	3.7 x 5.9 x .01	94 x 150 x 0.2	17.95	15.95	13.95
228064	MPT6-75	6.0	50	4.5 x 3.0 x .01	114 x 75 x 0.2	12.95	11.49	9.95
228072	MPT6-150	6.0	100	4.5 x 5.9 x .01	114 x 150 x 0.2	19.95	17.95	15.95
228101	MPT15-75	15.4	50	10 x 3.0 x .02	253 x 75 x 0.6	24.95	22.49	19.95
228110	MPT15-150	15.4	100	10 x 5.9 x .02	253 x 150 x 0.6	39.95	35.95	31.95

## Forrest M. Mims III Engineer's Guides

See Web for Bundles

★ Web Code: FMB

Part No.	Description	Pages	Price
2112743	Forrest M. Mims III Engineer's Guide to Electronics Volume I: Timer, Op Amp, Optoelectronic Circuits & Projects	124	\$15.95
2112751	Forrest M. Mims III Engineer's Guide to Electronics Volume II: Science & Communication Circuits & Projects	140	15.95
2112760	Forrest M. Mims III Engineer's Guide to Electronics Volume III: Electronic Sensor Circuit & Projects	144	15.95
2112778	Forrest M. Mims III Engineer's Guide to Electronics Volume IV: Electronic Formulas, Symbols & Circuits	192	15.95
2112786	Forrest M. Mims III Getting Started in Electronics, A Complete Electronics Course	128	24.95



2112743



2112778



2112786

## Vector 2X Compass Module

- Pin selectable BCD or binary output format (compatible with Motorola SPI and National Microwire)
- 2° accuracy, 1° resolution
- 3-wire serial output format
- Raw uncalibrated magnetometer output optional
- Hard iron calibration • 5Hz sampling rate
- Master or slave capability for data clock generation



Part No.	Description	1	5
126703	Compass module .....	\$19.95	\$17.95

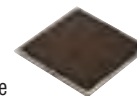


## 60mm Solar Panel

★ Web Code: AEK

Photovoltaic Mini Module

- Clear coat plastic
- Power output: 0.25W max.
- Voltage output: 4.7VDC to 5VDC
- Size: 2.36"L x 2.36"W x 0.1"Thick
- Material: copper indium diselenide



Part No.	Description	1	5	25
1928142	Solar panel .....	\$7.95	\$6.95	\$6.25

## Mini-Panel Solar Cells

★ Web Code: AEK

Ready to Use! No Soldering

Mini-panels are secured in a plastic body with a prismatic cover to help capture all available light. 6" red/black wires attached.



200221

**2113666: Solar Cell Grab Bag**

- Contains fragile cells of various sizes w/ 0.5V output
- No leads attached and requires soldering

2113666

Part No.	Mfr. P/N	VDC @ mA	Size (L" x W")	1	5
2136913	SOL1	0.5 @ 400	2.8 x 1.8 ..	\$5.95	\$5.49
2136921	SOL3	1.0 @ 200	3.0 x 1.8 ....	6.95	6.49
2210079	FAD-1	1.2 @ 75	1.2 x 0.7 ....	3.95	3.55
200221	SOL4	2.0 @ 200	3.0 x 3.7 ..	12.95	11.49
215319	4-3.0-100	3.0 @ 100	3.8 x 2.5 ..	12.95	11.49
215327	4-6.0-50	6.0 @ 50	3.8 x 2.5 ..	14.95	13.49
2221456	PEP20*	6.0 @ 150	4.0 x 3.0 ..	14.95	13.49
2113666	SC-GRAB	Solar cell grab bag .....			9.95 8.95
				(min. 40pcs/bag, sizes vary)	

\* Alligator clip leads

## JAMECO PUZZLER

BY FORREST MIMS III



Engineer Ozzie Meterson read that an amateur scientist found that the ozone indicated by a government monitor was 20 percent too high. Ozzie searched online for various ways to measure ozone. When he was about to select an electrochemical sensor, his boss challenged him to come up with something new. Ozzie was inspired by the challenge and went back online. There he learned how the most accurate ozone instruments use ultraviolet light, which is strongly absorbed by ozone. He suggested this method to his boss, who reminded him that the challenge was to come up with a new method. Ozzie went back online and learned that ozone has a pungent odor, is generally invisible and weakly absorbs a broad spectrum of visible light with a peak in the orange. While thinking this over, he glanced out the window toward the official ozone monitor near the corner traffic light and suddenly arrived at a possible new solution that might impress his boss.

Go to [www.Jameco.com/Ozone](http://www.Jameco.com/Ozone) for correct answer.

## PAYMENT OPTIONS

### Credit Card/Check Cards

We accept PayPal, VISA, MasterCard, American Express and Discover. Your account will not be charged until your order is shipped.

### Check or Money Order

You may pay by check or money order in U.S. funds, drawn on a U.S. bank.

### Open Account

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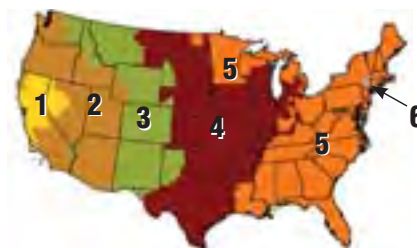
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① day ② ③ ④ ⑤ ⑥ days

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## A-B

3D PRINTERS.....	139
A/D CONVERTERS.....	8
ADAPTERS	
Apple iPhone/iPod/iPad.....	109,138
Audio/Video.....	48,59,96
BNC.....	59,60
Cables.....	138
Cigarette Lighter.....	95
Couplers.....	45,59,60
D-Sub.....	51
DIP.....	13
Gender Changers.....	51
HDMI.....	48
Modular Telephone.....	45
Network.....	45
Power.....	95,138
Power Cord.....	95
Prototype.....	136
RF.....	60
SATA Disk Drive.....	138
Serial.....	8,51
SMA.....	60
SOIC.....	13
Telephone.....	45
Terminators.....	60
USB.....	95,138
Wall Transformers.....	88-92,95
ALLIGATOR CLIPS/CONNECTORS ...	117,118
ANNUNCIATORS.....	75
ANTI-STATIC PRODUCTS.....	6,123
APPLE/MACINTOSH PRODUCTS	
.....	53,109,137,138
ARDUINO PRODUCTS.....	144,145
AUDIO/VIDEO	
Adapters.....	48
Audio Plugs/Jacks.....	48,49
Audio Transformers.....	98
Earphone.....	138
Microphone (XLR).....	48
Microphones.....	74
Power Plugs/Jacks.....	95,96
RCA Plugs/Jacks.....	48,49
Speakers.....	75,76
AUTOMOBILE PLUGS.....	95,137
BANANA PLUGS/JACKS.....	117,118
BASIC STAMP CONTROLLERS.....	7,143
BASIC SWITCHES.....	64
BATTERIES & ACCESSORIES	
Alkaline.....	109
Backup Power.....	109
Battery Pack.....	108
Chargers.....	108,111
Clips/Holders/Snaps ... Inside Front Cover,110	
Lead Acid.....	111
Li-Ion.....	108
LiFePO4.....	108
Lithium.....	108,153
NiCd.....	108
NiMH.....	108
Rechargeable.....	108,111
Silver Oxide.....	109
Zinc Chloride.....	109
BINDING POSTS.....	117,118
BNC CABLES/CONNECTORS/ADAPTERS.....	59-61,117,118
.....	147,148
BOOKS.....	130
BOXES.....	132,133
BRACKETS/MOUNTING RAILS.....	105,137
BREADBOARDS.....	131,134,136
BRUSH.....	130
BRUSHLESS FANS.....	84-86,Back Cover
BUZZERS.....	75
<b>C</b>	
CABINETS/ENCLOSURES.....	29,132,137
CABLE AND CABLE ASSEMBLIES	
Accessories.....	45-47
Adapter.....	48,138
Audio.....	43,48,61

BNC.....	61,117
Category 5e.....	44
Category 6.....	44
Coaxial.....	43,61
Communication.....	43
Computer.....	43,138
DVI.....	48
Extension.....	95,138
FireWire.....	138
Hard Disk Drive.....	138
HDMI.....	48
Hook-up..... Inside Front Cover,42,62	
IEEE 488.....	138
Keyboard.....	138
LED.....	23
Management.....	46,47
Modular Telephone.....	42,45
Monitor.....	138
Multi-Conductor.....	43
Network.....	44,61,138
Paired.....	42,43
Panel Bracket.....	50
Printer.....	45,138
Ribbon.....	44,50,138
SATA.....	138
SCSI.....	138
Serial.....	138
SMA/SMB.....	61
Speaker.....	43
Telephone.....	45
Tools.....	46,55
USB.....	95,137,138
Video.....	48,61
CABLE SLEEVES.....	47
CABLE TESTERS.....	114
CABLE TIES AND CLAMP.....	46
CALIPERS.....	122
CAMERAS AND ACCESSORIES	
Accessories.....	137
Enclosed.....	137
Module.....	138
Surveillance.....	137
Webcam.....	137
CAPACITORS	
Assortment/Kits/Grab Bags.....	29-31,35
Ceramic Disc.....	29,34
Ceramic, Axial Leaded.....	33
Ceramic, Monolithic Radial.....	29,34
Ceramic, Trimmer.....	32
Dipped Silver Mica.....	35
Dipped Tantalum.....	29,33
Electrolytic.....	29-33
Memory Back-Up.....	32
Metallized Polyester.....	35
Mylar.....	29,35
Surface Mount.....	32,35
Tools.....	122
CAR POWER ADAPTER.....	95
CARD-EDGE CONNECTORS.....	57
CARDS, COMPUTER.....	137
CELL PHONE ACCESSORIES.....	95,138
CHARGERS.....	95,108,111,138
CHEMICALS & ACCESS.....	130,135,147
CHOKES.....	30,37
CIRCUIT BOARD MTG. HARDWARE.....	77,78
CIRCUIT BOARDS.....	135,136
CIRCUIT BREAKERS.....	41
CLEANERS/DEGREASERS.....	130
CLIPS	
Alligator.....	117,118
Test.....	118
CLOCK CHIPS.....	4,7
CLUB JAMECO KITS.....	116,147
COAXIAL CABLE/WIRE.....	43,61
COMPASS MODULES.....	148
COMPONENT ASSORTMENTS.....	2,4,10,14,27,29-31,36,78
COMPONENT CABINETS.....	29,31,132
COMPUTER	
Adapter.....	51,138
Cables.....	44,48,50,95,137,138
Cards.....	137

Hubs.....	137
Power Cords.....	99,100
Signal Converter.....	138
Switch Boxes.....	137
Switches.....	44
USB Drive.....	137
CONNECTORS	
AT/ATX.....	53
Audio/Video.....	48,59,95,96
BNC.....	59
Card Edge.....	57
Coax.....	59,60
Computer.....	50,53,58
Contacts.....	51-53,55-58
Couplers.....	59
CPC Circular.....	58
D-Sub.....	50,51
DIN.....	58
F Type.....	60
Friction Lock Headers.....	55,56
Gender Changers.....	51
Grab Bags.....	30
Hardware.....	51
Headers.....	54-57
Housings.....	53-57
IDC Connectors.....	56,57
Jacks.....	59,95,96
Jones Plugs and Sockets.....	57
LED.....	17
Male Header Assortments.....	54
MMCX.....	60
Modular/Telephone.....	45,46
N Type.....	60
Network.....	45,46
Pins.....	51-53,55-58
Plugs.....	7,49,57-60,95,96
Power.....	52,53
Receptacles.....	56-58
Ribbon Cable.....	50,57
Shorting Blocks.....	53
Shrouded.....	56
SIMM.....	12
SMA/SMB.....	60
Sockets.....	11-13,56,57
Solderless Terminals.....	63
Strain Reliefs.....	57
Telecom Splice.....	61
Telephone.....	45,46
Terminal Blocks.....	61,62
Terminators.....	60
TNC Bulkhead.....	60
Tools.....	46,51-53,55,63,120
USB.....	7,58
Wire.....	61
XLR.....	48
CONTROL KNOBS.....	39
CONTROLLERS	
Micro..... Inside Front Cover, 5,7	
Motor.....	8,82,83
PIC.....	7,156
Robotics.....	7
Servo.....	8,83
Stepper.....	8,82
CONVERTERS, BIDIRECTIONAL.....	138
CONVERTERS, DC-DC.....	107
CORDS, POWER.....	92,99,100
COUPLERS, SHAFT.....	81
CPC CONNECTORS & CONTACTS.....	58
CPUs.....	4,5
CRIMPING TOOLS.....	46,51,55,63,120
CRYSTALS.....	30,40
CURRENT SENSING TRANSFORMERS.....	98
<b>D-F</b>	
D-SUB CONNECTORS.....	50,51
D/A CONVERTERS.....	8
DATA BOOKS.....	148
DATA LOGGERS.....	111
DC MOTORS.....	79,153
DC-DC CONVERTERS.....	107
DESIGN LABS.....	132
DESIGN PLASTIC.....	130

DESOLDER STATION & EQUIP.....	126,128
DFROBOT PRODUCTS.....	82,132,136,143-146
DIGITAL MULTIMETERS.....	Inside Front Cover,112,113,115
DIN CONNECTORS.....	58
DIN-RAIL POWER SUPPLIES.....	106,107
DIN-RAIL TERMINAL BLOCK & RAIL.....	62
DIN-RAIL TIMER.....	137
DIN-RAIL UPS MODULE.....	107
DIODES	
Assortments.....	15,29,30
Germanium.....	14
Kits/Grab Bags.....	15,29,30
LEDs.....	23
Rectifiers, Bridge, SCR.....	15,16
Schottky.....	14
Small Signal.....	15
Switching.....	14
Triacs.....	15
Ultrafast.....	14
Zener.....	15
DIP & SIP RELAYS.....	72
DIP SOCKETS.....	11,12
DIP SWITCHES.....	68
DISPLAYS, LED & LCD.....	26-28,30,112,114,Back Cover
DRILL/DRILL BITS.....	30,120,121
EARPHONE.....	138
EDUCATIONAL ELECTRONIC LABS.....	132
EEPROMS.....	6
ELECTRIC IMP CARD/BREAKOUT BOARD.....	44
ELECTRONIC KITS.....	40,115,139-147
EMI SUPPRESSION CORE.....	98
ENCLOSURES	
BeagleBone.....	133
Prototype Builder Board.....	133
Rack Mount.....	137
Storage.....	132,133
EPROM PROGRAMMERS/ERASERS.....	136
EPROMs.....	5,6
ETHERNET SWITCH.....	44
FANS & ACCESSORIES	
AC Tubeaxial.....	30,87
Blowers.....	84,85
Brushless DC.....	30,84-86,Back Cover
Cords.....	87,100
Filters.....	87
Filters & Guards.....	87
FILTERS, PWR. ENTRY/LINE/AC PLUG.....	99
FLASHLIGHT.....	137
FLUORESCENT LAMPS.....	24
FORCE-SENSING RESISTOR.....	74
FORREST MIMS III BOOKS & KITS.....	147,148
FREQUENCY COUNTERS.....	115
FUEL CELL PRODUCTS.....	146
FUME EXTRACTOR & ACCESS.....	126,128
FUNCTION GENERATORS.....	114,115
FUSES & ACCESSORIES	
Automotive Blade.....	41
Blocks.....	41
Circuit Breakers.....	41
Clips.....	41
Fast Acting.....	40
Holders.....	41
Kits.....	40
Resettable Fuses.....	41
Slow Blow.....	40
<b>G-H</b>	
GALS.....	7
GEAR HEAD MOTORS.....	80
GEARS.....	30,81,142
GENDER CHANGERS/ADAPTERS.....	51
GIPB (IEEE-488) CABLE.....	138
GLUE GUNS.....	124
GRAB BAGS.....	30,53,148
GRAPHIC DISPLAYS.....	112,114
HALL EFFECT SENSORS.....	10,73
HARD DRIVE ACCESSORIES.....	138
HARDWARE	
Assortments/Grab Bags.....	29,30
Cable Mounting.....	46
Fan Mounting.....	78



## HARDWARE (Continued)

Heat Sink Mounting .....	16
Knobs .....	39
LED Mounting .....	17,29
Magnet .....	77
Mounting Brackets .....	78,105
Panel Mounting .....	29,49,66-68,78
PCB Mounting .....	78,134
Screws, Nuts, Washers .....	29,51,77,134
Spacers .....	29,134
Standoffs .....	30,51,77
Thumbscrews .....	51,78
HDMI CABLES .....	48
HEADER PLUGS .....	57
HEADERS .....	30,54-56
HEAT GUNS .....	47,124
HEAT SHRINK SOLDER SLEEVE .....	47
HEAT SHRINK TUBING .....	47
HEAT SINKS & ACCESSORIES .....	16,130
HELPING HANDS .....	123,129
HOODS, D-SUB .....	51
HOOK-UP WIRE .....	42,62,156
HOUSING .....	54-57
HUBS .....	137
HUMIDITY SENSORS .....	73
HYDROGEN FUEL CELL PRODUCTS .....	146

## I-K

IDC CONNECTORS .....	56,57
INDUCTORS .....	30,37
INTEGRATED CIRCUITS .....	
Amplifiers .....	9
Buffer .....	7
Comparators .....	9
Converters .....	8
Digital Potentiometers .....	9
Display Drivers .....	8
Encoders/Decoders .....	8
Interface .....	7,8
J-FETs .....	14
Linear Series .....	10,29,30
Logic .....	2-4,29,30
Memory .....	5-7,156
MOSFETs .....	14
Processors .....	4,7
Programmable 555 Timers .....	4
Propeller Chips .....	7
RS-232 Drivers/Receivers .....	8
RS-422/423/485 Drivers/Receivers .....	8
Serial Adapters .....	8
Sockets .....	11-13
Voltage Regulators .....	10,11
Z80 MPUs .....	5
ISOLATION TRANSFORMER .....	98
JACK SCREWS/HEX NUTS .....	51
JUMPER LEADS/WIRES .....	131
KEYLOCK SWITCHES .....	68
KEYPADS .....	74
KITS, COMPONENTS .....	
Assorted Components .....	53,132
Capacitors .....	29,35
CMOS, CD4000 Series .....	4
Diodes .....	29
Fuses .....	40
Grab Bags .....	30,53,54
Hardware .....	29,78
Heat Shrink Tubing .....	47
ICs .....	2,4,29
LEDs & LED Mounting Hardware .....	27,29
Linear ICs .....	10
Potentiometers .....	29
Resistors .....	29,36,37
SMD Resistors .....	37
Solderless Terminal .....	63
Switches .....	29
Transistors .....	29
KITS, ELECTRONICS .....	
Alternative Energy .....	142,146
Audio & Amplifier .....	140
BASIC Stamps .....	143
Distance & Light .....	141
Educational .....	40,115,128,132,139-147

Experimentation Kit .....	139
Forrest M. Mims III .....	147
LED .....	141
Power Supply & Motor .....	82,141
Propeller .....	143
Raspberry Pi .....	139
Robotic & Computer Control .....	139,146
Sensors, Modules & Accessories .....	143
Starter Kit .....	139
Test & Measurement .....	115,140
Time & Clock .....	142
KNIFE SET .....	119
KNOBS .....	39

## L-M

LAB CENTERS .....	115
LAMPS AND ACCESSORIES .....	
Ballast .....	24
Fluorescent .....	24
Incandescent .....	24,25
LED .....	22,24,123,129
Magnifier/Desktop .....	123,129
Neon .....	24,25
Panel Mount .....	25
Ultra-Violet .....	24
LASER PRODUCTS .....	24
LCD DEVELOPMENT KIT .....	28
LCD DISPLAYS/MODULES .....	
..... 27,28,112,114,Back Cover	
LEAD ACID BATTERIES/CHARGERS .....	111
LEAD FORMING TOOLS .....	122
LEADS, TEST .....	117
LED ACCESSORIES .....	17,22,24,27
LED DISPLAYS .....	
Alphanumeric .....	26
Bar Graph Arrays .....	27
Dot Matrix .....	27
Multi-Digit Arrays .....	27
Numeric .....	26
Organic (OLED) .....	27
LED HARDWARE .....	17,27
LED MODULES .....	22,23
LED STRIPS .....	22,23
LEDs .....	
Assortments .....	29,30
Backlight .....	17,22
Cables .....	23
Circuit Board Indicators .....	21
Cluster .....	24
Detectors .....	23
Dimmer .....	22
Displays .....	26,30
Drivers .....	22
Electronic Kits .....	141,147
Emitters .....	23
Fastoon LEDs .....	22
Grab Bags .....	30
High Output .....	20-22
High Power .....	22
Interconnect .....	17
Lamps .....	22,24,123
Lens .....	17,25
Light Bar .....	22
Light Switch .....	22
Medium Output .....	20
Module .....	22,23
Mounting Hardware .....	17,27
Panel Mount Indicators .....	25
Phototransistor .....	23
Power Supplies .....	105
Programmable .....	22
Replacement Lamps .....	24
RGB & RGB Controller .....	21-23
Sockets .....	22
Soldering Iron .....	124
Standard Output .....	18,21
Strip .....	22,23
Tester .....	17
LIGHTING .....	
Flashlight .....	137
Night Light .....	137
LIQUID LEVEL SENSORS .....	74

LOGIC ANALYZER .....	115
LOGIC PROBE AND PULSER .....	115
MAGNET .....	77
MAGNETIC TRANSDUCERS .....	75
MAGNIFYING GLASSES/LAMPS .....	123,128,129
MEMORY .....	
Capacitors .....	32
DRAM .....	6
EPROMs/EEPROMs .....	5,6
OTP/PROM .....	6
SRAM .....	6
METERS .....	
Benchtop .....	115
DMM .....	Inside Front Cover,112,113
Panel .....	113
MICROCONTROLLERS .....	
..... Inside Front Cover,5,7,144	
MICROPHONE CARTRIDGES .....	74
MICROPROCESSORS .....	5,7
MODULAR ADAPTERS .....	45
MODULAR CABLE/WIRE .....	42,45
MODULAR COUPLERS .....	45
MODULAR JACKS & PLUGS .....	45,46
MOSFETs .....	14
MOTION SENSORS .....	69
MOTOR CONTROLLERS .....	8,82,83
MOTORS .....	
Accessories .....	83
Controllers .....	8,82,83
DC .....	30,79,153
Drivers .....	82
Gear .....	80
Gear Head .....	80
Grab Bag .....	30
Robotics .....	83
Servo .....	83
Stepper .....	81
Stepper Controllers .....	8,82
Vibrating .....	81
MULTIMETER TEST PROBES .....	117
MULTIMETERS .....	112,113,115,156
MUSCLE WIRE .....	148

## N-Q

NETWORK PRODUCTS .....	44-46,137,138
NIBBLING TOOL .....	119
NUTS .....	30,51,77
OLED DISPLAYS .....	27
OPTICAL SWITCHES .....	17
OPTOCOUPERS .....	17
OPTOISOLATORS .....	17
ORDER INFORMATION .....	149
OSCILLATORS .....	30,40
OSCILLOSCOPES/ACCESS .....	114,115
OTP/PROMs .....	6
PALS .....	7
PANEL METERS .....	113
PANEL MOUNTING HARDWARE .....	
..... 29,49,66-68,78	
PARALLAX PRODUCTS .....	7,83,143,145
PATCH CORDS .....	117
PC BOARDS/EXTENDERS .....	134-136
PC PHOTO ETCH .....	135,147
PELTIER THERMOELECTRIC COOLERS .....	
..... Inside Front Cover	
PCB DEV. TOOLS/ACCESS .....	135,147
PHONE JACKS/PLUGS .....	45,46
PHONE LINE TESTERS .....	114
PHOTO TRANSISTORS .....	17
PHOTOCELLS .....	30,35
PIC MICROCONTROLLERS .....	
..... Inside Front Cover,7,136	
PICKIT 3 PROGRAMMER/DEBUGGER .....	136
PIEZOELECTRIC TRANSDUCERS .....	75
PLCC SOCKETS .....	11
PLUGS .....	
Audio .....	48,59
Automobile .....	95
DC Power .....	95,96
DIN .....	58
DIP .....	57
IDC .....	57

Jones .....	57
Modular .....	45,46
Power Entry .....	99
RCA .....	48,49

## POTENTIOMETERS

Adjustment Tool .....	37,68
Audio Taper .....	38
Cermet .....	29,39,153
Digital .....	9
Kits/Grab Bags .....	29,30
Linear Taper .....	38,153
Multi-Turn .....	29,37,153
Single-Turn .....	29,38,153
Slide .....	38
Trimmer .....	30,38,153
Vertical Mount .....	38
Wirewound .....	37,153
POWER ADAPTERS .....	95,96
POWER BANK USB CHARGERS .....	109
POWER CONNECTORS/PINS .....	
AC Plug .....	99
AT/ATX Motherboard .....	53
Disk Drive, Power Supply .....	53
Kits .....	52
Pins .....	52,55,56
Plugs/Receptacles .....	52,99
POWER CONVERTERS .....	107
POWER CORD ADAPTERS .....	95
POWER CORDS .....	87,92,99,100
POWER ENTRY & LINE FILTERS .....	99
POWER JACKS/PLUGS .....	95,96
POWER PROTECTION/STRIPS .....	137
POWER RELAYS .....	72
POWER SUPPLIES .....	
AC Variable Transformers .....	98
AC/DC .....	92-95,101-105,131,Back Cover
Benchtop .....	95,116
Brackets .....	105
Breadboard .....	131,132
Charger .....	109
Desktop .....	95,115
DIN-Rail .....	106,107
Enclosed .....	102-105
Fluorescent Light .....	24
High Voltage .....	98
Interchangeable Plug .....	95
LED .....	105
Medical .....	92,101-103,Back Cover
Open Frame .....	101
Power Cords .....	100
Precision Regulated DC .....	116
Switching .....	92-95,101-106
Table-Top .....	92-95,Back Cover
Unregulated Linear .....	93
Wall Adapters .....	88-92,95
POWER TRANSFORMERS .....	97,98
PRINTED CIRCUIT BOARD SUPPLIES .....	134,135
PRINTER ACCESSORIES .....	
Cables .....	138
Switch Boxes .....	137
PRINTER/PEN, 3D .....	139
PROBES .....	114,115
PROGRAMMERS .....	136
PROMs .....	6
PROTOTYPE ADAPTER .....	136
PROTOTYPING BOARDS/ACCESS .....	
..... 42,130,134-136,147	
PROXIMITY SENSORS .....	73
PUSHBUTTON SWITCHES .....	65
PUZZLER .....	148

## R-S

RACKS/RACK MOUNT EQUIP. ....	137
RAM .....	6
RANGE FINDERS .....	73
RASPBERRY PI ACCESSORIES .....	
..... Inside Front Cover,139	
RCA, JACKS/PLUGS/CABLES .....	48,49
RECEPTACLES .....	58
RECTIFIERS .....	15
RELAYS .....	
Blade and Octal .....	72,153
Circuit Breaker .....	41

RELAYS (Continued)		SOLAR KITS .....	142,146	TERMINAL BLOCK JUMPERS .....	61	Split-Bobbin .....	98
DIP & SIP .....	72	SOLAR PANELS .....	148	TERMINAL BLOCKS .....	61,62	Variable .....	98
Enclosed Construction .....	71	SOLDER/DESOLDERING EQUIPMENT		TERMINALS		Wall (AC and DC) .....	88-92,95
General Purpose .....	72	Accessories .....	53,124-130	Crimp .....	53,55-58	TRANSISTORS	
OptoMos .....	71	Bars .....	129	Solderless .....	63	Assortments .....	14
PC Mount .....	70	Fume Extractors .....	126,128	Wire Wrap .....	134	Hexfet MOSFET .....	14
Power .....	70,72	Pots .....	128	TEST EQUIPMENT		J-FETs .....	14
Reed .....	71	Pump .....	128	Benchtop Power Supplies .....	95,115,116	Kits/Grab Bags .....	14,29
Sockets .....	71,153	Sponges .....	124-126	Cable/Interface .....	114	MOSFETs .....	14
Solid State .....	71	Stations/Irons/Kits .....	124-128	Camera Detector .....	137	N-Channel MOSFETs .....	14
RESETTABLE FUSES .....	41	Tips .....	124-128	Data Loggers .....	111	NPN Bipolar .....	13
RESISTORS		Tools .....	53,123-130	Desktop Power Supply .....	95,115	P-Channel MOSFETs .....	14
Assortments .....	29,36,37	SOLDERLESS BREADBOARDS .....	131	Electrical .....	114	PNP Bipolar .....	13
Carbon Film .....	36	SOLDERLESS TERMINALS .....	63	Environmental .....	111,114	TRIACS .....	15
Chip .....	37	SOLENOIDS .....	83	Frequency Counter .....	115	TUBEAXIAL FANS .....	84-87, Back Cover
Hi-Power Fixed Ceramic .....	37	SOLID STATE RELAYS .....	71	Function Generator .....	114,115	TWEEZERS .....	122,123
Kits/Grab Bags .....	29,36	SOUND DEVICES/BUZZERS .....	74-76	LAN Tester .....	114	UARTs .....	5
Network .....	30,37	SPACERS .....	29,134	LED Tester .....	17	ULTRASONIC SENSORS .....	74
Surface Mount .....	37	SPEAKER WIRE .....	43	Logic Analyzer .....	115	USB PRODUCTS	
Tools .....	122	SPEAKERS .....	75,76	Logic Probe .....	115	Adapters/Connectors .....	7,44,58,95,138
Wirewound .....	37	SPEED SENSORS .....	73	Multimeter, Analog/Digital .....	114,156	Cable .....	95,137,138
RESONATOR, CERAMIC .....	34	SPROCKETS .....	82	Multimeter, Benchtop .....	115	Chargers .....	95,108,138,147
RFID PRODUCTS .....	143	SRAMS .....	6	Oscilloscopes .....	114,115	Data Loggers .....	111
RIBBON CABLE .....	44,138	STANDOFFS .....	30,51,77	Pattern Generator .....	115	Flash Drive .....	137
ROBOTICS .....	40,74,81,139,142,146,147	STATIC CONTROL .....	6,123	Plugs & Clips .....	118	Hubs .....	137
ROCKER SWITCHES .....	67	STATIC RAM .....	6	Power Supply .....	115,116	Programmers .....	136
ROTARY DIP SWITCHES .....	68	STEPPER MOTOR CONTROLLERS .....	8,82	Probes .....	114,117	Servo Controller .....	83
ROTARY SWITCHES .....	68	STEPPER MOTORS .....	81	Programmers/Testers .....	136	Soldering Iron .....	126
RUBBER FEET .....	30,78	STORAGE, CABINETS .....	132,133	Test Leads .....	117	Stepper Controller/Driver .....	82
SCREWDRIVERS .....	119,122	SUPPRESSION CORE .....	98	TEST LEADS/PROBES/CLIPS/STARTER KIT .....	115,117,118	Video Borescope .....	137
SCREWS .....	30,51,77,78	SURFACE MOUNT		TFT DISPLAYS .....	28		
SCRs .....	16	Adapter Boards .....	136	THERMOELECTRIC COOLERS .....		<b>V-Z</b>	
SECURITY .....	22,137,138	Breadboards .....	136	Inside Front Cover		VACUUM TOOLS .....	123
SENSORS		Capacitors .....	32,35	THERMISTORS .....	35	VARIABLE TRANSFORMERS .....	98
Arduino Compatible .....	74,145,146	ICs .....	4,6,9-11,30	TIE MOUNTS .....	46	VARISTORS .....	35
CO <sub>2</sub> .....	73,74	Proto Boards .....	136	TIME/TEMPERATURE METERS .....	114	VELCRO STRAPS .....	46
Distance .....	73,74	Resistors .....	37	TIMER MODULE .....	137	VIBRATING MOTORS .....	81
Environmental .....	73,74	Rework Stations .....	126,127	TOGGLE SWITCHES .....	66,67	VISES .....	129
Flex .....	74	Sockets .....	13	TOOL KITS .....	47,53,118,127,137	VOICE CHIPS/MODULES .....	7
Gear Tooth .....	73	Tools .....	126	TOOLS		WALL ADAPTERS	
Hall Effect .....	10,73	SURGE PROTECTORS .....	137	Anti-Static .....	6,123	AC to AC .....	88
Humidity .....	73	SWITCH BOXES/CABLES .....	137	Bottle .....	130	AC to DC .....	88-92
Liquid Level .....	74	SWITCHES		Brush .....	130	Interchangeable Plug .....	90
Motion .....	69	Accessories .....	67,69	Cable Cutter .....	120	Regulated Linear .....	90
Position .....	73	Basic .....	64	Calipers .....	122	Regulated Switching .....	88-90
Proximity .....	73	Binary .....	68	Cases .....	53,118,132,133	Slim Line .....	89,91,92
Resistor .....	74	Capacitive Touch .....	69	Crimping/Stripping/Cutting .....	46,51,55,63,120	Unregulated Linear .....	91,92
Solid State .....	73	Caps .....	69	Drill Stand .....	121	WALL JACKS/PLATES .....	46
Sonar Range Finder .....	73	Centrifugal Force .....	69	Drills/Drill Bits .....	120,121	WASHERS .....	30,77,134
Speed .....	73	Computer .....	44	File Set .....	119	WIRE & CABLE MANAGEMENT .....	46,47
Ultrasonic .....	73,74	Cord .....	69	Glue Gun/Glue Sticks .....	124	WIRE CONNECTORS .....	61
SERVO MOTORS .....	83	Covers .....	67	Hand Tools .....	46,51,55,63,119-123	WIRE CUTTERS/STRIPPERS .....	55,120
SERVOS & CONTROLLERS .....	8,83	DIP .....	29,68	Heat Guns .....	47,124	WIRE JUMPERS .....	131
SHAFT COUPLERS .....	81	Incremental Encoder .....	69	Hemostat .....	122	WIRE WRAP TOOLS .....	122
SHIELDS .....	82,144,145	Keylock .....	68	IC .....	122,123	WIRE/CABLE, BULK	
SHORTING BLOCKS .....	53	Keypad .....	74	IDC Connector .....	56	Bundle .....	42
SHRINK TUBING .....	47	Kit/Grab Bag .....	29,30	Insertion/Extraction .....	52,55,120,123	Bus Bar Hook-Up .....	42
SIMM SOCKETS .....	12	Magnetic Proximity/Reed .....	69	Kits/Sets .....	53,118-124,127,132,137	Category 5e .....	44
SIREN LIGHTS .....	22	Optical .....	17	Knives .....	119	Coaxial Cable .....	43
SIRENS .....	75	Pushbutton .....	29,65	Lead Forming .....	122	Flat Ribbon Cable .....	44
SLIDE SWITCHES .....	64	Reed Alarm .....	69	Miscellaneous .....	37,46,53,68,119,122,126,129	Flexinol .....	148
SMA/SMB CONNECTORS .....	60,61	Rocker .....	30,67	Nibbling .....	119	Hookup Wire, Solid/Stranded .....	
SOCKETS & ACCESSORIES		Rotary .....	68	Pliers .....	121	Inside Front Cover .....	42,62
Adapters .....	13	Rotary DIP .....	68	Reamer .....	122	Magnet .....	42
Assortment/Kits .....	30	Sensors .....	73,74	Rulers, Stainless Steel .....	122	Modular Telephone .....	42
Connector .....	56,57	Slide .....	30,64	Screw/Nut Drivers .....	119,122	Multi-Conductor .....	43
DIN .....	58	Tactile .....	69	Soldering .....	53,123-129	Muscle Wire .....	148
DIP .....	11,57	Temperature .....	69	Tweezers .....	122,123	Network .....	44
Grab Bag .....	30	Thumbwheel .....	68	Vises .....	129	Nickel Chromium Resistance .....	42
Header Plugs .....	57	Toggle .....	29,66,67	Wire Wrap/Strip .....	122	Paired .....	42,43
IC .....	11-13,57	Voltage Selector .....	69	Work Center/Helping Hands .....	123,129	Speaker .....	43
Low Profile .....	11-13			TRANSDUCERS .....	75	Tools .....	46,120,122
Machine Tooled .....	12	<b>T-U</b>		TRANSFORMERS		Wire Kit Assortment .....	131
Marker .....	12	TABLE-TOP POWER SUPPLIES .....	92-95, Back Cover	Audio .....	98	Wire Wrap .....	42
Oscillator .....	40	TACTILE SWITCHES .....	69	Current Sensing .....	98	WIRELESS PRODUCTS	
PLCC .....	11	TAPE .....	129	International Step Up/Down .....	97	Interface Devices .....	143
Relay .....	71,72	TELEPHONE ACCESSORIES .....	45,46	Isolated .....	98	Network Module .....	44,143
SIMM .....	12	TELEPHONE CABLE/WIRE .....	42,45	Modem Coupling .....	98	Xbee/Zigbee Shield .....	143
Single-In-Line .....	12	TELEPHONE CONNECTORS .....	45,46	PC Mount .....	98	WORK CENTER .....	129
Solder Tail .....	11,12	TELEPHONE LINE TESTERS .....	114	Power .....	97	ZENER DIODES .....	15
Wire Wrap .....	12	TEMPERATURE SENSORS .....	10	Quick Connect .....	97	ZIF SOCKETS .....	13
Wire Wrap ID Labels .....	12						
ZIF .....	13						

# Featured Products



## DC Motors



DC Motors on page 79

Whether to enable movement for your robots or vehicles, these motors are exactly what you need to get the job done! Get great quality and low prices with this selection.

Part No	Mfr.	Mfr. Part No.	Nominal Voltage (V)	@ Max. Efficiency			Shaft Length (in.)	Pricing	
				Speed (RPM)	Current (mA)	Torque (g-cm)		1	10
2209043	Jinlong	Z4SL2A0000009	1.3	21000	50	0.3	0.1	\$1.95	\$1.75
2158442	Nichibo	RF-500TB-18280-R	3	2104	170	13.4	0.34	2.95	2.75
2158434	Nichibo	RF370CH-22170-R	6	4787	450	34.28	0.19	2.25	1.95
2155250	Nichibo	MD3BN-14280-R/51	12	5260	268	36.2	0.45	2.95	2.49
2208833	Nichibo	UC-130S-18149PW	12	16234	980	35.9	0.31/0.43 dual	3.95	3.49
2208841	Nichibo	UC-130S-19133PW	12	18587	1180	41.5	0.31/0.43 dual	4.49	3.95
2208850	Nichibo	UC-130S-22103PW	12	25253	1480	33.2	0.31/0.43 dual	4.95	4.49
2167699	Nichibo	775-8511FDAS-R	14.4	17606	18050	103	0.19	5.95	4.95
2217801	Nichibo	MS5BN-1980-R	18	15432	1050	78.9	0.51	2.95	2.49
2218011	Mabuchi	RS385PH-29505	24	7420	410	84.6	0.96	2.95	2.75

NEW  
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\* Web Code: FBN



## General Purpose Blade and Octal Relays and Sockets

Relays and Relay Sockets on pages 70-72

These popular relays from ValuePro have industry standard termination for quick installation. As one of the most common electrical devices used today, there are a wide range of coil voltages for several commercial and industrial applications. The sockets also mate with the corresponding contact form.

### Relays

\* Web Code: ACF

Part No.	Mfr. Part No.	Contact Form	Coil Voltage	Contact Rating	Coil Res.	Coil Curr.	1	10	50
172719	LB2-12DS-R	DPDT	12VDC	12A @ 30VDC, 12A @ 240VAC	160	75	\$5.95	\$5.49	\$4.95
175565	LB2-24D-S-R	DPDT	24VDC	12A @ 30VDC, 12A @ 240VAC	650	37	6.95	6.25	5.59
175573	LB2-110A-S-R	DPDT	110VAC	12A @ 30VDC, 12A @ 240VAC	3900	28	6.95	6.25	5.59
291507	LB4H-12DS-R	4PDT	12VDC	5A @ 30VDC, 5A @ 240VAC	160	75	4.49	3.95	3.59
175602	LB4H-24DS-R	4PDT	24VDC	5A @ 30VDC, 5A @ 240VAC	650	37	5.95	5.39	4.79



### Relay Sockets

\* Web Code: TEM

Part No.	Mfr. Part No.	Mating Socket	Mounting	Relay Series	1	10	50
175531	PTF08A-A-R	8-pin DPDT	Combo - DIN rail or screw	K10, LB1, LB2	\$4.95	\$4.49	\$3.95
175557	PYF14A-A-R	14-pin 4PDT	Combo - DIN rail or screw	KHUA, LB4H	3.95	3.59	3.29



## Lithium Coin Cell Batteries with Leads

Batteries on pages 108-109

These non-rechargeable 3-volt batteries can be used with anything to provide them with a temporary charge when needed. Connect them to your devices directly or with the 2-inch wire leads to power them today!

Part No.	Mfr. Part No.	Capacity	Diameter	Thickness	1	10	25	100
2123784	CR1220	38 mAh	0.49"	0.77"	\$8.95	\$7.75	\$6.65	\$5.55
2210010	CR1220-LEADS	38 mAh	0.49"	0.77"	.89	.79	.69	.59
14162	CR2032	180 mAh	0.787"	0.13"	1.09	.99	.85	.75
2223443	CR2032-LEADS	180 mAh	0.787"	0.13"	1.49	1.29	1.19	.99



\* Web Code: LBT

NEW  
MARKED IN PINK



## 1 to 20W Wirewound and Precision Linear Potentiometers

Pots on pages 37-39

\* Web Code: TDF

These potentiometers from BI Technologies are built for your design specifications to meet your exact requirements. These linear pots are economically priced and easy to implement to provide position sensing technology in your projects. Check out our complete selection!

Part No.	Mfr. Part No.	Size (in.)	Wattage	No. Turns	Ohms	Tol. (±%)	Max Input (Volt. @ Curr.)	Type	1	10	100
2199324	6186R100K-L1.0	7/8	1	1	100k	10	316V @ 3.16mA	Conductive Plastic	\$6.95	\$6.25	\$5.59
2201501	7366R-10K-L.25	7/8	1.5	3	10k	5	122.47V @ 12.20mA	Wirewound	11.95	10.95	9.95
2198639	7276R100L.25	7/8	2	10	100	5	14.1V @ 141mA	Wirewound	9.95	8.95	7.95
2198663	7276R500L.25	7/8	2	10	500	5	31.62V @ 63.2mA	Wirewound	9.95	8.95	7.95
2198049	8146R500L.10	7/8	2	10	500	10	31.62V @ 63.2mA	Hybrid	9.95	8.95	7.95
2198516	7221R1K-L.25	7/8	2	10	1k	3	44.7V @ 44.7mA	Wirewound	49.95	44.95	39.95
2198532	7223R1K-L.05	7/8	2	10	1k	3	44.7V @ 44.7mA	Wirewound	39.95	35.95	32.95
2198330	8106R1K-L.25	7/8	2	10	1k	10	44.7V @ 44.7mA	Hybrid	6.95	5.95	4.95
2198735	7286R2K-L.25	7/8	2	10	2k	5	63.24V @ 31.6mA	Wirewound	7.95	6.95	6.25
2194806	8146R2KL025CT	7/8	2	10	2k	10	63.24V @ 31.6mA	Hybrid	9.95	8.95	7.95
2198081	8136R20K-L.25	7/8	2	10	20k	10	200V @ 10mA	Hybrid	9.95	8.95	7.95
2198882	7266R30K-L.2RS	7/8	2	10	30k	3	245V @ 8.16mA	Wirewound	9.95	8.95	7.95
2198591	7246R30K-L.25	7/8	2	10	30k	5	245V @ 8.16mA	Wirewound	9.95	8.95	7.95
2194793	AR2KL.25	1-13/16	5	10	2k	3	100V @ 50mA	Wirewound	29.95	26.95	23.95
2200145	A-R30K-L.25	1-13/16	5	10	30k	3	387V @ 12.9mA	Wirewound	19.95	17.95	15.95
2200225	C-R100K-L.50/R1K-L.15	1-13/16	3	3	100k/1k	3	548V @ 5.48mA	Wirewound	19.95	17.95	15.95
2199463	E-R50K-L.50	3/5/2016	20	40	50k	3	1000V @ 20mA	Wirewound	29.95	26.95	23.95



\* For additional products, availability and specifications visit [Jameco.com](http://Jameco.com) and enter the Web Code in the product search box



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## DC Brushless Tubeaxial Fans

**NEW**  
MARKED IN PINK



\*Web Code: **FNZ**

2100371



**DC Brushless Fans on pages 84-86**

Part No.	Mfr. Part No.	Voltage (VDC)	Size (mm) (W x H x D)	Bearing	Agency Approval	Leads	Pricing	
							1	10
2134088	AD2005LX-70	5	20 x 20 x 6	Hypro	TUV/CE	5.5"	\$8.95	\$7.95
2132189	AD0405HB-G70	5	40 x 40 x 10	Ball	UL/CUL/TUV/CE	12"	5.95	5.39
2121316	AD0212HB-G50GL	12	25 x 25 x 10	Ball	UL/CUL/CE	5.5"	5.95	5.39
2203469	AD3512HB-G53	12	35 x 35 x 10	Ball	UL/CUL/TUV/CE	12" 1	9.95	8.95
2095322	AD3512MX-G76	12	45 x 45 x 10	Hypro	UL/CUL/TUV/CE	11" 1	9.95	8.95
2099534	AD0512HB-D70	12	50 x 50 x 15	Ball	UL/CUL/TUV/CE	5.5"	6.95	6.25
2100371	AP0512HX-J90*	12	51 x 51 x 8	Hypro	UL/CUL/CE	5"	9.95	8.95
1928020	AD1212HB-Y51	12	120 x 120 x 32	Ball	UL/CUL/TUV/CE	11"	10.95	9.95
2203434	AD1312UB-F53	12	127 x 127 x 38	Ball	UL/CUL/TUV/CE	11" 1	14.95	13.49
2220171	AD0824UB-Y51	24	80 x 80 x 32	Ball	UL/CUL/TUV/CE	12"	11.95	10.95

\*Chip cooler with heat sink 1 3 leads; speed sensor



## AC-to-DC Switching Table-Top Power Supplies

\*Web Code: **DDZ**

**NEW**  
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- Single output green adapter with an efficiency of up to 91%
- Short circuit/over load/over voltage/over temperature protections
- Universal AC input/full range
- Protection: short circuit/overload/over voltage/over temperature
- Fully enclosed plastic case
- Medical standard: 2 x MOPP
- LED indicator for power on
- Class I power (with earth pin)
- Three-year warranty
- AC cord not included (recommend P/N 38050)

GST90A



**Table-Top Power Supplies on pages 92-95**

Part No.	Mfr. Part No.	Output		Output Connector	Load Regulation	Line Regulation	Efficiency	Pricing	
		Voltage @ Current	Power					1	10
2224278	GST40A05-P1J	5V @ 5A	25W	2.1mm	±5.0%	±1.0%	84.5%	\$18.95	\$16.95
2224286	GST40A07-P1J	7.5V @ 5.34A	40W	2.1mm	±5.0%	±1.0%	87.5%	18.95	16.95
2224374	GST60A09-P1J	9V @ 6A	54W	2.1mm	±5.0%	±1.0%	89%	20.95	18.95
2224382	GST60A12-P1J	12V @ 5A	60W	2.1mm	±3.0%	±1.0%	89.5%	20.95	18.95
2223460	GST90A12-P1M	12V @ 6.67A	80W	2.5mm	±5.0%	±1.0%	89%	33.95	30.95
2223478	GST90A15-P1M	15V @ 6A	90W	2.5mm	±5.0%	±1.0%	89.5%	33.95	30.95
2223646	GST120A24-P1M	24V @ 5A	120W	2.5mm	±3.0%	±1.0%	90.5%	49.95	44.95
2223654	GST120A48-P1M	48V @ 2.5A	120W	2.5mm	±2.5%	±1.0%	91%	49.95	44.95



## Serial and Parallel LCD Displays

**LCD Displays on pages 27-28**

These popular LCD displays from Newhaven offer clear and legible data for all your projects with various colors to choose from. Check out some of our best sellers!

\*Web Code: **DSP**

Part No.	Mfr. Part No.	Characters x Lines	Port type	Input (V @ mA)	Letters - Backlight	Module Size (W" x H" x D")	Display Size (W" x H")	Pricing		
								1	5	25
2118651	NHD-0216K3Z-FL-GBW-V3	16 x 2	Serial	5.0 @ 125	Blue - Yellow/Green	3.2 x 1.4 x 0.5	2.5 x 0.6	\$21.95	\$19.95	\$17.95
2154927	NHD-0216K3Z-NS(RGB)-FBWV3	16 x 2	Serial	4.7-5.5 @ 33	RGB - Black	3.1 x 1.4 x 0.5	2.5 x 0.6	23.95	21.49	18.95
2118580	NHD-0216K1Z-FL-YBW	16 x 2	Parallel	5.0 @ 1.5	Blue - Yellow/Green	3.2 x 1.4 x 0.5	2.5 x 0.6	9.95	8.95	7.95
2118598	NHD-0216K1Z-NSW-BBW-L	16 x 2	Parallel	5.0 @ 1.5	Blue - Yellow/Green	3.2 x 1.4 x 0.5	2.5 x 0.6	10.95	9.95	8.95
2118635	NHD-0220DZ-FL-YBW	20 x 2	Parallel	5.0 @ 1.5	White - Blue	4.6 x 1.5 x 0.4	3.3 x 0.7	14.49	13.49	11.95
2118686	NHD-0420D3Z-FL-GBW-V3	20 x 4	Serial	5.0 @ 245	Blue - Yellow/Green	3.9 x 2.4 x 0.5	3.0 x 1.0	25.95	23.49	21.95



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