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During the COVID-19 pandemic, our retail store in Van Nuys, California has been closed, but every day we’re still shipping orders placed on our website or over the phone. Yes – we still have a phone order department. Call **800-826-5432** Monday – Saturday during normal business hours. For updates on the retail store re-opening, please check our homepage [www.allelectronics.com](http://www.allelectronics.com).

### Thanks for shopping with us.

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.C./D.C. Wall Adapters</td>
<td>63</td>
</tr>
<tr>
<td>A.C. Line Cords &amp; Connectors</td>
<td>36 - 38</td>
</tr>
<tr>
<td>Adhesives, Tapes</td>
<td>68, 69</td>
</tr>
<tr>
<td>Air Pump</td>
<td>69</td>
</tr>
<tr>
<td>Alarms &amp; Accessories</td>
<td>27, 66</td>
</tr>
<tr>
<td>Alligator Clips</td>
<td>4, 80, 81</td>
</tr>
<tr>
<td>Amplifiers</td>
<td>44</td>
</tr>
<tr>
<td>Arduino &amp; Compatible</td>
<td>8 - 12</td>
</tr>
<tr>
<td>Audio Cables &amp; Connectors</td>
<td>50 - 54</td>
</tr>
<tr>
<td>Automotive</td>
<td>19, 28, 65</td>
</tr>
<tr>
<td>Barrier Strips</td>
<td>6, 40, 41</td>
</tr>
<tr>
<td>Batteries</td>
<td>45 - 47</td>
</tr>
<tr>
<td>Battery Chargers</td>
<td>45, 46</td>
</tr>
<tr>
<td>Battery Holders</td>
<td>47, 48</td>
</tr>
<tr>
<td>Breadboards</td>
<td>6, 79, 80</td>
</tr>
<tr>
<td>Bridge Rectifiers</td>
<td>60</td>
</tr>
<tr>
<td>Buck / Boost Regulators</td>
<td>62</td>
</tr>
<tr>
<td>Buss Wire</td>
<td>86</td>
</tr>
<tr>
<td>Buzzers</td>
<td>6, 66, 67</td>
</tr>
<tr>
<td>Cables, Connectors, Adapters</td>
<td></td>
</tr>
<tr>
<td>AC Power</td>
<td>36, 37</td>
</tr>
<tr>
<td>Audio</td>
<td>50 - 54</td>
</tr>
<tr>
<td>BNC.</td>
<td>49, 50</td>
</tr>
<tr>
<td>Category 5E / 6.</td>
<td>31</td>
</tr>
<tr>
<td>Cigarette Lighter, Auto</td>
<td>65</td>
</tr>
<tr>
<td>Display Port</td>
<td>49</td>
</tr>
<tr>
<td>F-Cables, Video</td>
<td>49</td>
</tr>
<tr>
<td>HDMI</td>
<td>49</td>
</tr>
<tr>
<td>Microphone.</td>
<td>52, 87</td>
</tr>
<tr>
<td>Multi-Pin</td>
<td>55, 56</td>
</tr>
<tr>
<td>RC Model</td>
<td>55, 58</td>
</tr>
<tr>
<td>Telephone, modular</td>
<td>31, 87, 90</td>
</tr>
<tr>
<td>USB</td>
<td>56, 57</td>
</tr>
<tr>
<td>Video/ Audio</td>
<td>49</td>
</tr>
<tr>
<td>Cable Ties &amp; Clamps</td>
<td>4, 69, 91</td>
</tr>
<tr>
<td>Capacitors</td>
<td>74 - 76</td>
</tr>
<tr>
<td>Cases, Project</td>
<td>6, 78, 79</td>
</tr>
<tr>
<td>Chemicals / Cleaners</td>
<td>68</td>
</tr>
<tr>
<td>Chokes, Inductors</td>
<td>65</td>
</tr>
<tr>
<td>Circuit Protectors, Thermal</td>
<td>19</td>
</tr>
<tr>
<td>Conductive Glue / Paint</td>
<td>68</td>
</tr>
<tr>
<td>Crimp Terminals</td>
<td>88 - 90</td>
</tr>
<tr>
<td>Decade Boxes</td>
<td>73</td>
</tr>
<tr>
<td>Diac</td>
<td>61</td>
</tr>
<tr>
<td>Dimmers</td>
<td>16</td>
</tr>
<tr>
<td>DIN Rails</td>
<td>30</td>
</tr>
<tr>
<td>Diodes</td>
<td>59, 60</td>
</tr>
<tr>
<td>Displays, LED, LCD</td>
<td>9, 15, 16, 58, 93</td>
</tr>
<tr>
<td>Door Lock Actuator</td>
<td>34</td>
</tr>
<tr>
<td>Educational Kits</td>
<td>7 - 9</td>
</tr>
<tr>
<td>Electrical Tape</td>
<td>69</td>
</tr>
<tr>
<td>Electroluminescent (EL) Strip</td>
<td>17</td>
</tr>
<tr>
<td>Enclosures</td>
<td>6, 78 - 80</td>
</tr>
<tr>
<td>Encoders, Rotary</td>
<td>73</td>
</tr>
<tr>
<td>Extension Cords</td>
<td>4, 65</td>
</tr>
<tr>
<td>Faders &amp; Slide Pots</td>
<td>71</td>
</tr>
<tr>
<td>Fans and Accessories</td>
<td>42, 43</td>
</tr>
<tr>
<td>Ferrite Beads</td>
<td>65</td>
</tr>
<tr>
<td>F.E.T.s</td>
<td>61</td>
</tr>
<tr>
<td>Flashers</td>
<td>7, 14, 16, 17</td>
</tr>
<tr>
<td>Flashlights</td>
<td>17</td>
</tr>
<tr>
<td>Fuses &amp; Fuse Holders</td>
<td>18, 19</td>
</tr>
<tr>
<td>Gears and Pulleys</td>
<td>31</td>
</tr>
<tr>
<td>Grommets</td>
<td>90</td>
</tr>
<tr>
<td>Hall Effect Sensors</td>
<td>11</td>
</tr>
<tr>
<td>Headers</td>
<td>9, 56</td>
</tr>
<tr>
<td>Headphones</td>
<td>44</td>
</tr>
<tr>
<td>Heat Shrinking Tubing</td>
<td>92</td>
</tr>
<tr>
<td>Heat Sinks</td>
<td>44</td>
</tr>
<tr>
<td>Hook &amp; Loop</td>
<td>69</td>
</tr>
<tr>
<td>Indicator Lamps</td>
<td>15, 17</td>
</tr>
<tr>
<td>Inductors</td>
<td>65</td>
</tr>
<tr>
<td>Infrared and PIR</td>
<td>10</td>
</tr>
<tr>
<td>Integrated Circuits</td>
<td>59</td>
</tr>
<tr>
<td>Joysticks</td>
<td>20</td>
</tr>
<tr>
<td>Jumper Wires</td>
<td>56, 80</td>
</tr>
<tr>
<td>Component</td>
<td>Page(s)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Keypads</td>
<td>27</td>
</tr>
<tr>
<td>Kits</td>
<td>7 - 9</td>
</tr>
<tr>
<td>Knobs</td>
<td>72</td>
</tr>
<tr>
<td>Lamps</td>
<td>16, 17</td>
</tr>
<tr>
<td>Lamp Holders</td>
<td>14, 16, 17</td>
</tr>
<tr>
<td>Lasers</td>
<td>12</td>
</tr>
<tr>
<td>LCD Displays</td>
<td>9, 58</td>
</tr>
<tr>
<td>L.E.Ds</td>
<td>5, 13 - 17</td>
</tr>
<tr>
<td>Magnets</td>
<td>77</td>
</tr>
<tr>
<td>Magnet Wire</td>
<td>86</td>
</tr>
<tr>
<td>Memory Cards, Micro-SD</td>
<td>64</td>
</tr>
<tr>
<td>Meters, Panel</td>
<td>5</td>
</tr>
<tr>
<td>Microphones</td>
<td>41</td>
</tr>
<tr>
<td>MOSFETS</td>
<td>61</td>
</tr>
<tr>
<td>Motors</td>
<td>32 - 35</td>
</tr>
<tr>
<td>Multimeters</td>
<td>82</td>
</tr>
<tr>
<td>Network Cables, Connectors</td>
<td>31</td>
</tr>
<tr>
<td>Opto Sensors</td>
<td>10, 12</td>
</tr>
<tr>
<td>Optoisolators</td>
<td>61</td>
</tr>
<tr>
<td>Paging Horn</td>
<td>39</td>
</tr>
<tr>
<td>Panel Meters</td>
<td>93</td>
</tr>
<tr>
<td>P.C. Board Material</td>
<td>68</td>
</tr>
<tr>
<td>Peltier Device</td>
<td>43</td>
</tr>
<tr>
<td>Perf Boards</td>
<td>79</td>
</tr>
<tr>
<td>Photo Diodes &amp; Transistors</td>
<td>59</td>
</tr>
<tr>
<td>Photo Electric Switches</td>
<td>12</td>
</tr>
<tr>
<td>Photo Resistors</td>
<td>10</td>
</tr>
<tr>
<td>Piezo Elements</td>
<td>66, 67</td>
</tr>
<tr>
<td>Potentiometers</td>
<td>70, 71</td>
</tr>
<tr>
<td>Power Cords, AC</td>
<td>36, 37</td>
</tr>
<tr>
<td>Power Supplies</td>
<td>4, 5, 63, 64, 80</td>
</tr>
<tr>
<td>Power Strips</td>
<td>37</td>
</tr>
<tr>
<td>Printed Circuit Supplies</td>
<td>68</td>
</tr>
<tr>
<td>Project Boxes</td>
<td>6, 78, 79</td>
</tr>
<tr>
<td>Rechargeable Batteries</td>
<td>45, 46</td>
</tr>
<tr>
<td>Relays</td>
<td>5, 28 - 30</td>
</tr>
<tr>
<td>Relay Sockets</td>
<td>30</td>
</tr>
<tr>
<td>Remote Controls</td>
<td>76</td>
</tr>
<tr>
<td>Resistors</td>
<td>73</td>
</tr>
<tr>
<td>Resistors, Variable (Pots)</td>
<td>70, 71</td>
</tr>
<tr>
<td>Ribbon Cable</td>
<td>87</td>
</tr>
<tr>
<td>Rotation Components</td>
<td>31</td>
</tr>
<tr>
<td>Rubber Feet</td>
<td>67</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>59 - 61</td>
</tr>
<tr>
<td>Sensors</td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td>62</td>
</tr>
<tr>
<td>Hall Effect</td>
<td>11</td>
</tr>
<tr>
<td>Liquid Level</td>
<td>12</td>
</tr>
<tr>
<td>Photo Resistors, CdS</td>
<td>10</td>
</tr>
<tr>
<td>Photo-electric</td>
<td>12</td>
</tr>
<tr>
<td>Temperature</td>
<td>4, 10, 11</td>
</tr>
<tr>
<td>Thermistors</td>
<td>11</td>
</tr>
<tr>
<td>Servos</td>
<td>35</td>
</tr>
<tr>
<td>Shunts, meter</td>
<td>93</td>
</tr>
<tr>
<td>Shrink Tubing</td>
<td>92</td>
</tr>
<tr>
<td>Sirens</td>
<td>66</td>
</tr>
<tr>
<td>Sockets</td>
<td></td>
</tr>
<tr>
<td>Lamp</td>
<td>16, 17</td>
</tr>
<tr>
<td>I.C</td>
<td>59</td>
</tr>
<tr>
<td>Relay</td>
<td>30</td>
</tr>
<tr>
<td>Solar Cells</td>
<td>9</td>
</tr>
<tr>
<td>Solder</td>
<td>84</td>
</tr>
<tr>
<td>Soldering Irons &amp; Accessories</td>
<td>84, 85</td>
</tr>
<tr>
<td>Solderless Breadboards</td>
<td>79, 80</td>
</tr>
<tr>
<td>Solenoids</td>
<td>30</td>
</tr>
<tr>
<td>Solenoid Valve</td>
<td>30</td>
</tr>
<tr>
<td>Spacers</td>
<td>90</td>
</tr>
<tr>
<td>Speakers and Accessories</td>
<td>38, 39, 41</td>
</tr>
<tr>
<td>SplitLoom Tubing</td>
<td>91</td>
</tr>
<tr>
<td>Stepper Motors</td>
<td>34</td>
</tr>
<tr>
<td>Strain Reliefs</td>
<td>37</td>
</tr>
<tr>
<td>Strobe Lights</td>
<td>17</td>
</tr>
<tr>
<td>Switches</td>
<td></td>
</tr>
<tr>
<td>Alarm Switch</td>
<td>27</td>
</tr>
<tr>
<td>Doorbell Switch</td>
<td>26</td>
</tr>
<tr>
<td>Float Switch</td>
<td>12</td>
</tr>
<tr>
<td>Foot Switch</td>
<td>27</td>
</tr>
<tr>
<td>Joystick</td>
<td>20</td>
</tr>
<tr>
<td>Keyswitches</td>
<td>22</td>
</tr>
<tr>
<td>Magnet</td>
<td>27</td>
</tr>
<tr>
<td>Push Button</td>
<td>4, 24 - 27</td>
</tr>
<tr>
<td>Reed</td>
<td>27</td>
</tr>
<tr>
<td>Rocker</td>
<td>23, 24</td>
</tr>
<tr>
<td>Rotary Switches</td>
<td>27</td>
</tr>
<tr>
<td>Slide</td>
<td>24</td>
</tr>
<tr>
<td>Snap-action</td>
<td>22</td>
</tr>
<tr>
<td>Toggle</td>
<td>6, 20, 21</td>
</tr>
<tr>
<td>Tachometer</td>
<td>82</td>
</tr>
<tr>
<td>Telephone Accessories</td>
<td>31, 87, 90</td>
</tr>
<tr>
<td>Terminals, Crimp</td>
<td>58, 88 - 90</td>
</tr>
<tr>
<td>Terminal Strips</td>
<td>6, 40, 41</td>
</tr>
<tr>
<td>Test Cables &amp; Clips</td>
<td>4, 5, 80 - 82</td>
</tr>
<tr>
<td>Test Equipment</td>
<td>16, 47, 80 - 82</td>
</tr>
<tr>
<td>Thermal Compound</td>
<td>44</td>
</tr>
<tr>
<td>Thermal Switches, Breakers</td>
<td>19</td>
</tr>
<tr>
<td>Thermistors</td>
<td>11</td>
</tr>
<tr>
<td>Thermoelectric Device</td>
<td>43</td>
</tr>
<tr>
<td>Tie Wraps</td>
<td>4, 91</td>
</tr>
<tr>
<td>Tools</td>
<td>49, 58, 83 - 85</td>
</tr>
<tr>
<td>Toroids</td>
<td>65</td>
</tr>
<tr>
<td>Transducers</td>
<td>67</td>
</tr>
<tr>
<td>Transformers</td>
<td>62, 63</td>
</tr>
<tr>
<td>Transistors</td>
<td>61</td>
</tr>
<tr>
<td>Triacs</td>
<td>61</td>
</tr>
<tr>
<td>Tubing</td>
<td>91, 92</td>
</tr>
<tr>
<td>Tweeter</td>
<td>39</td>
</tr>
<tr>
<td>Ultrasonic Transducer</td>
<td>11</td>
</tr>
<tr>
<td>Variacs</td>
<td>62</td>
</tr>
<tr>
<td>Video Connectors</td>
<td>49</td>
</tr>
<tr>
<td>Voltage Regulators</td>
<td>59, 62</td>
</tr>
<tr>
<td>Wall Transformers</td>
<td>63</td>
</tr>
<tr>
<td>Wheels</td>
<td>31</td>
</tr>
<tr>
<td>Wire, Cable</td>
<td>86, 87</td>
</tr>
<tr>
<td>Wire Management</td>
<td>91</td>
</tr>
<tr>
<td>Wire Strippers</td>
<td>83</td>
</tr>
<tr>
<td>Wiring Nuts</td>
<td>90</td>
</tr>
<tr>
<td>Woofers</td>
<td>38, 39</td>
</tr>
</tbody>
</table>

ORDER TOLL FREE 1-800-826-5432
MICRO AIR PUMP, 12 VOLTS DC
Skooom Electronic Co., LTD SC5002PM

Product Specification:
• Rated Voltage: 12.0 Volt DC
• Rated Current: <1000mA
• Normally Open Valve
• Positive Pressure: 200KPA (29 PSI)
• Air Flow: 10-12 L/Minute
• Noise: <72dB (30 cm Away)
• Dimensions: 86.1mm x 65.4mm x 40mm
• Port Dimensions: OD: 4mm (ID: 3.5mm)
• Wire Length: 380mm w/ 2-pin Molex connector
CAT # PMP-23 $6.50 each

FENDER CLIP-ON GUITAR TUNER
Fender, FT-004 clip-on chromatic guitar tuner is compact and easy to operate even under darkened stage conditions. It tunes instruments using a built-in vibration sensor for accurate and precise tuning even in noisy areas. The LCD screen with easy-to-read sweep needle display rotates 360 degrees for easy viewing. Tuning modes include: Guitar, Bass, Ukulele, Violin and Chromatic. Includes CR2032 battery.
CAT # FT-004 $7.50 each 10 for $6.75 each

SPECIAL - 4” CABLE TIES
White (natural) nylon cable ties. 4” length, 7/8” bundle diameter. 18lb tensile strength. Great for fastening and bundling wires. Fast-easy installation.
100 piece bag.
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Normally open, momentary switch with 1/4” bushing and red plastic button. Ideal for most low current projects. Prepped with 24” wire leads.
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Heavy-duty, 3-conductor extension cable with two outlets. 14/3 SJT 3’ power cable. 105C, 600V, 15A/ 125V. UL.
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ATX TO BENCHTOP POWER SUPPLY CONVERSION KIT
Handy conversion kit plugs into your ATX power supply to create a benchtop power supply with enough juice to run most of your electronics projects. Provides quick access to the typical voltages needed including 3.3V, 5V, 12V and -12V. Each output channel has replaceable 5A fuse and corresponding ground connection with binding post. Easy to connect on-board standard 24pin ATX port; just plug-in, and you’re ready to go. Power indicator, power switch and LEDs. Added bonus, on-board USB port for charging or power of external devices. Board Size: 128 x 48 x 30mm / 5.04 x 1.89 x 1.18”
CAT # ATX-BT $15.95 each

6” COTTON SWAB, 100 PIECES
A bag of 100 cotton swabs. 6" long with long, sturdy wooden handles. Single, compacted cotton tip with less lint than regular cotton swabs. Great for model making, ceramics, jewelry, fabric decorations, hobby, arts and crafts. Versatile tool for cleaning, detailing, and applying paint, glue, epoxy, lubrication, etc.
NOT FOR MEDICAL USE.
CAT # CS-100 $1.50 bag

RF TRANSMITTER / RECEIVER MODULES
433 MHz RF transmitter and receiver. Use to send audio or data signals, or use as a remote control on/off switch. With a few extra parts you can use these modules in a variety of applications. Right-angle headers (0.1” spacing) plug into solderless or solderable breadboards, for convenient experimentation. Operates on 5Vdc power. Transmitter is 19mm square, receiver is 14 x 30mm.
CAT # RC-16 $3.00 set

THERMOSTATIC CONTROL MODULE
Digital module can be programmed to turn equipment on or off at specific, pre-set temperatures. Also has hysteresis setting, delay setting, upper-limit setting and upper limit alarm setting. Displays temperature in Celsius on 3-digit LED display. On-board 20A relay. Waterproof temperature sensor. Three buttons for navigating temperature parameters and other functions. Operating voltage 12 Vdc. Overall dimensions 48mm x 40mm x 14mm.
CAT # THM-4 $6.00 each

30 DAY MONEY-BACK GUARANTEE
**SPDT 40 AMP AUTO RELAY**

12 Vdc, 88 Ohm coil. Contacts rated 40A. Plastic enclosed relay, 1.1” x 1.2” x 1” high. Plastic flange for bulkhead mounting. Mounts in standard automotive relay socket.

CAT# RLY-351 $2.55 each • 10 for $22.50

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**BATTERY LEVEL METER**

Monitor battery usage in lead-acid and lithium-ion batteries. LCD displays percentage of voltage remaining in numerical and graphic format. Designed for use with 12, 24, 36 or 48V lead-acid batteries or 3 to 15 cell (8-63V) lithium-ion batteries. Battery symbol flashes when level reaches 5%.

CAT # BT-3 $7.75 each

---

**0-100VDC VOLTMETER**

3-digit LED voltmeter for 0-100VDC range. 0.28” digits on a 0.89” x 0.39” display. Digits on black background. Three wire operation. Red-black for power; yellow-black for voltage being monitored. Will monitor its own voltage. Mounting ears w/ holes on 1.03” centers.

Blue digits CAT# PM-126B $3.95 each

Red digits CAT# PM-126 $3.95 each

---

**2-CONDUCTOR WATERPROOF CONNECTORS, 18 AWG**

Mating, weather-resistant polarized connectors. 12” red & black 18 gauge stranded wire leads.

CAT # CON-320 $1.95 each

10 for $1.80 each • 100 for $1.50 each

---

**1W LED W/ REFLECTOR IN HOUSING**

This good looking fixture is a great beginning for a shelf or display lighting project. Bright, white 1 Watt LED enclosed in a rugged black and yellow hard plastic housing with a conical reflector and a clear plastic front lens. Overall dimensions, 2.16” diameter x 3.45” long. Two wire leads. Operates on 3 Vdc @ 300 mA. For higher voltages use a dropping resistor.

CAT # LMP-26 $2.50 each

10 for $2.25 each

---

**3 AMP DC MOTOR SPEED CONTROLLER**

Controls the speed of a DC motor using Pulse-Width-Modulation. An efficient method of changing the speed of a DC motor without changing voltage. Has a potentiometer with on-off switch and a four-position screw-terminal strip for easy connection to motor and power source. Can be used as a lighting dimmer and similar applications with DC loads up to 3A. 30 x 28mm pc board.

CAT # MSC-35 $5.75 each

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**TWEEZER TEST LEADS**

A must for testing small, in-circuit components. Shrouded banana plugs fit most test meters. Tweezer marked with + and - symbols. 5.9” long tweezer probe. Overall length of leads, 24”.

CAT # TL-126 $6.95 each

---

**300 LEDs, RED, GREEN, YELLOW, BLUE, WHITE**

Keep a good selection of LEDs on hand for whatever your project might require. Red, Green, Blue, Yellow (Amber) and White 3mm and 5mm LED assortment. All are clear in off-state.

- 5mm LEDs, 20 pcs each color.
- 3mm LEDs, 40 pcs each color.
- Clear plastic divided box w/ locking lid.

Because all of these water-clear LEDs look alike and might easily get mixed, we suggest ordering our LED tester, CAT# LT-100 to assure LED color before soldering.

CAT # LED-K1 $8.00 kit

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**TESLA COIL KIT**

Fascinating mini Tesla Coil kit is great for educational demonstrations and entertainment purposes. Produces a high-voltage, low-current arc when you hold a metallic object (ie. insulated screwdriver) next to it. Impressively, it uses wireless power to transmit electrical energy to a high-frequency, low current electrical load such as a neon lamp or fluorescent bulb without any physical connection. 85mm x 54mm x 68mm assembled. Requires a 12 Vdc 2 Amp power supply, we suggest our CAT# DCTX-1241.

CAT# TCL-35 $8.50 each

---

**ILLUMINATED MULTI POWER HEAD MAGNIFIER & LOUPE**

Illuminated multi-power head magnifier keeps your hands free while enhancing your vision. 2 led bulbs with tilt and angle controls to adjust the light beam. Magnification: 1.9x acrylic fixed lens, 1.9x acrylic flip-down lens and 4.5x glass swivel loupe. Magnifier assembly can be flipped up out of your way when not in use. Adjustable head strap with dial control. Plastic body.

CAT # HD-LMAG $10.95 each

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**BATTERY LEVEL METER**

Monitor battery usage in lead-acid and lithium-ion batteries. LCD displays percentage of voltage remaining in numerical and graphic format. Designed for use with 12, 24, 36 or 48V lead-acid batteries or 3 to 15 cell (8-63V) lithium-ion batteries. Battery symbol flashes when level reaches 5%.

CAT # BT-3 $7.75 each

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**O R D E R  T O L L F R E E  1-800-826-5432**

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CAT # HD-LMAG $10.95 each

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**ORDER TOLL FREE 1-800-826-5432**
EXTRA-LOUD MINI PIEZO SIREN
Small, painfully-loud two-tone piezo siren for auto or home security devices. Operates 6-12 Vdc, 110 ma. 108dB output (30cm) 1.81" x 1.55" x 0.88" high black plastic body. Two mounting holes on diagonal 1.80" centers. 3" wire leads.

CAT# ES-10 $5.85 ea. • 10 for $5.65 ea.

7A 12 POSITION TERMINAL BLOCK
For 22-18 wire. 3.78” x 0.67” x 0.57” high. 0.32”(8mm) terminal centers.

UL, CSA, VDE. Flexible white (natural) Nylon 66 body, 94V2 rated for 105 C degrees. 400 Volts. All metal parts are completely recessed in the housing to prevent shorts. Strip has 12 circuits, with a mounting hole between each circuit. Can be easily shortened with a knife or saw.

CAT # TB-7 $2.00 each
10 for $1.80 each • 100 for $1.60 each

SOLDERLESS BREADBOARD, 400 CONTACTS
Accommodate all sizes of dips and discrete components with lead diameters up to 0.032". Interconnect with solid hook-up wire (#22 AWG recommended). Wires and components can be used and re-used many times without damage to board or components. 400 tie points. 300 contacts on main board and 50 contacts on each of two power distribution strips. Distribution strips are removable.

CAT # PB-400 $4.00 each
10 for $3.75 each

2-CONDUCTOR LOCKING CONNECTORS W/ LEADS
Mating pair of polarized multi-pin connectors with wire leads. Pins on 2.5mm centers. Black nylon housing with release on male side of connector. Female side of connector can be snap-mounted into a rectangular chassis mounting hole. 12" color-coded leads, 22 AWG stranded wire on both connectors.

CAT # CON-240 $1.35 each
10 for $1.20 each • 100 for 95¢ each

PRE-WIRED CONNECTORS WITH MATING HEADERS
Nylon connectors and mating pc mount, snap-lock headers. Female socket connector is pre-wired with 11” long color-coded stranded wire.

CAT# pins AWG spacing price
CON-242 2 22 0.1” $8.50 per set
CON-243 3 22 0.1” $1.10 per set
CON-244 4 22 0.1” $1.30 per set

3.5MM - 3.5MM AUDIO AUXILIARY CABLE, 5'
5' cable with 3.5mm stereo mini-phone plugs on each end. Flexible, good-quality cable, made for Motorola (MOT# SKN6393A). Straight plug on one end, right-angle on other. Perfect for iPhone, Android and other audio connections.

CAT # CB-453 $1.00 each
50 for 75¢ each • 100 for 60¢ each

5” FLUSH CUTTER
Trim leads on PC boards. Thin cutting edge for hard to reach areas. Insulated handle. Spring return.

CAT # FC-14 $7.25 each

3-18 VDC PIEZO BUZZER
FY14-G. 3-18Vdc mini-piezo beeper. Emits a medium, high-pitched tone when energized. 80 dB. 12Vdc, 7mA, 4Khz. 13.8mm diameter x 7.5mm high. PC pins on 7.5mm centers.

CAT # SBZ-204 $1.45 each
10 for $1.35 each • 100 for $1.15 each

ECONOMY PROJECT BOXES
Black ABS plastic project enclosure. Inter-locking lid secured with self-tapping screws. Interior slots for PC boards. Includes hardware.

Dimensions CAT# 1-9 10+
3.95” x 3.02” x 1.60” MB-173 3.00 2.75
5.3” x 3” x 1.9” MB-113 4.85 4.50

HIGH VOLTAGE TASER COMPONENT
Converts 3.7 Volts to approximately 18,000 Volts. The main component in a taser/ stun gun, it creates quite a spark and a loud crackling noise when the probes are within 1/2” inch of each other. 1.35” x 1.55” x 0.31”. The output leads have pointed probes attached.

Warning: Operate carefully!

CAT# HVS-01 $7.50 each
KITS

**A NOTE ABOUT KITS....**
Kits cannot be returned or exchanged once assembly has begun.
All parts supplied EXCEPT batteries.

**EDUCATIONAL MOTOR KIT**
Easy to assemble working DC motor kit illustrates the basics of electric motors and electromagnetism. Rugged plastic and colorful metal parts. Operates on 5-12 Vdc. 5.5” x 3.5” x 4.0” assembled.
CAT # KT-49  $9.90 each

**PLUG-IN SOLAR RECHARGEABLE PENGUIN KIT**
Owki# MSK691. The kit consists of a powerful solar cell, rechargeable battery (included), igloo, and penguin. It is easy to assemble: no screws, nuts, or fuss. Just simply plug-in the penguin into the igloo, solar energy converts into electric power for storage and application. Once released from the igloo, the penguin will venture and waddle for you for approximately 3 minutes. For ages 8+. Approximately 4” x 4” x 3”. Thirty-nine pieces in kit.
CAT # MSK-691 $21.95 each

**SOLAR WILD BOAR KIT**
Owki# MSK682. OWI'S Solar Wild Boar is a solar kit that smiles as it klippy-klocks around any mess. Building the 3.56” x 1.85” x 2.24” size figure is ideal for a do-it-yourself science fair, after-school, or summer workshop project with the bonus gift of learning mechanical transmission and electrical motor theory. With 47 assembly parts, it's great for the beginner enthusiast ages 8+.
CAT # MSK-682 $15.95 each

**L.E.D. FLASHER KIT**
This kit includes parts and instructions to make a simple 2-L.E.D flasher circuit. A quick and easy project for anyone with basic soldering skills. Requires 9V battery (not included).
CAT# LEDKIT $2.50 each 100 for $2.25 each

**LED CHASER KIT**
Build this variable speed LED chaser. 10 leds flash sequentially at whatever speed you set them for. Easy to build kit includes pc board, parts and instructions. Ideal for special lighting effects, costumes, etc. Operates on 3 to 9 volts. PC board is 5” x 2.25”.
CAT# AEC $6.95 each  • 10 for $65.00

**100 IN 1 STEM LAB KIT**
100 STEM experiments in one box. For ages eight and up, kids will learn about basic circuit connections as they construct four initial units (Maze Challenge, Flying Disc, Turbo Air, and Alarm System). Maze challenge allows children to build a carnival classic hand eye coordination game where a metal loop is maneuvered around a metal wire without making contact; difficulty of the wire can be adjusted. Flying Disc allows children to launch a disc spinning into the air. By using the auxiliary pieces designed for Turbo Air children will use the air flow to create a bubble machine (bubble solution not included), vacuum cleaner, or a foam ball! Alarm system lets children build a functioning spinning LED light with a loud beeping audio display.
CAT # OWI-38917 $39.95 each

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**6-IN-1 EDUCATIONAL SOLAR KIT**
An excellent building kit for beginners, teaching children the benefits of solar energy while they create a toy that is fun to play with and requires no batteries. Children use the snap-together plastic parts to build six different motorized working models including an airboat, windmill, puppy, car, and two different planes. No tools required for assembly. Diagonal cutter may be needed to separate plastic parts. Kit includes plastic parts, 75mA solar cell, 1.2V electric motor, wires, springs and instruction book. For children 10+. May require adult assistance.
CAT # KFK-2 $6.50 each

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**EM4 ROBOT KIT**
Owki# OWI-891 Fun & easy-to-assemble Educational motorized robot kit with four modes: 6-leg walking cricket, motorized transmission trailer, grand rolling Beast and gear driven walking Grandpa-Bot! This 32 piece, 3 speed kit provides entertainment, imagination and education. Multi Ratio Gear Box. Requires one AA battery. No soldering required. Easy assembly and only requires a diagonal cutter and screwdriver. No soldering required. Assembled dimensions: 10.50” x 7.25” x 3.50”. For ages 8+.
CAT# OWI-891 $20.95 each

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40 EDUCATIONAL ELECTRONIC PROJECTS, BOOK & PARTS KIT

An immersive, hands-on curriculum of fun and illustrative electronics projects that teaches the fundamentals of electronics. Designed to be STEM (Science, Technology, Engineering, Math) Education Compliant for use in school curriculum. Projects are designed to be breadboarded, taken apart and reused.

Complete Lab includes The Basics v2.0 manual (112 pages), and all the parts necessary for the 40 projects in this book, the basics parts kit, solderless circuit board and 9-Volt battery.

CAT# KT-40 $28.95 each

If you only wish to purchase the book, use
CAT# BK-52 $16.95 each

2-DIGIT COUNTER WITH POWER SUPPLY

Large, two digit counter assembly. Advances one digit at a time, from 0 to 99 each time button is pushed. Each digit is 2.75” high and consists of 21 red 5mm LEDs. 5” x 4.18” black display board connected to 4.25” x 2” controller board. Five 4” pigtail wires. Included is a 9 Vdc power supply and a momentary, normally-open pushbutton switch.

CAT# CTR-92 $6.00 each
10 for $5.65 each

ELECTRONIC PARTS KIT

A large assortment of electronic parts in a clear plastic box with lid. Includes: solderless breadboard with 400 contacts, electrolytic capacitors, red, green, blue and yellow LEDs, precision adjustable pot, resistors, resistance card, disc capacitors, jumper wires, tactile pushbuttons with red, yellow, blue and white caps, buzzers and a 40-pin header (see online for full list and quantity of parts).

CAT# EPKIT-1 $15.95 each

SOLAR POWERED RACING CAR

Owkit# OWI-MSK681

Great little solar powered racing car kit for kids ages 8+. Easy and fast to assemble, no batteries required. Assembled size: 2.62” x 2.17” x 2.40” high. 20 pieces.

CAT # MSK-681 $11.95 each

ARDUINO COMPATIBLE PRODUCTS

Arduino is an open-source physical computing platform based on a simple i/o board and a development environment that implements the Processing/ Wiring language. Arduino can be used to develop stand-alone interactive objects or can be connected to software on your computer (e.g. Flash, Processing, MaxMSP). The open-source IDE can be downloaded for free (currently for Mac OS X, Windows, and Linux). We carry Arduino microprocessors and related products. See our online store for full descriptions.

UNO R3

Everything needed to support the onboard ATmega328 microcontroller; connect to a computer with a USB cable or power it with a AC-to-DC adapter or battery. It has 14 digital input/output pins (6 can be used as PWM outputs), 6 analog inputs, a 16 MHz ceramic resonator, a USB connection, a power jack, an ICSP header, and a reset button. This version of the board has a socketed / replaceable ATmega328 chip (see CAT# ARD-24).

Recommended operating voltage, 7-12 Vdc.

CAT# ARD-21 $14.00 each

Snap-together cases for the UNO R3 above
Clear CAT# CSE-3C $4.95 each
Black CAT# CSE-3B $4.95 each

ATMEGA328 W/ ARDUINO OPTIBOOT (UNO), DIP

Pre-loaded with the Arduino Optiboot (Uno 16MHz) Bootloader, to use Arduino code in a custom embedded project without using an actual Arduino board.

CAT# ARD-24 $5.50 each
10 for $4.95 each

MICRO SD CARD READER / WRITER MODULE

Read and write Micro SD cards with your Arduino or favorite microcontroller. Great for adding storage space to any Arduino project. Features on board level shifting IC to go from 5v to 3.3v and uses standard SPI interface.

CAT # SDR-7 $2.85 each

PRO MINI 328

For users that understand the limitations of system voltage (3.3 or 5v), lack of connectors, and USB off board. Not populated with connectors so you can solder any connector or wire with any orientation you need. We recommend first time users start with the Uno R3 (CAT# ARD-21).

3.3V / 8MHz Pro Mini 328 CAT# ARD-14
$4.90 each • 10 for $4.75 each

5V / 16MHz Pro Mini 328 CAT # ARD-18
$4.90 each • 10 for $4.75 each

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$4.90 each • 10 for $4.75 each

5V / 16MHz Pro Mini 328 CAT # ARD-18
$4.90 each • 10 for $4.75 each
SENSOR KIT FOR ARDUINO
A very handy kit containing 37 different devices with the standard 3-pin interface for Arduino. We sell many of these modules and sensors separately, but this kit would be a bargain for a classroom or experimental setting. In addition to a useful assortment of sensors, the kit includes a joystick, relay module, sound and light emitting modules and a pushbutton. Packaged in individual compartments in a sturdy clear plastic case with an easy-to-use display map on the cover showing the location of each item.
CAT # SKA-36  $36.00 each

CLOCK MODULE
The DS1302 trickle-charge time-keeping chip contains a Real-Time Clock/calendar. It communicates with a micro-processor via a simple serial interface. On-board CR2032 backup battery. Operates on 2.5-5.5VDC @ 300mA. 44mm x 23mm x 11mm.
CAT # ME-48  $3.00 each

LOGIC LEVEL CONVERTER, BI-DIRECTIONAL
Bi-directional logic level converter safely steps down 5V signals to 3.3V and steps up 3.3V to 5V at the same time. This level converter also works with 2.8V and 1.8V devices. 0.63 x 0.52" (16.05 x 13.33mm).
CAT# LLC-46  $2.95 each

ARDUINO STACKABLE HEADER KIT
Works with Arduino Main Board, Pro & Mega. They clear the USB-B connector and enable stacking of multiple shields. This kit includes four headers (2 8-pin and 2 6-pin).
CAT# HDR-07  $1.50 each

WiFi MODULE - ESP8266
Self contained WiFi module capable of either hosting an application or offloading all Wi-Fi networking functions from another application processor. Pre-programmed with an AT command set firmware. Operating voltage 3.3V.
CAT# ESP-8266  $5.00 each

16 X 2 LCD W/ KEYPAD
For Arduino compatible boards for user input & menu selection in custom applications. Features a 1602 white character LCD with blue LED backlight and 4-bit Arduino LCD library. Character size: 2.95 x 4.35mm. Keypad consists of 6 keys: select, left, up, down, right & reset. Potentiometer for dimmable backlighting. LED indicator. Operates on 5Vdc. 80mm x 58mm x 13mm.
CAT# ST-1113  $5.95 each

UNO R3 STARTER KIT
A very useful, not to mention economical, kit including an Arduino Uno R3 equivalent microcontroller and a large selection of devices you will want for a number of projects using the Arduino microcontroller. Includes an expansion board, extra breadboards, motors, motor drivers, a relay board, a remote control keypad, joystick, LCD, LED displays, LEDs, jumpers, headers, sensors, switches, pots, battery holder and more. All of this packaged in a well organized, divided plastic case. You can’t go wrong with this. These items purchased separately would be considerably more.
CAT # SKA-47  $45.00 each

RFID READ AND WRITE KIT
Allows you to both read and write MiFare-type cards. Includes one credit-card style tag and one key-fob style tag.
CAT # ME-138  $5.75 each

JOYSTICK SHIELD
Turn your Arduino into a gamepad. Features the Nokia 5110 LCD / nRF24L01 interface. 7 pushbuttons (four big, two small, joystick select button) and a two-axis thumb joystick. Operates on 3.3-5Vdc.
CAT# ST-1124  $4.00 each

SOLAR CELLS
0.5V 800MA
Ideal for hobby and educational projects. 82 x 46 x 2mm high. 7" pigtail leads.
CAT # SOL-2N  $1.10 each
10 for $1.00 each

3V 40MA
Output: approximately 3 Volts @ 40 mA. 60mm square x 2.5mm thick epoxy-encapsulated silicon photovoltaic cell. Solid, almost-unbreakable module with solderable foil strips on backside. Ideal for solar-powered battery chargers and other projects.
CAT # SPL-30  $1.15 each
10 for $1.00 each

ORDER TOLL FREE 1-800-826-5432 9

New Item

New Item
**LIGHT SENSORS**

**CdS PHOTOCELLS – PHOTO RESISTORS**

Light dependent Cadmium sulfide resistors. Plastic coated resistors on ceramic, 0.2-0.25" dia. Light & dark resistances are approximate.

<table>
<thead>
<tr>
<th>Resistivity</th>
<th>Type</th>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2M Ω Dark</td>
<td>1K – 60K Ω Light</td>
<td>PRE-24</td>
<td>$1.25 each</td>
</tr>
<tr>
<td>3K Dark – 1.5K Light</td>
<td>PRE-25</td>
<td>95¢ each</td>
<td></td>
</tr>
<tr>
<td>3M Ω Dark – 100Ω Light</td>
<td>PRE-26</td>
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<td></td>
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<tr>
<td>1M Ω Dark – 180Ω Light</td>
<td>PRE-27</td>
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<td></td>
</tr>
</tbody>
</table>

**PHOTO DETECTOR**

Photonic Detectors Inc # 1541-80A
Miniature photovoltaic cell in a 5mm diameter LED-type package, 0.53Vdc.
CAT# PD-8 3 for 99¢
50 for 20¢ each

**INFRARED MOTION DETECTOR MODULE**

Mini-passive infrared motion detection module (PIMR). Senses changes in infrared heat patterns. 3-pin configuration ideal for use with Arduino / RaspberryPi / Adafruit microcontrollers.
Lens diameter, 14mm. Overall length, excluding pins, 19mm.
CAT # PIR-12 $3.75 each

**IR RECEIVER MODULE**

Simple IR receiver module used to read infrared light value. Can be used to communicate with our IR transmitter module (CAT# SE-28).
Detection angle 60°. Can receive transmissions from a distance of 8 meters. Operating voltage 5 Vdc, 25mm x 15mm.
CAT# ST-1089 $2.40 each

**INFRARED SENSOR**

RE 200B passive infrared sensor. Two active elements helping compensate for differences in environmental temperature. Used in alarm systems and automatic switches that respond to human body motion. Hermetically sealed TO5 metal case with 3 leads.
CAT# PIR-200B $1.00 ea. • 10 for 90¢ ea.

**PIR SENSOR HC-SR501**
Can be used alone or with Arduino or other microcontroller. Adjustable sensitivity and timing. 33 x 24mm pc board. 25mm overall depth.
CAT# PIR-7 $3.25 each

**IR OBSTACLE AVOIDANCE SENSOR**
Uses IR beam to detect proximity of obstacles. Great for sounding an alarm or changing direction of a robot or self-propelled vehicle. Potentiometer to adjust detection distance (2-40cm). Supply voltage 5 Vdc. 45mm x 16 mm x 9mm.
CAT# ST-1081 $2.75 each

**LINE FOLLOWING / REFLECTIVITY SENSOR**
Measures the reflectivity of a surface using infrared emitter/detector pair. Built around the LM393 comparator, it requires only 3 connections, V+, 5VDC, and GND. LED indicator. Can make a robot follow a painted line or count rotations of a motor shaft. 1.64" x 0.42" x 0.40". Three pin header, 0.1" centers. Operates on 3.3-5Vdc. 20mA @ 5Vdc.
CAT# ST-1140 $2.75 each

**IR TRANSMITTER MODULE**
IR transmitter module designed for IR communication when paired with IR receiver (CAT# ST-1089).Indicator LED lights when signal voltage change is detected. Operating voltage 5Vdc. Includes 3-pin female jumpers for attachment to header pins. 34mm x 20mm.
CAT# SE-28 $3.40 each

**TEMPERATURE SENSORS**

**TEMPERATURE SENSOR**
National Semi # LM34DZ
Precision Fahrenheit sensor. Voltage is linearly proportional to the temperature. Operates on 5-30Vdc. TO-92 package.
CAT# LM34DZ $3.30 each

**TMP36 TEMPERATURE SENSOR**
Precision centigrade temperature sensor. It provides a voltage output that is linearly proportional to the Celsius temperature. +125°C temperature range. TO-92 case.
CAT# TMP-36 $2.00 each

**DIGITAL TEMPERATURE SENSOR**
DS18B20 1-Wire digital temperature sensor. Reports degrees C with 9 to 12-bit precision, -55°C to 125°C (+/-0.5°C). Sensor has a unique 64-Bit Serial number etched into it. TO-92 case.
CAT# DS18B20 $1.50 each

**TEMPERATURE / HUMIDITY SENSOR**
Digital temperature and humidity measurement device with a high-performance 8-bit microcontroller connected. Standard single-bus interface.
CAT# SEN-4 $3.50 each
**TEMPERATURE SENSOR MODULE**

NCT thermistor sensor.
LM393 voltage comparator for clean output waveform.
Working voltage 3.3V-5V. Digital switching outputs (0 and 1). PC board, 32 x 14mm.
CAT # SEN-19 $1.50 each

**DIGITAL THERMOMETER W/ PROBE SENSOR**

-50 to 110° Celsius thermometer with digital LCD readout.
Moisture resistant, waterproof probe on 38° lead. Snap-mounts in 1.75” x 1” panel cut-out.
CAT # THM-5 $3.75 each

**DIGITAL THERMOSTATIC CONTROL MODULE**

Digital module can be programmed to turn equipment on or off at specific, pre-set temperatures. Also has hysteresis setting, delay setting, upper-limit setting and upper limit alarm setting. Displays temperature in Celsius on 3-digit LED display. On-board 20A relay. Waterproof temperature sensor. Three buttons for navigating temperature parameters and other functions. Operating voltage 12 Vdc. Overall dimensions 48mm x 40mm x 14mm.
CAT # THM-4 $6.00 each

**THERMISTORS**

NTC – Negative Temperature Coefficient. Resistance drops as temperature increases.

**10K OHM NTC THERMISTOR**

5mm epoxy coated disc. 500mW max power rating. -20 to 125°C operating temperature.
CAT# TNR-103 65¢ each
10 for 55¢ each • 100 for 40¢ each

**10K NTC TEMPERATURE SENSOR**

Gold-plated 3mm dia. x 14.5mm long probe compresses, with spring-return, into a 4.2mm dia. x 9mm long collar. Removed from new equipment in excellent condition.
CAT# THM-43 $1.00 • 75¢ each
10 for 60¢ each

**INRUSH CURRENT SUPPRESSOR, 3.9 OHM**

Murata # NTPAD3R9LDNB0. 3.9 Ohm NTC thermistor. Current rating: 3.3A. Voltage: 264V.
CAT# TNR-3.9 65¢ ea. • 150 for 40¢ ea.

**ULTRASONIC SENSORS**

The HC-SR04 is an affordable proximity/distance sensor that can be used for object avoidance in various applications from robotics to car parking. The module has integral ultrasonic transmitters, receiver and control circuit and is for use in conjunction with Arduino boards. 45 x 27 x 17mm.
CAT# UST-4 $3.25 each

**HALL EFFECT SENSOR BOARD**

44E938 and related components on a pc board designed for use with Arduino boards. 30 x 15mm overall dimensions. Operates on 5V.
CAT# SE-54 $2.25 each

**HALL EFFECT SENSOR**

Allegro MicroSystems # UGN3503U Ratio metric, linear hall-effect sensor in a miniature three-lead plastic SIP package. Flat Response to 23 kHz. 4.5V to 6V Operation.
CAT# HES-2 $1.50 each

**LINEAR MAGNETIC HALL SENSOR**

Simple analog hall sensor module used for proximity switching, positioning, speed detection, and current sensing applications. Signal output is low when magnetic field is present, signal output is high when magnetic field is absent. LED indicator. Potentiometer for adjustable sensitivity. Operating voltage 5Vdc. 44mm x 15mm x 13mm.
CAT# SE-14 $2.50 each

**ROTOR MAGNETIC MODULE**

RLS # RML221Q3 / SKM 3208. Encoder module with a magnetic actuator. 20mm dia. x 4mm thick. Includes small neodymium magnet.
CAT # HES-3 $1.75 each

**BI-POLAR HALL EFFECT SENSOR**

MIRCONEAS HAL115UA-C Detects the presence or the absence of a magnetic field. TO-92UA. VDD = 4.5V to 24V. Typical VDD = 12V.
CAT# HES-1 75¢ each
10 for 65¢ each • 100 for 55¢ each

**3-AXIS ACCELEROMETER**

3-axis accelerometer with signal conditioned voltage outputs. Measures acceleration with a minimum full-scale range of ±3 g. It can measure the static acceleration of gravity in tilt-sensing applications, as well as dynamic acceleration from motion, shock, or vibration.
CAT # ACX-61 $8.95 each

**ULTRASONIC DISTANCE SENSOR**

ORDER TOLL FREE 1-800-826-5432
LIQUID SENSORS

FLUID PRESSURE SENSOR
Using a 5 Vdc input, the fluid-pressure sensor provides a 0.25 - 4 Vdc output proportional to pressure from 0-5” H2O max. Typical applications include duct air flow, filter pressure monitoring, combustion air flow and gaseous leak detection. Measures 1-5/16” x 17/32” on a pair of 7/8” long slotted mounting wings. Two 3/16” O.D. barbs. 3-pin connector with 3” wire leads for power and output.
CAT # FLS-4 $3.15 each

LIQUID LEVEL SENSOR
Float switch closes circuit when float rises to top of switch (end opposite leads). Can be used in opposite direction as well to close circuit when water level drops. 0.96” diameter plastic float and 0.35” threaded bushing with plastic nuts and rubber O-ring. 2.64” overall length. 14” pigtail leads.
CAT # FLW-2 $3.35 each

FLOAT SWITCH WITH INTEGRATED THERMISTOR
Gems Sensors. Horizontal liquid level float switch. For sensing rising or falling liquid levels (normally open or normally closed). Hermetically sealed magnet and reed switch for accurate, reliable long-life operation. Polypropylene float, 2.4” long from hinge to end. Four 10” leads, two for switch (red) and two for thermistor (green).
CAT# FLW-1 $3.50 ea. • 10 for $3.00 ea.

LIQUID FLOW SENSOR
Measures the rate of liquid flowing through it. Consists of a plastic valve body, flow rotor and hall effect sensor. Can be used with a microcontroller such as Arduino to monitor devices. Operates on 5vdc @ 15mA. Water flow range 0.3-6 L /min. Water pressure <0.8MPa. 4mm I.D. x 6mm O.D. inlets. Overall dimensions 35mm x 35mm x 26mm. 6” 3-wire leads with 3-pin connector.
CAT # FLW-3 $5.00 each

PROXIMITY SENSOR
P/N: LJ12A3-4-Z/BX. Inductive-type proximity sensor with NPN, Normally open transistor switch. Output upon detection. Power: 6-36 VDC. Output Current: 300mA. Detection Range: 4mm. Detected material: Iron/Steel alloys. 64mm long x 12mm dia. threaded bushing. Includes hardware. 3-wire, 43” cable.
CAT # PSW-21 $3.75 each

THROUGH-BEAM PHOTO-ELECTRIC SENSOR PAIR
SICK Optics WS15-D1130 / WE15-A1130. Photo-electric sender and receiver pair detects the presence of an object when the beam between the two is interrupted. When the beam is broken, the receiver produces a current that can be used to trigger an audio-visual signal or relay-operated device. 5 Meter range. Built-in LED alignment and power indicators. Modules are 38 x 21 x 16.2mm and can be front or side-mounted. Front-mount hardware is included. Operate on 10-30Vdc. Power supply not included. cULus.
CAT # OSU-1130 $11.35 pair

RED LASER MODULES

LASER DIODE
LiteOn # LTLD505T. 6mm diameter. Gold-plated heat-sink base and leads.
CAT# DLM-6 85¢ each
100 for 40¢ each

LASER ASSEMBLY W/ PINS
Mounted on pc board with header pins for use with Arduino and other projects. Can be used as a trip wire for theft detection or for optical effects. 26 x 16 x10mm.
CAT# ST-1172 $2.80 each

MODULE WITH ADJUSTABLE LENS
Metal enclosed module. 12mm diameter x 35mm long 5” pigtail leads.
CAT# DLM-8 $4.55 ea. • 10 for $4.00 ea.

RED X MODULE
Projects a red X. Visible approximately 10’ in daylight. Metal enclosed module, 12mm diameter x 35mm long. 5” pigtail leads.
CAT# LL-6 $5.00 each

CD LASER OPTICS AND MECHANISM
Sony# KSM213CLCM / KSS213CL.
Optical pickup mechanism with CD laser lens assembly. 3.93” x 3.15” metal bracket. New, original condition.
CAT # LA-10 $7.50 each
10 for $6.70 each
## LIGHT EMITTING DIODES (LED)

### STANDARD 5mm

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>diffused</td>
<td>LED-1</td>
<td>10 for $1.00</td>
<td>.09</td>
<td>.07</td>
</tr>
<tr>
<td>RED</td>
<td>high-brightness</td>
<td>LED-10R</td>
<td>10 for $1.00</td>
<td>.08</td>
<td>.05</td>
</tr>
<tr>
<td>GREEN</td>
<td>diffused</td>
<td>LED-2</td>
<td>10 for $1.50</td>
<td>.12</td>
<td>.08</td>
</tr>
<tr>
<td>YELLOW</td>
<td>diffused</td>
<td>LED-3</td>
<td>10 for $1.50</td>
<td>.12</td>
<td>.08</td>
</tr>
<tr>
<td>AMBER</td>
<td>diffused</td>
<td>LED-173</td>
<td>10 for $1.50</td>
<td>.12</td>
<td>.08</td>
</tr>
</tbody>
</table>

### ULTRA-BRIGHT 5mm

Improved brightness and color consistency.

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA</td>
<td>water clear in off state</td>
<td>LED-130</td>
<td>.60</td>
<td>.45</td>
<td>.30</td>
</tr>
<tr>
<td>RED</td>
<td>water clear in off state</td>
<td>LED-257</td>
<td>3/$1.05</td>
<td>.28</td>
<td>.17</td>
</tr>
<tr>
<td>RED</td>
<td>Water-clear in off-state, Special</td>
<td>LED-301</td>
<td>3/$1.20</td>
<td>.35</td>
<td>.20</td>
</tr>
<tr>
<td>RED</td>
<td>our “brightest red,” water clear in off-state</td>
<td>LED-233</td>
<td>.50</td>
<td>.40</td>
<td>.25</td>
</tr>
<tr>
<td>BLUE</td>
<td>water clear in-off-state, 20º viewing angle</td>
<td>LED-215</td>
<td>.60</td>
<td>.45</td>
<td>.30</td>
</tr>
<tr>
<td>PURPLE</td>
<td>Frosted in off state</td>
<td>LED-92</td>
<td>.55</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>RED</td>
<td>water clear 16K mcd</td>
<td>LED-57</td>
<td>1.10</td>
<td>.90</td>
<td>.80</td>
</tr>
<tr>
<td>GREEN</td>
<td>water clear in-off-state</td>
<td>LED-128</td>
<td>.75</td>
<td>.55</td>
<td>.40</td>
</tr>
<tr>
<td>WHITE</td>
<td>water clear in-off-state, 20º viewing angle</td>
<td>LED-214</td>
<td>.60</td>
<td>.45</td>
<td>.30</td>
</tr>
<tr>
<td>YELLOW</td>
<td>water clear 3000 mcd</td>
<td>LED-72</td>
<td>.95</td>
<td>.75</td>
<td>.47</td>
</tr>
<tr>
<td>ORANGE</td>
<td>water clear point source</td>
<td>LED-136</td>
<td>.25</td>
<td>.15</td>
<td></td>
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</table>

### MINIATURE 3mm

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>diffused</td>
<td>MLED-1</td>
<td>10 for $1.00</td>
<td>.08</td>
<td>.04</td>
</tr>
<tr>
<td>GREEN</td>
<td>diffused</td>
<td>MLED-2</td>
<td>10 for $1.25</td>
<td>.10</td>
<td>.04</td>
</tr>
<tr>
<td>YELLOW</td>
<td>diffused</td>
<td>MLED-3</td>
<td>10 for $1.25</td>
<td>.10</td>
<td>.03</td>
</tr>
<tr>
<td>RED</td>
<td>point source</td>
<td>MLED-7</td>
<td>10 for $1.00</td>
<td>.08</td>
<td>.07</td>
</tr>
<tr>
<td>AMBER</td>
<td>diffused</td>
<td>MLED-12</td>
<td>10 for $1.25</td>
<td>.10</td>
<td>.08</td>
</tr>
<tr>
<td>BLUE</td>
<td>point source Ultrabright</td>
<td>LED-59</td>
<td>.60</td>
<td>.45</td>
<td>.35</td>
</tr>
<tr>
<td>WHITE</td>
<td>water clear Ultrabright</td>
<td>LED-83</td>
<td>.95</td>
<td>.80</td>
<td>.65</td>
</tr>
</tbody>
</table>

### 12 VDC LEDS

Bright 5mm round LEDs with built-in resistors for 12Vdc, No external resistor required. Works well on 4-12Vdc. Dimmer at lower voltages.

<table>
<thead>
<tr>
<th>Color</th>
<th>Lens Color</th>
<th>CAT#</th>
<th>Each</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>Red</td>
<td>LED-12R</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>BLUE</td>
<td>Milky-white</td>
<td>LED-12BW</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>WHITE</td>
<td>Milky-white</td>
<td>LED-12W</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>GREEN</td>
<td>Green</td>
<td>LED-12G</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>WHITE</td>
<td>Water-clear</td>
<td>LED-12WP</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>BLUE</td>
<td>Water-clear</td>
<td>LED-12BP</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>YELLOW</td>
<td>Yellow</td>
<td>LED-12Y</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
</tbody>
</table>

### SPECIAL - 5MM YELLOW 12 VDC LEDS

Prepped with 8” leads & resistor - ready for use with 10-20 Vdc.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED-410</td>
<td>10 for $2.50</td>
<td>100</td>
<td>15¢</td>
</tr>
</tbody>
</table>

### BI-COLOR

5mm RED / GREEN diffused

Two leads. Reverse polarity to change color. Milky-white off-state.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED-6</td>
<td>.50</td>
<td>.45</td>
<td>.35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED-6WC</td>
<td>.50</td>
<td>.45</td>
<td>.35</td>
</tr>
</tbody>
</table>

Chicago Miniature # CMD119EGW.

Three-lead, rectangular LED lights red or green. Milky-white in off-state. Center, common lead is cathode. Led face is 2mm x 5mm.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED-64</td>
<td>10 for $1.00</td>
<td>100</td>
<td>6¢</td>
</tr>
</tbody>
</table>

### BI-COLOR FLASHING

5mm LED alternately flashes red and green, approximately 180 flashes per minute. Milky-white in off-state.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED-6F</td>
<td>45¢</td>
<td>.45</td>
<td>.35</td>
</tr>
</tbody>
</table>

### 3MM RED / WHITE BI-POLAR LED, 3-LEGS

Milky-white off-state.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED-290</td>
<td>45¢</td>
<td>.40</td>
<td>.30</td>
</tr>
</tbody>
</table>

### RGB LED

4-lead, 5mm red-green-blue LED. One common lead (anode) and one lead for each color. Water-clear in off-state.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED-258</td>
<td>75¢</td>
<td>.70</td>
<td>.60</td>
</tr>
</tbody>
</table>
5MM RGB COLOR CHANGING LEDS
Cycles through red-green-blue and combinations of RGB, yielding purple, white and other hues. 5mm water-clear package. Great for attention-getting displays, and jewelry.

Slow Rate -- fades in and out of each color approximately every 5 seconds. Operates on 3.5Vdc.
CAT# LED-276 65¢ each • 10 for 55¢ each • 100 for 40¢ each

Rapid Rate -- changes color every second for ten seconds, then changes color three or four times per second for ten seconds.
CAT# LED-231 60¢ each • 10 for 50¢ each • 100 for 40¢ each

Fluttering -- cycles through RGB colors at a very fast rate, giving the impression of a fluttering red / blue light. Milky-white in off-state.
CAT# LED-232 2 for $1.00 • 100 for 40¢ each

FLASHING LEDS 5mm  Built-in flashing unit 3-5 Vdc. Diffused. High-brightness.

<table>
<thead>
<tr>
<th>Color</th>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>LED-4</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>GREEN</td>
<td>LED-4G</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>WHITE</td>
<td>LED-4W</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>BLUE</td>
<td>LED-4B</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
<tr>
<td>YELLOW</td>
<td>LED-4Y</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
</tr>
</tbody>
</table>

3 WATT LEDS ON HEATSINK
Ultra-bright, high-power, long-life LEDs mounted on 20mm dia. star-type aluminum disc which serves as a heatsink and provides solder spots to simplify connection.

Note: Sensitive to misuse. No guarantee after voltage has been applied.

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
<th>CAT#</th>
<th>Each</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOL WHITE</td>
<td>18000-20000K. 3.2-3.4V, 700mA.</td>
<td>LED-248</td>
<td>1.68</td>
<td>1.51</td>
</tr>
<tr>
<td>WARM WHITE</td>
<td>3500-4200K. 3.2-3.4V, 700mA.</td>
<td>LED-249</td>
<td>2.00</td>
<td>1.75</td>
</tr>
<tr>
<td>AMBER</td>
<td>600-610nm. 1.9-2.3V, 700mA.</td>
<td>LED-253</td>
<td>3.00</td>
<td>2.70</td>
</tr>
<tr>
<td>RED</td>
<td>660nm. 1.9-2.3V 700 mA.</td>
<td>LED-250</td>
<td>3.16</td>
<td>2.84</td>
</tr>
<tr>
<td>BLUE</td>
<td>460-470nm. 3.2-3.4V, 700mA.</td>
<td>LED-261</td>
<td>2.28</td>
<td>2.05</td>
</tr>
<tr>
<td>IR</td>
<td>940nm. 1.5-1.7V 700 mA.</td>
<td>LED-256</td>
<td>2.76</td>
<td>2.48</td>
</tr>
</tbody>
</table>

DRIVER FOR 3W LEDS
The 3 watt LEDs above can be operated on 12 Volts using this driver. Operate on 12 Vac or 12 Vdc.
CAT# LD-3 $3.25 each • 10 for $3.00 each

LENSES FOR 1W, 3W & 5W LEDS
20mm lens in a 23mm plastic holder. Works well with our 1W, 3W and 5W LEDs, with & without star pc board ie. LED-248, LED-249, LED-5BL.

60° viewing angle CAT# LNS-57 $1.50 each • 10 for $1.35 each
45° viewing angle CAT# LNS-58 $1.50 each • 10 for $1.35 each

LED ASSORTMENTS  in divided clear plastic boxes with locking lids

5MM ASSORTED COLORS – 500 PCS
100 each, red, green, blue, yellow, white.
CAT# LED-K2 $10.00 per kit

3MM AND 5MM ASSORTED COLORS – 300 PCS
All are clear in off-state. Red, green, blue, yellow, white.
5mm LEDs – 20 each color. 3mm LEDs – 40 each color
CAT# LED-K1 $8.00 per kit
**ALPHANUMERIC DISPLAYS**

*4 DIGIT RED CLOCK DISPLAY, 0.4" DIGITS*

MSCQ4911C

4 character 7-segment LED display module. Red characters. Semi-colon between middle digits. Decimal points after all digits. Gray face. Common Anode. 0.508" H x 1.562" W x 0.276" D. Fits our part# ICS-22W. CAT# FDA-5 85¢ each • 10 for 75¢ each

*3-DIGIT 7-SEGMENT LED DISPLAY, .28" GREEN*

LTC-2621G. 7-segment, 3 character LED display module. Lights green. Common anode. 2.1V 20mA. 0.891" L x 0.394" W x 0.24" h (22.64mm L x 10mm W x 6.1mm H). 0.28" (7.00mm) digits. 16-pin DIP configuration. CAT# TDA-26 85¢ each 10 for 80¢ each • 100 for 70¢ each

*2.3" 5 X 8 RED-GREEN DOT MATRIX*

Lite-On # LTP2558AA-RA Large. 2.3" matrix height. Red-Orange and Green LEDs. Overall dimensions, 2.40" x 1.5" x 0.33". Gray face with white dots in off-state. Spec sheet available. CAT# SDD-25 $1.00 ea. • 10 for 80¢ ea.

**COOL-WHITE DUAL LED ASSEMBLY**

Nice bright miniature LED light source for display and lighting applications.

2 high-brightness surface-mount white LEDs mounted on a 0.56" x0.31" (7 x 14mm) pc board. Built-in circuitry for 8V operation. Two pc pins on 5mm centers. CAT# LED-2W 5 for $1.00 100 for 12¢ each

**LED INDICATOR ASSEMBLIES**

*12 VDC W/ PLASTIC HOUSING*

Threaded bushings with nuts. Solder-lug terminals. 2 sizes, 4 colors (red, green, blue, yellow).

10mm diameter lens. 10mm bushing. CAT# IND-10(R,G,B,Y) $1.25 each 10 for $1.10 each

12mm diameter lens. 12mm bushing CAT# IND-12(R,G,B,Y) $1.35 each 10 for $1.15 each

*12 VDC RED LED*

5mm red diffused LED. Press-fit mounting in 0.25" diameter hole. Two 10" pigtail leads. CAT# LED-12VR $1.15 each 10 for $1.05 each • 100 for 90¢ each

**12 VDC W/ CHROME HOUSING**

5mm diameter LED in 10mm diameter chrome bezel. 8mm threaded bushing with mounting hardware. Extends 34mm below mounting panel. Available in Red (R), Blue (B), Green (G) and Amber (A). CAT# IND-160(R,B,G,A) $2.25 each

**12 VDC LED MODULES & STRIPS**

*WEATHER-RESISTANT 12 VDC LED MODULE, COOL-WHITE*

Miniature lensed weather-resistant LED module provides 160° of cool white light. Narrow footprint and adhesive backing makes it easy to mount, even on curved surfaces. IP67 rating for outdoor use. Wired together in 20 module strands, with LEDs on 2.36" centers. Can be purchased individually. CAT# LED-161CW $0.80 module 20 for 70¢ per module

*12 VDC MODULE STRIPS*

Rugged, high-luminosity 3-LED modules suitable for indoor or outdoor, shelf, display or sign lighting. Operates on 12Vdc. Dimmable. Covered lens protects against humidity and sun damage. Double-stick tape on back of each module for attachment to clean, flat surface. Hole for screw mounting. Modules linked on 2-conductor 18AWG zip cord, 161mm (6.5") center-to-center spacing. Maximum string is 50 modules, 10 meters (32Ft). 0.72W per module, 36W per string. UL, CE. Can be used w/ dimmer CAT# DMR-8

- Warm White CAT# LS-123WW
- Cool White CAT# LS-123CW
- Red CAT# LS-123R
- Yellow CAT# LS-123Y
- Green CAT# LS-123G
- Blue CAT# LS-123B
- Cool White CAT# LS-123HCW

High-Power. 1.2W per module. 60W (50 x 1.2W) per string. $2.25 per module 10 for $2.00 per module 50 for $1.75 per module

*LOW PROFILE 3-LED MINI MODULE, COOL-WHITE*

Miniature 3-LED module, ideal for indirect lighting, cabinet lighting, sign backlights or outdoor lighting. Provides 120-degrees of cool white light. 12 Vdc. 30mA current. 36W per module. Narrow footprint and adhesive backing makes it easy to mount, even on curved surfaces. IP67 rating for outdoor use. Wired together in 20 unit strands, with modules on 2.72" centers. Can be purchased individually. CAT# LPM-3 85¢ module 20 for 75¢ per module

ORDER TOLL FREE 1-800-826-5432 15
12 VDC LED LIGHT STRIPS

Adhesive-backed ribbon with surface-mount ultrabright LEDs. Ideal accent lighting in auto or home. Dimmable. Can be cut every third LED or 50mm (approx. 0.2") and each segment can be lit independently. Wires can be soldered directly to solder spots on ribbon tape. 5 Meters, 100 segments per continuous strip. Can be connected end-to-end for longer strips. Can be purchased in 2’ (3-led) segments.

- Cool-white CAT# LS-12-CW $1.00 each 2 segments for $1.00
  10 segments $0.65 each
- Warm-white CAT# LS-12-WW $1.00 each
  2 segments for $1.00
  10 segments $0.65 each
- Neutral-white CAT# LS-12-NW
  $1.50 per 3-led segment
  10 segments $1.30 per segment
  100 segments $1.00 per segment

ECONOMY MODULES

C O O L - W H I T E

Very bright, but less bright than our other modules. 3.5” wires between modules.
20 modules per string. 0.72W per module

CAT# LS-200CW $1.40 per module
20 modules for $1.10 per module
100 modules for $0.80 per module

12-24 VDC 8A DIMMER

Designed for 12-24 VDC LED strip lights like our CAT#s LS-12-CW, NW, WW. Clearly-marked screw-clamp input/output terminals. Rotary adjustment. 3.5” x 2.35” x 2.25” high. Mounting holes on 1.6” x 3.1” centers.

CAT# DMR-8 $19.95 each

POCKET-SIZED LED TESTER

Handy device for testing LEDs (2-150mA). Simply plug your LED into the correct holes and push the button to test its brightness, illuminant color, etc. The top row is for 2 pin LEDs with currents ranging from 2mA - 30mA. The bottom row is for 4 pin LEDs (super-flux LEDs) with currents ranging from 20mA - 150mA. Powered by a 9V battery (included).

CAT# LT-100 $8.95 each

FUSE LAMPS

Popular lamps which are the same size as a 3AG 1/4” x 1 1/4” (AGC) fuse.

<table>
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<td>12</td>
<td>LPFS-12</td>
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LED FESTOON LAMPS

6 LED festoon lamps operates on 12 AC/DC 45mA.
120° radiance angle. 10.7mm dia. x 44mm L.

- Cool-white - 45 lumen. 6000 CCT(K).
  CAT# HFL-12CW $4.50 each
  10 for $4.35 each
- Warm-white - 40 lumen. 3000 CCT(K).
  CAT# HFL-12WW $4.50 each
  10 for $4.35 each

Festoon socket for 44mm lamps. Fits CAT#s HFL-12CW and HFL-12WW. Can be used with other 37-44mm festoon based lamps and LEDs.

CAT# FLS-3 $0.75 each  •  10 for $0.70 each

120 VAC LED LAMP

- Earthtronics # LEDX485090
  • 120Vac, 60Hz, 0.062A, 3.5W
  • Off-white (beige), 7.5” diameter
  • 6” diameter x 1.25” depth behind bezel
  • 61 LED array, cool-white 5000K
  • Comparable to 50-60W incandescent lamp
  • Designed to snap into 6” dia. recessed can
  • Pigtail leads

CAT# LED-485 $4.75 each

120 VAC RETROFIT LED DOWNLIGHTS, 4-PACK

- 120Vac, 9W LED lamps for 5”-6” recessed cans
  • Dimmable 10%-100%
  • Standard medium screwbase
  • Normal-white, 4000K color temp
  • 650 lumens
  • Energy Star, cULus, FCC.
  CAT# LMP-56NW $19.95
  $16.00 pack of 4 lamps

12 VDC FLASH ASSEMBLY

Bright xenon strobe assembly for highway emergency signal. Approximately 80 flashes per minute. 12Vdc operation.

Horseshoe flash tube (31.5 x 16 x 6mm) mounted on 65 x 75mm pc board. On/off switch. Easy to connect. See hook-up diagram on-line spec sheet.

CAT# FSH-13 $4.50 ea.  • 10 for $4.00 ea.
**INCANDESCENT LAMPS**

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<th>Leads Type</th>
<th>CAT#</th>
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<td>1.5V, 40mA</td>
<td>10&quot;</td>
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<td>LP-41</td>
<td>4 for $1.00 • 100 for 19¢ each</td>
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<td>LP-4</td>
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<td>5V, 60mA</td>
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**3MM, T-1 SPECIAL**

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<td>LP-23</td>
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<td>500 for 18¢ each • 1000 for 14¢ each</td>
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**T-1 3/4 5MM DIAMETER LAMPS**

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<td>14V MINI BAYONET BASE LAMP</td>
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</table>

#1815 lamp. 14.0 volts. 0.200 amps. CAT# LP-1815 75¢ each 100 for $67.50

**BAYONET BASE LAMP SOCKETS**

PC / solder leads. CAT# LS-17 2 for $1.00

For use with #44, 47, 1815 etc. standard mini-bayonet base lamps. CAT# LHL-37 2 for $1.00

PC leads. 0.40" (10mm) lead spacing. CAT# LHL-46 2 for $1.00

**1.2" X 2.6" EL BACKLIGHT**

Electroluminescent (EL) Backlight. 30 x 67mm (1.2" x 2.6"). Glows green when energized. Ivory off-state. Solderable pin. Operates on 80-120Vac. Will operate from 120v "house" electricity or inverter. For control panels, LCD, special effects and model lighting. CAT# EL-26 3 for 99¢ • 100 for 20¢ each

**1W LED W/ REFLECTOR IN HOUSING**

Great beginning for a shelf or display lighting project. Bright, white 1 Watt LED enclosed in a rugged black and yellow hard plastic housing with a conical reflector and a clear plastic front lens. Overall dimensions, 2.16" diameter x 3.45" long. Two wire leads. Operates on 3 Vdc @ 300 mA. For higher voltages use a dropping resistor. CAT# LMP-26 $2.50 each 10 for $2.25 each

**HI-INTENSITY UV LAMP ASSEMBLY**

High-intensity UV light light source in the 400nM spectrum. Sixteen 1W LEDs on a two-piece curved 1.6" wide pc board assembly approximately 6" long. 4" pigtail leads. Operates on 30vdc @ 1A. CAT# LED-16UV $5.95 each

**LIGHTS**

**170 LUMEN WORK LIGHT -- BRIGHT**

Nebo 6327 LarryC. EXTREMELY BRIGHT! Equipped with new C-O-B LED technology, it outputs 170 lumens of intense light. The 180° rotating magnetic clip allows for hands-free lighting. The reinforced plastic body design is water and impact-resistant. Top-positioned, ON/OFF button. Powered by 3 AAA batteries (included). 6.375" long. Includes retail box. Comes in red, blue, black or yellow (no choice of color). CAT# FL-170 $8.99 each

**FLASHING ROAD HAZARD FLARE**

Flashing roadside emergency LED flare with flashlight. Features ten different flashing patterns. Contains a hook and strong magnet for placement on vehicle. Powered by 3 AAA batteries (not included). 6.375" long. Includes retail box. Comes in red, blue, black or yellow (no choice of color). CAT# ERL-1 $9.95 each

**PORTABLE LED LANTERN LIGHT**

Battery operated, light-weight portable LED lantern light. Ultra-bright led light is useful for camping, hiking and emergency situations. Features: 360-degree illumination, adjustable light setting. Easily collapses to 5" high, expands to approximately 7.40" high. 3.4" dia. magnetic base conveniently attaches to metal fixtures. Requires 3 AA batteries (not included). CAT# PLL-1 $6.95 each
### FUSES

#### 3 AG (AGC) FUSES

**STANDARD FUSES 1/4" x 1 1/4"**

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**SLOW BLOW 3AG (MDL) FUSES**

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- pack of 5 for $1.75
- 100 for $30.00 (no mixing)

#### CERAMIC 3 AG FUSES

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- 75¢ each • 10 for 70¢ each
- 100 for 60¢ each (no mixing)

### GMA SIZE FUSES

**MINIATURE FUSES 3/16” x 3/4”**

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- Littelfuse® 1.6A 250V slow blow fuse.
- CAT# GMA-1.6SB 3 for $1.95
- 10 for 55¢ each • 100 for 40¢ each

### ATC AUTOMOTIVE BLADE FUSES

19mm wide. Fits fuseholder FHP-25. Four piece minimum per item.

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</tr>
<tr>
<td>40</td>
<td>ORANGE</td>
<td>FSA-40</td>
<td>$1.20</td>
<td>$22.00</td>
</tr>
</tbody>
</table>

### AGC (3AG) FUSE HOLDERS (for fuses 1/4" x 1 1/4")

#### PANEL MOUNT

Screw style cap. Holder fits 3 AG (AGC) or MDL fuses. Chassis mounting hole 0.59" (15mm) diameter.

**CAT# FHPM-31 $1.50 each**

- 10 for $1.35 each • 100 for $1.15 each

#### PANEL-MOUNT

Bussmann® HTB-38I-R. Low-profile, screwdriver / slotted release. Maximum panel thickness: 0.30" (7.62mm). Rated: 16-amp 250V. 0.25" QC and solder terminals, one right-angle terminal.

**CAT# FHP-223 $2.00 each**

- 100 for $1.75 each

#### PANEL MOUNT

Littelfuse® H43453HS7LN. High profile, screwdriver cap. Fits in 0.47” diameter hole, with special 1/2" thread. Rated: 20 Amp 250 Vac. 1/4” quick-disconnect right angle terminals.

**CAT# FHP-63 $1.95 each**

- 100 for $1.50 each

### MINI ATC BLADE FUSES

11mm wide

<table>
<thead>
<tr>
<th>AMP</th>
<th>COLOR</th>
<th>CAT#</th>
<th>4 PCS</th>
<th>100</th>
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<tbody>
<tr>
<td>2</td>
<td>GREY</td>
<td>MATC-2</td>
<td>1.20</td>
<td>22.00</td>
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<tr>
<td>3</td>
<td>PURPLE</td>
<td>MATC-3</td>
<td>1.20</td>
<td>22.00</td>
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<tr>
<td>4</td>
<td>PINK</td>
<td>MATC-4</td>
<td>1.20</td>
<td>22.00</td>
</tr>
<tr>
<td>5</td>
<td>AMBER</td>
<td>MATC-5</td>
<td>1.20</td>
<td>22.00</td>
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<tr>
<td>7.5</td>
<td>VIOLET</td>
<td>MATC-7.5</td>
<td>1.20</td>
<td>22.00</td>
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<tr>
<td>10</td>
<td>RED</td>
<td>MATC-10</td>
<td>1.20</td>
<td>22.00</td>
</tr>
<tr>
<td>15</td>
<td>TEAL</td>
<td>MATC-15</td>
<td>1.20</td>
<td>22.00</td>
</tr>
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<td>20</td>
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<tr>
<td>30</td>
<td>GREEN</td>
<td>MATC-30</td>
<td>1.20</td>
<td>22.00</td>
</tr>
</tbody>
</table>

**FAX YOUR ORDER 24 HOURS A DAY (818) 781-2653**
**In-Line**

Red wire.
Fuses not included.
CAT# FHP-2  $1.00 each • 20 for 85¢ each

**Fuse Clip for 1/4" Dia. Fuse**

Buss fuse clip BK / 1A1119-04. Requires 2 clips per fuse. PC mount with pins on 0.3" mounting centers. Fits 3AG / AGC fuse.
CAT# FC-PC  10 for $1.00
100 for 8¢ each

**Automotive Blade Fuseholders**

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Description</th>
<th>Price per 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHP-25</td>
<td>Red 14 AWG wire.</td>
<td>$1.50 ea.</td>
</tr>
<tr>
<td>FHP-31</td>
<td>Red 10 AWG wire.</td>
<td>$2.00 each</td>
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</table>

**ATO/ATC Fuse Blocks**

<table>
<thead>
<tr>
<th>Description</th>
<th>Price per 100</th>
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<tbody>
<tr>
<td>4-Circuit Fuse Block</td>
<td>$9.95 each</td>
</tr>
<tr>
<td>6-Circuit Fuse Block</td>
<td>$11.10 each</td>
</tr>
<tr>
<td>8-Circuit Fuse Block</td>
<td>$11.55 each</td>
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</tbody>
</table>

**GMA Fuse Holders**

<table>
<thead>
<tr>
<th>Description</th>
<th>Price per 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHP-72</td>
<td>2 for 90¢ • 100 for 40¢ each</td>
</tr>
<tr>
<td>FHP-49</td>
<td>85¢ each • 100 for 65¢ each</td>
</tr>
</tbody>
</table>

**Resettable Circuit Breakers**

**PolySwitch® 0.65-1.3A**
Raychem “PolySwitch”
# RXE-065S-1. Current: 0.65 Amps.
Trip Current: 1.3 Amps. Max Voltage: 60 Volts. 0.33" diameter. UL, CSA.
CAT# RXE-065  3 for 99¢ • 100 for $ 20.00
500 for $85.00 • 1000 for $150.00

**10 AMP Circuit Breaker**
Hwawon HW-15MB
10A, 125Vac resettable, panel-mount thermal type circuit breaker. 11mm (13/32) threaded bushing. 1/4" qc/solder terminals. UL, CSA. Removed from new equipment.
CAT # CBR-10  $1.25 each

**Thermal Switches**

**Normally-Closed**

Prevent overheating by opening circuit at rated temperature. Open upon rise to rated temperature. Auto-reset when temperature drops.

**Opens at 115°F**
Klixon 9700K25-48
Rated 10 (6)A@250Vac. 0.63" diameter x 0.53". Solder-loop tabs.
THSW-115  2 for $1.00
100 for 45¢ each

**75°C (167°F) Closes 50°C (122°F)**
Klixon 9700K25-48
Rated 13A/250 Vac. 3" lead length.
CAT# THSW-167  75¢ each

**95°C (203°F)**
Selco# 802L-095.
PC 2 pin terminals. TO-220 package.
CAT# THSW-095  85¢ each
100 for 70¢ each

**Opens at 110°C (230°F)**
Uchiya UP62G.
Normally-closed thermal protector. Rated 2.5A/250VAC (resistive). 0.62" x 0.250" x 0.12". 4" insulated stranded pigtail leads. VDE.
CAT # THSW-110C  50¢ each

**Manufacturers**
We Purchase Excess Inventories.
CALL, WRITE, E-MAIL or FAX your list.
## MINIATURE TOGGLE

### MINIATURE TOGGLE - THREADED BUSHING

1/4” threaded bushing. Rated 3A/120Vac.

Note: Parentheses indicate a momentary position, ie, (on)-off indicates “momentary-on”

<table>
<thead>
<tr>
<th>CAT#</th>
<th>DESCRIPTION</th>
<th>Terminals</th>
<th>1</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTS-4</td>
<td>SPDT, on-on</td>
<td>Solder-lugs</td>
<td>$1.25</td>
<td>$1.10</td>
<td>$0.95</td>
</tr>
<tr>
<td>MTS-4PC</td>
<td>SPDT, on-on</td>
<td>PC pins</td>
<td>$1.25</td>
<td>$1.10</td>
<td>$0.95</td>
</tr>
<tr>
<td>MTS-5</td>
<td>SPDT, on-off-on</td>
<td>Solder-lugs</td>
<td>$1.25</td>
<td>$1.10</td>
<td>$0.95</td>
</tr>
<tr>
<td>MTS-5PC</td>
<td>SPDT, on-off-on</td>
<td>PC pins</td>
<td>$1.25</td>
<td>$1.10</td>
<td>$0.95</td>
</tr>
<tr>
<td>MTS-8</td>
<td>DPDT, on-on</td>
<td>Solder-lugs</td>
<td>$1.75</td>
<td>$1.60</td>
<td>$1.35</td>
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<tr>
<td>MTS-8PC</td>
<td>DPDT, on-on</td>
<td>PC pins</td>
<td>$1.75</td>
<td>$1.60</td>
<td>$1.35</td>
</tr>
<tr>
<td>MTS-12</td>
<td>DPDT, on-off-on</td>
<td>Solder-lugs</td>
<td>$1.85</td>
<td>$1.70</td>
<td>$1.45</td>
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<tr>
<td>MTS-12PC</td>
<td>DPDT, on-off-on</td>
<td>PC pins</td>
<td>$1.85</td>
<td>$1.70</td>
<td>$1.45</td>
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<tr>
<td>MTS-93</td>
<td>DPDT, (on)-(off)-(on)</td>
<td>Solder-lugs</td>
<td>$2.25</td>
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<td></td>
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<tr>
<td>MTS-94</td>
<td>DPDT, on-off-(on)</td>
<td>Solder-lugs</td>
<td>$2.30</td>
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<td></td>
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<tr>
<td>MTS-60</td>
<td>3PDT, on-on</td>
<td>Solder-lugs</td>
<td>$2.40</td>
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<td></td>
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<tr>
<td>MTS-63</td>
<td>3PDT, on-off-on</td>
<td>Solder-lugs</td>
<td>$2.60</td>
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<tr>
<td>MTS-70</td>
<td>4PDT, on-on</td>
<td>Solder-lugs</td>
<td>$3.25</td>
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<td></td>
</tr>
</tbody>
</table>

### SWITCH COVER FOR 1/4" BUSHING

Protects mini-toggle switches from dust and moisture. Rubber boot attached to 1/4" threaded nut fits over handle and screws onto bushing. Fits all mini-toggle switches (our CAT#s MTS-XXX) except those with short or extra-long handles. Round trim, black plastic. CAT# SBT-1 $0.75 each

### MINIATURE TOGGLE - FLAT HANDLE

<table>
<thead>
<tr>
<th>CAT#</th>
<th>DESCRIPTION</th>
<th>Terminals</th>
<th>Each</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MTS-17</td>
<td>SPST, on-off</td>
<td>Solder-lugs</td>
<td>$1.25</td>
<td></td>
</tr>
<tr>
<td>MTS-18</td>
<td>SPDT, on-on</td>
<td>Solder-lugs</td>
<td>$1.50</td>
<td></td>
</tr>
<tr>
<td>MTS-19</td>
<td>SPDT, on-off-on</td>
<td>Solder-lugs</td>
<td>$1.50</td>
<td></td>
</tr>
<tr>
<td>MTS-20</td>
<td>DPDT, on-on</td>
<td>Solder-lugs</td>
<td>$2.00</td>
<td></td>
</tr>
<tr>
<td>MTS-21</td>
<td>DPDT, on-off-on</td>
<td>Solder-lugs</td>
<td>$2.00</td>
<td></td>
</tr>
</tbody>
</table>

### D.P.D.T. ON-OFF-ON


CAT# MTS-80 $1.00 each • 10 for 90¢ each

### D.P.D.T. ON-OFF-ON

Special - D.P.D.T. ON-OFF-ON

Contacts rated 5A/125Vac, 2A/250Vac. 6mm threaded bushing, PC terminals. 0.43” long handle.

CAT# MTS-212 $1.50 each
10 for $1.30 each • 100 for $1.00 each

### SUB MINIATURE TOGGLE

S.P.D.T. ON-ON

Rated: 1.5 amp @ 250 Vac. Solder lug terminals. 0.4” long bat handle. 0.2" diameter threaded bushing.

CAT# SMTS-4 $1.35 each
10 for $12.50 • 100 for $110.00

D.P.D.T. ON-ON

Rated: 1.5 amp @ 250 Vac. Solder lug terminals. 0.4” long bat handle. 0.2" diameter threaded bushing.

CAT# SMTS-8 $1.75 each
10 for $15.50 • 100 for $135.00

### JOYSTICKS

2-Axis, self-centering joysticks. Two independent 10K Ohm pots, one per axis. Select button actuated when the joystick is pressed down.

CAT# JS-932 $3.95 each
10 for $3.56 each

Interfaced through a 5-pin header. 2 analog outputs (X & Y), 1 digital output (button). Output voltage: 2.5V. 37mm x 25mm x 32mm.

CAT# ST-1079 $1.50 each
STANDARD TOGGLE

15/32" threaded mounting bushing

15/20A TOGGLE SWITCHES
Heavy-duty, toggle switches rated 20A @ 125Vac / 15A @ 250Vac. STS-70 and STS-71 are rated 15A @ 125Vac / 10A @ 250Vac.

Note: Parentheses in DESCRIPTION, ie, (on)-off, indicates a momentary-on position.

SOLDER / 0.25" QC TERMINALS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>DESCRIPTION</th>
<th>Each</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>STS-94</td>
<td>SPDT, on-off</td>
<td>$2.10</td>
<td>$1.95</td>
</tr>
<tr>
<td>STS-95</td>
<td>SPDT, on-on</td>
<td>$2.45</td>
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</tr>
<tr>
<td>STS-96</td>
<td>SPDT, on-off-on</td>
<td>$2.50</td>
<td>$2.30</td>
</tr>
<tr>
<td>STS-100</td>
<td>SPDT, (on)-(off)-(on)</td>
<td>$2.65</td>
<td>$2.45</td>
</tr>
<tr>
<td>STS-97</td>
<td>DPDT, on-off</td>
<td>$2.70</td>
<td>$2.55</td>
</tr>
<tr>
<td>STS-98</td>
<td>DPDT, on-on</td>
<td>$3.10</td>
<td>$2.90</td>
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<tr>
<td>STS-99</td>
<td>DPDT, on-off-on</td>
<td>$3.30</td>
<td>$3.05</td>
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<tr>
<td>STS-101</td>
<td>DPDT, (on)-(off)-(on)</td>
<td>$3.45</td>
<td>$3.15</td>
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<tr>
<td>STS-102</td>
<td>DPDT, (on)-(off)-(on)</td>
<td>$3.65</td>
<td>$3.35</td>
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SCREW TERMINALS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>DESCRIPTION</th>
<th>Each</th>
<th>10</th>
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<tbody>
<tr>
<td>STS-56</td>
<td>SPDT, on-off</td>
<td>$2.00</td>
<td>$1.85</td>
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<tr>
<td>STS-57</td>
<td>SPDT, on-on</td>
<td>$2.35</td>
<td>$2.10</td>
</tr>
<tr>
<td>STS-58</td>
<td>SPDT, on-off-on</td>
<td>$2.40</td>
<td>$2.20</td>
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<tr>
<td>STS-78</td>
<td>SPDT, (on)-(off)-(on)</td>
<td>$2.55</td>
<td>$2.35</td>
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<tr>
<td>STS-59</td>
<td>DPDT, on-off</td>
<td>$2.60</td>
<td>$2.45</td>
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<tr>
<td>STS-89</td>
<td>DPDT, on-on</td>
<td>$3.00</td>
<td>$2.80</td>
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<td>STS-60</td>
<td>DPDT, on-off-on</td>
<td>$3.20</td>
<td>$2.95</td>
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<td>STS-79</td>
<td>DPDT, (on)-(off)-(on)</td>
<td>$3.35</td>
<td>$3.05</td>
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<td>STS-80</td>
<td>DPDT, (on)-(off)-(on)</td>
<td>$3.55</td>
<td>$3.25</td>
</tr>
<tr>
<td>STS-70</td>
<td>4PDT, on-on</td>
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<tr>
<td>STS-71</td>
<td>4PDT, on-off-on</td>
<td>$4.50</td>
<td>$4.25</td>
</tr>
</tbody>
</table>

SPDT 20A ON-ON UL
E-switch, LAMB ST-1 #ST143D00. Standard SPDT toggle switch with 0.25" QC/solder terminals. 12mm threaded bushing (M12x1). 19.5mm toggle handle. E149579. cULus.
Rating: 20A/15A 125/277Vac, 2HP 125-277Vac.
CAT # STS-143 $3.85 each
50 for $3.50 each

SPST ON-OFF TOGGLE SWITCH W/ SCREW TERMINALS
Standard SPST On-off toggle switch with screw terminals. 0.45" long toggle. Rated: 6A 125Vac/3A 250Vac. M12x0.75 threaded mounting bushing.
CAT # STS-136 $1.65 each
10 for $1.55 each • 100 for $1.35 each

DUAL SPST TOGGLE SWITCH
Rated 3 Amps @ 125 Vac. Looks like a DPDT toggle switch, but it is actually two separate single pole switches.
When one is open, the other is closed. Solder terminals.
CAT# STS-20 $1.50 each

SPST ON-OFF TOGGLE SWITCH W/ PUSH ON TERMINALS
Standard SPST On-Off toggle switch with 0.25" QC terminals. 0.45" long toggle. Rated: 6A 125Vac/3A 250Vac. M12x0.75 threaded mounting bushing.
CAT # STS-135 $1.55 each
10 for $1.45 each • 100 for $1.25 each

SPST ON-OFF TOGGLE SWITCH W/ WIRE LEADS
Standard SPST On-Off toggle switch prepped with two 5" wire leads. 0.45" long toggle.
Rated: 6A 125Vac/3A 250Vac.
CAT # STS-137 $1.65 each
10 for $1.55 each • 100 for $1.35 each

TOGGLE SWITCH COVER FOR 15/32" BUSHING
Protects standard toggle switches from dust and moisture. Fits all our standard toggle switches. Round, knurled nut.
CAT# SBT-2 $0.85 each

HIGH-RELIABILITY TOGGLES

APEM 12146A SERIES
toggle switches specially manufactured for defense, telecommunications and other industrial applications. Standard size toggle handle with matte-black finish on toggle, bushing and hardware. 15/32" threaded bushing.

DPDT, ON-ON
APEM # 12146AD2GK
CAT# STS-133 $6.50 each

2P3T, ON-ON-ON
APEM # 12164AD2GK-3V
2-pole, 3-position, on-on-on.
Toggle lever locks in all 3 positions. Switching pattern - see online doc.
CAT# STS-134 $4.75 each • 10 for $4.25 each

SPST ON-OFF TOGGLE SWITCH W/ SCREW TERMINALS
Standard SPST On-off toggle switch with screw terminals. 0.45" long toggle. Rated: 6A 125Vac/3A 250Vac. M12x0.75 threaded mounting bushing.
CAT # STS-136 $1.65 each
10 for $1.55 each • 100 for $1.35 each

HIGH-RELIABILITY TOGGLES

APEM 12146A SERIES
toggle switches specially manufactured for defense, telecommunications and other industrial applications. Standard size toggle handle with matte-black finish on toggle, bushing and hardware. 15/32" threaded bushing.

DPDT, ON-ON
APEM # 12146AD2GK
CAT# STS-133 $6.50 each

2P3T, ON-ON-ON
APEM # 12164AD2GK-3V
2-pole, 3-position, on-on-on.
Toggle lever locks in all 3 positions. Switching pattern - see online doc.
CAT# STS-134 $4.75 each • 10 for $4.25 each

KNIFE SWITCH
Base is 75 x 12 x 9mm high.
Two mounting holes on 46mm centers.
CAT# SWS-10 $2.25 each

ORDER TOLL FREE 1-800-826-5432 21
SNAP ACTION SWITCHES

STANDARD BODY

Standard body switches are 27.8 x 15.9 x 10.3mm, S.P.D.T.

**STYLE**

<table>
<thead>
<tr>
<th>STYLE</th>
<th>AMPS</th>
<th>TERM.</th>
<th>MFG. #</th>
<th>CAT#</th>
<th>PRICE 10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>0.25&quot;</td>
<td>SMS-226</td>
<td>1.10</td>
<td>1.00</td>
<td>0.85</td>
</tr>
<tr>
<td>B</td>
<td>10</td>
<td>0.25&quot;</td>
<td>SMS-222</td>
<td>1.50</td>
<td>1.35</td>
<td>1.20</td>
</tr>
<tr>
<td>C</td>
<td>10</td>
<td>0.25&quot;</td>
<td>SMS-223</td>
<td>1.50</td>
<td>1.35</td>
<td>1.20</td>
</tr>
<tr>
<td>D</td>
<td>15</td>
<td>0.25&quot;</td>
<td>SMS-271</td>
<td>1.75</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>0.187&quot;</td>
<td>Zippy VMN-03N-05D0-B</td>
<td>SMS-330</td>
<td>.75</td>
<td>.55</td>
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<tr>
<td>D</td>
<td>6</td>
<td>0.187&quot;</td>
<td>Zippy VMN-06S-05D0-B</td>
<td>SMS-338</td>
<td>1.00</td>
<td>.85</td>
</tr>
</tbody>
</table>

**SMALL SIZE BODY**

Small body switches are 19.8 x 10.6 x 6.4mm, S.P.D.T. (unless otherwise specified) and have solder terminals. 125/250 Vac.

<table>
<thead>
<tr>
<th>STYLE</th>
<th>AMPS</th>
<th>MFG. #</th>
<th>CAT#</th>
<th>PRICE 10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>0.25&quot;</td>
<td>SMS-220</td>
<td>1.10</td>
<td>0.95</td>
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<tr>
<td>C</td>
<td>5</td>
<td>0.25&quot;</td>
<td>SMS-221</td>
<td>1.00</td>
<td>0.85</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>0.25&quot;</td>
<td>SMS-219</td>
<td>1.30</td>
<td>1.15</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>Burgess V4NC / PC pins</td>
<td>SMS-365</td>
<td>0.95</td>
<td>0.75</td>
</tr>
<tr>
<td>F</td>
<td>5</td>
<td>Micro 311SM56</td>
<td>SMS-357</td>
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**MINI BODY STYLE**

SPDT MINI- SNAP-ACTION SWITCH W/ SIM ROLLER LEVER

Omron D2F-01L3. SPDT. Rated 0.1 Amp @ 30 VDC. Simulated roller lever extends to end of switch. Body: 12.8 x 5.5 x 5.5mm. Thru-hole mounting. PC pins. RoHS.

**KEY SWITCHES**

- **Two-position, on-on, S.P.D.T. keyswitch. Key removable in both positions. 90° range. 0.86" dia. bezel. 5/8" threaded bushing mount, up to 1/8" panel thickness. 1.2" behind-panel depth. Solder-lug terminals. Includes two keys.**
  - CAT # KSW-50 $4.00 each
  - 10 for $3.50 each

- **Semco. High quality, round tumbler type switch. S.P.S.T momentary-ON. Includes two keys. Key removable in off position only. Fits in 0.75" dia. hole. Two post style terminals.**
  - CAT # KSW-35 $3.50
  - Reduced Price $2.50 each
  - 10 for $2.20 each

- **ON-OFF keyswitch rated 1A 120Vac. 11mm dia. threaded mounting bushing. Chrome bezel. Includes two keys. Key removable in off-position only. 90° rotation. All keyed alike. Ace-type key (round body). Solder pot style terminals.**
  - CAT # KSW-33 $2.50 each
  - Reduced Price $2.25 each

- **ON-OFF keyswitch rated 1A 120Vac. 11mm dia. threaded mounting bushing. Chrome bezel. Includes two keys. Key removable in off-position only. 90° rotation. All keyed alike. Solder lug terminals.**
  - CAT # KSW-12 $3.50 each
ROCKER SWITCHES

ROUND ROCKERS
Matte-black, single-pole. Snap-mounts in 0.8” diameter hole. 0.9” dia. bezel. 0.6” dia. round rocker. Rated 13 Amps / 125 Vac. Solder or 0.187” qc terminals. TUV. Five configurations:

With BLACK rocker
ON-OFF, S.P.S.T. CAT# RS-164 $1.35 each
ON-OFF, S.P.D.T. CAT# RS-144 $1.25 each
ON-ON, S.P.D.T. CAT# RS-145 $1.35 each
ON-OFF-ON CAT# RS-146 $1.40 each

With RED rocker: Rated 10 Amps / 125 Vac
ON-OFF, S.P.S.T. CAT# RS-144R $1.20 each

10 for $1.10 each

DPST ON-OFF RED ROCKER SWITCH
D.P.S.T., OFF/ON, rocker switch red rocker. Same specs and dimensions as our lighted rocker switch, CAT# LRS-42, but is not lighted. Rated 20A @ 125Vac. Snap-mounts in 23 x 27mm (0.90” x 1.07”) rectangular cut-out.

CAT# RS-20 $1.00 each • 10 for $85¢ each

SPDT MINIATURE ROCKER SWITCH

CAT# RS-163 $1.10 each • 10 for $95¢ each

DPST ROCKER SWITCH
SMK #BZ35. D.P.S.T., on-off rocker switch. Matte-black bezel (21 x 15mm) and rocker. Rocker has embossed white symbols – and O which appear on edge of rocker. Snap-mounts into 20 x 13mm cut-out. Rated 6A /125Vac. 0.185” QC/solder terminals. UL, CSA.

CAT# RS-189 65¢ ea. • 100 for 50¢ ea.

MINIATURE SPDT ROCKER SWITCH
Eledis # 3A11-BFST SE22. S.P.D.T., on-on. Rated 5A, 120Vac. Solder-lug terminals. Bezel is 16 x 20 mm. Matte-black Nylon rocker and bezel. Snap-mounts into a 0.5” x 0.6” cut-out.

CAT# RS-228 2 for $1.00
25 for 45¢ each • 100 for 40¢ each

12V LIGHTED ROCKER SWITCHES

12V LIGHTED ROCKER SWITCHES, ROUND
S.P.S.T., on-off. Round body. Rated 16A (except LRS-29G). Can be wired to be always on, or when contacts are closed. Solder or 0.187” qc terminals.

0.90” DIA. BEZEL,
12V INCANDESCENT LAMP
Lighted red rocker with on-off symbols. Mounts in 0.8” diameter hole.

CAT# LRS-32 $1.85 each

same as above, but green,
10 Amps, no symbols.

CAT# LRS-29G $1.00 each
10 for 65¢ each

0.90” DIA. BEZEL, ROCKER W/ LED
available with red, green, amber, aqua or blue LED embedded in one side of rocker. Built-in resistors allow LEDs to light on 12 Vdc. Mounts in 0.8” diameter hole.

CAT# LRS-28X (X=R, G, A, AQ, B) $2.20 each

12V incandescent S.P.S.T. rocker. 0.65” diameter bezel, 0.45” diameter. Red. Snap-mounts in 0.59” dia. hole. Rated 6 amps. Solder loop terminals.

CAT# LRS-31 $1.95 each

12 VDC LED LIGHTED ROCKERS (OVAL)
S.P.S.T. on-off, surface-mount rocker switch with LED indicators. Built-in resistors for 12 Vdc operation. Surface mount switch with threaded bushing with nut, conveniently mounts in 0.48” diameter hole. Matte-black oval switch with LED on one side of rocker. Above panel dimensions are 1.22” x 0.78” x 0.63” high. 0.25”qc / solder terminals. Rated 20A / 12 Vdc. Available with LEDs in 4 colors, red (R), green (G), amber (A), and blue (B).

CAT# LRS-30X (X=R, G, A, or B) $2.20 each

120V LIGHTED ROCKER SWITCHES

S.P.S.T. On-off red lighted rocker switch. On/Off symbols (- and O) printed in white. Black body, bezel 1.25” x 0.55”. Snap mounts in 1.10” x 0.42” cutout. Current rating: 20A 125 Vac; 15A 250 Vac. 0.25”QC/solder terminals. TUV CE.

CAT# LRS-40 $1.95 each

120V LIGHTED ROCKER SWITCHES

ON-OFF 12V LIGHTED ROCKER SWITCH
S.P.T. rocker switch with red 12V lighted rocker. Rated 20A / 12V. Snap-mounts in 1.05” x 0.45” cut-out. 0.25”qc / solder terminals.

CAT# LRS-20 $1.75 each

ORDER TOLL FREE 1-800-826-5432
24V LIGHTED ROCKER SWITCH
Carlingswitch. S.P.S.T., ON-OFF, lighted rocker switch. Matte-black rocker and bezel. Red jewel in rocker. Snap-mounts in 1.4" x 0.8" rectangular cut-out. 0.25" ac/ solder terminals.
CAT# LRS-51 $1.00 each • 10 for 65¢ each

SLIDE SWITCHES

SPDT MINI SLIDE SWITCH
S.P.D.T. miniature slide switch. 10.0 x 5.5mm body. Rating: DC 50V, 0.5A. Mounting holes on 15mm centers. Solder-loop terminals.
CAT# SSW-86 4 for $1.00 100 for 20¢ each • 1000 for 12¢ each

MINIATURE SPDT SLIDE SWITCH
7.5mm x 15.5mm (0.21" x 0.62") body. 5mm high slider. 3.5mm travel. Mounting holes on 19mm centers. Solder loop terminals.
CAT # SSW-91 4 for $1.00 100 for 25¢ each • 1000 for 15¢ each

MINIATURE DPDT SLIDE SWITCH
DPDT miniature slide switch. 7.5mm x 15.5mm (0.21" x 0.62") body. 5mm high slider. Rating: DC 50V 0.5A, contact resistance 30m ohm Max. Mounting holes on 19mm (0.75") centers. Solder loop terminals.
CAT # SSW-92 4 for $1.20 100 for 25¢ each • 1000 for 15¢ each

MINIATURE SPDT SLIDE SWITCH
Body: 11 x 5 x 5mm (0.44" x 0.22" x 0.22"). Mounting flange length 19mm (0.75"). Holes on 15mm (0.61") centers. Solder-loop terminals.

TACTILE PUSH BUTTONS

TACTILE MOMENTARY PUSHBUTTONS
6MM SQUARE Off-(On) momentary pushbutton. Rated 50mA/ 12Vdc. 6 x 6 x 3mm body. PC leads on 4 x 6mm centers.
Overall Height CAT# Price 100
4mm TSW-64 5 for 75¢ $12.00
8mm TSW-68 5 for 85¢ $13.00
12mm TSW-612 5 for 85¢ $13.00
12MM SQUARE Off-(On) momentary pushbutton. Rated 50mA/ 12Vdc. 12 x 12 x 3mm body. PC leads on 4 x 12mm centers.
4mm TSW-124 5 for $1.00 $15.00
6mm TSW-126 4 for $1.00 $18.00
12mm TSW-1212 4 for $1.00 $18.00

TACTILE SWITCH
Alps #SKEYAB028A.
S.P.S.T., normally-open. “Soft-feeling” rubberized pushbutton for pc or breadboard mounting. 7.8 x 7.8 x 5mm. 1mm travel. Orange button on black base.
CAT# MPB-143 4 for $1.00 • 100 for $20.00

MINI-TACTILE PUSHBUTTON SWITCH, SURFACE MOUNT
S.P.S.T., normally-open mini-pushbutton. 6mm square body. Four surface mount leads on 4 x 8mm centers.
CAT# MPB-43 3 for 99¢ 100 for 29¢ each • 1000 for 23¢ each

LED LIGHTED TACTILE MOMENTARY PUSHBUTTONS
Good-looking 12mm square tactile pushbutton switch, S.P.S.T., normally-open. High-brightness LED in 7mm lens embedded in plunger. LED will operate on any voltage when used with appropriate resistor, and can be wired for always-on or operate when button is pushed. Ratings: 50 mA 12 Vdc. Available in red, green, blue and yellow.
CAT# LTSW-127R, G, B or Y $1.00 each • 10 for 85¢ each

TINY SURFACE-MOUNT TACTILE PUSHBUTTON
Alps #SKKEYAB028A. S.P.S.T., normally-open. “Soft-feeling” rubberized pushbutton for pc or breadboard mounting. 7.8 x 7.8 x 6.5mm. Positive, heavy-force tactile operation. Contact rating: 50 mA, 16Vdc. RoHS. Cut tape packaging.
CAT # MPB-150 2 for $1.00 10 for 40¢ each • 100 for 30¢ each

MOMENTARY PUSHBUTTON SWITCHES

MOMENTARY N.O. MINI-SWITCH
S.P.S.T. miniature momentary pushbutton switch. Push-on, release-off. Press-fit in 0.31" diameter chassis hole. 0.39" diameter black bezel. Green button extends 0.29" above mounting plane in off-position. Switch body is 0.31" dia. x 0.5" long (excluding pc pins) below mounting plane.
CAT# PB-159 35¢ ea. • 100 for 25¢ ea.

SPST MOMENTARY NORMALLY OPEN PUSHBUTTON W/ WIRE LEADS
1/4" bushing and red plastic button. Ideal for most low current projects. Prepped with 24" wire leads.
CAT # MPB-19 75¢ each • 100 for 60¢ each

SPDT MOMENTARY
C & K 8168. 1/4-40 UNS-2A threaded bushing. Also has metal mounting bracket. Black knob fits 0.122" diameter shaft. Rated: 0.4VA Max. 0.35" long PC leads.
CAT# MPB-178 $1.25 each 10 for $1.00 each

NEW ITEM
SPST MOMENTARY PUSHBUTTON
Switchcraft # 951X
Open-frame, single-pole, normally-open. 1/4-32 threaded bushing, 0.20" long, with nut and washer. Solder-loop terminals. Red 0.20" diameter push-button. Springs are silver-plated, copper alloy. Note: leads may be tarnished. CAT # PB-951 $1.50 each

SUB-MINI PUSHBUTTON, SPST NORMALLY-OPEN
Right angle sub-miniature S.P.S.T. momentary N.O. pushbutton switch. Epoxy sealed. 4.7mm non-threaded bushing. Black plunger. Rated: 0.4VA max. Gold-plated PC terminals plus stabilizing pin. CAT# MPB-237 75¢ each • 10 for 65¢ ea.

SPST MOMENTARY PUSHBUTTONS
1/4" bushings and plastic button. Ideal for most low current projects. Solder-loop terminals.

Normally open
Red button CAT# MPB-1
Black button CAT# MPB-1B
Blue button CAT# MPB-1BL
Green button CAT# MPB-1G
Yellow button CAT# MPB-1Y
White button CAT# MPB-1W
85¢ each • 100 for 65¢ each

Normally closed
Red button CAT# MPB-5R
Black button CAT# MPB-5
60¢ each • 100 for 45¢ each

MOMENTARY PUSHBUTTONS
Rated 5A/120Vac, 2A/250Vac. Removable 10mm diameter red plastic cap. 6mm threaded bushing mounting. Includes nuts and washers. Solder terminals. UL.

S.P.D.T. CAT# MPB-174 $2.70 each
D.P.D.T. CAT# MPB-175 $3.00 each

N.O. MOMENTARY
S.P.S.T. normally-open, momentary pushbutton switch. Heavy-duty metal plunger, suitable for foot switch applications. 15/32" threaded bushing mounts in panels up to 0.1" thick. Solder-loop terminals.

4 A / 125 Vac CAT# PB-142 $3.20 each
10 A / 125 Vac CAT# PB-147 $4.00 each

MOMENTARY PUSHBUTTONS
(On)-(On), heavy-duty pushbutton with metal plunger and mounting bushing. Ideal for foot-switch or hard physical use. 15/32" threaded bushing for panels up to 0.5" thick. 0.4" diameter plunger. Solder terminals. Rated 2A 250Vac.

SPDT CAT# PB-174 $4.00 each
DPDT CAT# PB-176 $4.80 each
3PDT CAT# PB-237 $3.25 each

LARGE, SURFACE-MOUNT PUSHBUTTON
S.P.S.T., normally-open, momentary pushbutton switch. 1.6" diameter metal body with mounting flanges, holes on 2.25" centers. Originally for automotive horn application. 0.84" dia. black push-button, 0.95" overall height. CAT# PB-156 $1.75 each

LARGE MOMENTARY PUSHBUTTON SWITCH
Black plastic. Fairly rugged S.P.S.T., normally-open switch. 19.5mm dia. plunger in a 29mm dia. x 20mm high case. Mounting holes on 50mm centers. 0.187"gc/ solder terminals. Can be surface mounted or mounted from behind panel through 29.5mm diameter hole. Note: terminals are tarnished but functional. CAT# PB-225 $1.15 each 10 for $1.00 each • 100 for 75¢ each

METAL PUSHBUTTONS, N.O. MOMENTARY
Heavy-duty metal pushbutton switches. IP65 rated, dust and water resistant.

• Single pole, normally-open, momentary
• Bezel: 22mm (0.86") diameter
• Threaded bushing: M10 thread (0.39") dia.
• Silver contacts rated 4A @ 125V
• Screw-clamp terminals

PLUNGER FLUSH WITH CURVED BEZEL
CAT# PB-243 $5.25 each

PLUNGER FLUSH WITH FLAT BEZEL
CAT# PB-144 $5.25 each

PLUNGER RAISED 0.1", CURVED BEZEL
CAT# PB-244 $5.75 each

WEATHER-PROOF METAL PUSHBUTTON SWITCH
Single-pole, push-to-make momentary pushbutton switch. IP66, waterproof, dustproof protection. Metal parts are nickel-plated. Push-button is recessed inside of 0.85" dia. bezel. Threaded bushing is 0.74" dia. x 0.73" long. 1.33" overall length including terminals. Screw-clamp terminals. CAT# PB-172 $7.50 each

MOMENTARY LIGHTED PUSHBUTTON SWITCHES
Momentary-action, S.P.D.T lighted pushbutton switch for displays and games. 1" round polycarbonate lens. Rated 5 Amps @ 125/250 Vac. The assembly is lighted with a replaceable 12 Volt, 3 Watt, #161 wedge-base lamp. Matte black plastic 1.30" dia. x 0.37" high bezel. 0.93" dia. threaded bushing with a plastic nut mounts in panels up to 0.70" thick. Lens colors: red (R), green (G), blue (B), yellow (Y), white (W).

CAT# LPS-1(R, G, B, Y, W) $3.75 each • 10 for $3.45 each

30 DAY MONEY-BACK GUARANTEE
12V LIGHTED PUSHBUTTON, 2" LENS
Momentary-action, S.P.D.T. lighted pushbutton switch for displays and games. 2" round polycarbonate lens. Rated 5 Amps @ 125/250 Vac. The assembly is lighted with a replaceable 12 Volt, 3 Watt, #161 wedge-base lamp. Matte black plastic 2.38" diameter x 0.40" high bezel. 0.93" diameter threaded bushing with a plastic nut mounts in panels up to 0.70" thick. Lens colors: Red (R), Blue (B), Green (G), Yellow (Y), and White (W). CAT# LPS-3(R, B, G, Y, W) $4.75 each • 10 for $4.35 each

GIANT PUSH-BUTTON SWITCHES WITH 12VDC LIGHT
High-visibility red or green domed pushbutton switches with replaceable 12Vdc wedge-base led lamp. Ideal for games and displays, the momentary SPDT snap-action switch provides a "snappy" tactile action with an audible click. Rated 5 Amps @ 125/250Vac. Dimensions:
• Dome (plunger): 3.07" (78mm) diameter
• Black bezel: 3.8" (96mm) diameter
• Required recessed mounting hole 3.40" (86mm) diameter x 0.40" (10mm) depth.
• Maximum panel thickness 1.25" (32mm).
• Threaded bushing 0.92" (24mm) diameter.
Red BUTTON CAT # LPS-100R $11.00 each
Green BUTTON CAT # LPS-100G $11.00 each

SPST MOMENTARY PUSHBUTTON
S.P.S.T., normally-open, momentary pushbutton switch rated 3A / 125V. 10mm dia. red button. 14.5mm dia. x 7mm high black bezel. Threaded bushing mounts in 10mm dia. hole. Solder terminals.
Red BUTTON CAT# PB-179 $1.00 each
10 for 90¢ each • 100 for 78¢ each

PUSHBUTTON WITH METAL BEZEL
S.P.T momentary pushbutton. 0.51" dia. plunger, 0.74" dia. metal bezel. 0.62" dia. threaded bushing mounts in panels up to 0.15" thick. Solder lug terminals. 4A 125 Vac.

NORMALLY-OPEN

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NORMALLY-CLOSED

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SPECIAL - NORMALLY CLOSED MOMENTARY PUSHBUTTON, RED
S.P.S.T. 0.51" diameter red plunger, 0.74" diameter metal bezel. 0.62" diameter threaded bushing mounts in panels up to 0.15" thick. Solder lug terminals. 3A 125V.

Good switch for prototypes and projects. Not recommended for frequent use.
CAT# PB-199 85¢ each • 20 for 75¢ each

SPST N.O. PUSHBUTTON
Single-pole, normally-open momentary switch. Attractive and functional dome-shaped pushbutton. 0.70" dia. black plastic bezel. 0.45" button. Extends 0.3" above mounting plane. Threaded bushing mounts in 0.53" diameter hole. Solder terminals.

Red BUTTON CAT# PB-138
Black BUTTON CAT# PB-139
Green BUTTON CAT# PB-172G
Blue BUTTON CAT# PB-172B
Yellow BUTTON CAT# PB-172Y
$1.50 each • 100 for $1.20 each

LIGHTED DOORBELL SWITCH
Broan # RC819. SPST, normally-open, surface-mount pushbutton switch. 2.7" x 1.0" x 0.75" high shiny brass/gold-colored plastic base with white pushbutton. Push-button is lighted when 10-16V is present. Screw terminals. Includes mounting screws.
CAT# PB-234 95¢ each • 10 for 85¢ each

BLACK RUBBER BOOT/CAP
Fits snugly over 13mm diameter knurled nut on Judco pushbutton switches. Prevents dust and moisture contamination. Fits CAT# PB-13

CAT# WPC-3 65¢ each • 100 for 53¢ each

PUSH-ON PUSH-OFF SWITCHES

PUSHBUTTON SWITCH
Judco model# J-188A-1. SPST, push-on push-off, plastic pushbutton. Contacts rated 6 amps @ 125 Vac. Black body, actuator and panel nut. 3/8-27 threaded bushing. 4 1/2" stranded wire pigtails. UL listed. For moisture-resistant cap/nut see CAT# WPC-3.

CAT# PB-13 $1.85 ea. • 100 for $1.50 ea.

MINI SPDT
Rated 2A/ 250Vac. 6mm threaded bushing. 10mm diameter red plastic cap. Solder-lug terminals.

CAT# MPB-176 $2.85 each

S.P.S.T. ON/OFF
Rated 3A/ 125V. 10mm diameter red button. 14.5mm dia. x 7mm high black bezel. Threaded bushing mounts in 10mm diameter hole. Solder terminals.

CAT# PB-177 $1.35 each
10 for $1.20 each • 100 for $1.05 each
SPST PUSH-ON / PUSH-OFF
Judco #J-977 Mini Flat Pac. Two terminal, push-on/push-off switch. Rated 300mA/12Vdc, 0.472" square x 0.268" thick (0.366" with pushbutton). PC leads on 0.276" centers.
CAT# PB-193 $1.50 ea. • 10 for $1.35 ea.

ROTARY SWITCHES

ENCLOSED BODY
6mm diameter flatted shaft. 9mm threaded bushing. 10Amp/125VAC, 6Amp/250V T85. Plastic body, shaft and bushing. Body, 28.5mm diameter x 11.5mm. Solder-lug terminals.
1-POLE, 2-POSITION
CAT# RSW-210 $1.65 each
1-POLE, 3-POSITION
CAT# RSW-310 $1.70 each
1-POLE, 4-POSITION
CAT# RSW-410 $1.80 each
1-POLE, 6-POSITION
CAT# RSW-610 $1.95 each

WAFFER STYLE
6mm diameter knurled, split shaft. 9mm threaded bushing. 0.5A/125Vac. 2-POLE, 6-POSITION Solder-lug terminals.
CAT# RSW-260 $1.90 each
1-POLE, 11-POSITION PC pin terminals. Can be wrapped and soldered.
CAT# RSW-39 $1.45 each
1-POLE, 12-POSITION Solder-lug terminals.
CAT# RSW-112 $2.00 each

ALARM SWITCHES

SPDT
Can be used on normally open or normally closed loop systems. Switch measures 2" long x 3/8".
CAT# MS-7 $6.50 each
10 for $6.00 each

PRESS-FIT MAGNET SWITCH
Press-fit into 3/8" hole. Ideal for windows and doors. For normally closed systems. 0.75" operating gap. UL listed.
CAT# MS-11 $3.50 per set
10 sets for $32.50

MAGNETIC PROXIMITY SWITCH
Two-piece, alarm-type magnetic reed switch. For closed-loop alarm systems - Circuit is closed when magnet and switch are in proximity to each other. Both parts are 1.00" x 0.53" x 0.35". Mount with peel-off adhesive tape (already attached), via two screw holes. 12" pigtail leads on switch.
CAT# MS-44 $2.25 each
10 for $2.00 each

REED SWITCHES
Magnetically-operated reed switches. Hermetically-sealed glass body.
NORMALLY-OPEN
Coto RI-01C. Body: 1.8mm dia. x 13.5mm long
CAT# RSW-41 $1.25 95¢ each
10 for 85¢ each • 100 for 70¢ each
ORD2201
1 Amp rating. 2.75mm dia. x 21.0 long
CAT# RSW-43 2 for $1.50

S.P.D.T.
Hamlin. Body: 4.7mm diameter x 33mm long.
CAT# RSW-40 $1.50 ea. • 10 for $1.25 ea.

BATTERY DISCONNECT SWIT

FOOT SWITCH
Spring-return metal foot switch for 120Vac devices. Momentary-on action, on when pressed; off when released. Ideal for rotary tool, scroll saw, devices using 200W or less. 6' cords for power input and output. 5" x 3" x 2 1/4".
CAT# FSW-15 $23.50 each

KEYPADS

4 X 4 MATRIX MEMBRANE KEYPAD
Digits 0 through 9, letters A, B, C, D and symbols *, #. 3.0" x 2.7". Snap-action feel to switches. Peel-off adhesive backing and stick onto smooth, clean surface. 3.2" ribbon connector, terminated with 8-pin socket connector, 0.1" spacing.
CAT# ME-44 $3.55 each

3 X 4 MATRIX MEMBRANE KEYPAD
Digits 0 through 9 and * and # symbols. 3.0" x 2.7". Snap-action feel to switches. Peel-off adhesive backing and stick onto smooth, clean surface. 3.2" ribbon connector, terminated with 7-pin socket connector, 0.1" spacing.
CAT# ME-43 $3.45 each

ORDER TOLL FREE 1-800-826-5432
27
## RELAYS

### AUTOMOTIVE / POWER RELAYS

#### SPDT 40 AMP AUTO RELAY
12 Vdc, 88 Ohm coil. Contacts rated 40A. Plastic enclosed relay, 1.1” x 1.2” x 1” high. Plastic flange for bulkhead mounting. Mounts in standard automotive relay socket.
CAT# RLY-351 $2.55 each
10 for $22.50

#### 12VDC 25A DPDT N.O. POWER RELAY
Coil current: 158ma. Coil resistance: 75Ω. 1.98” x 1.30” x 1.42” high not including flanges. Mounting holes w/ 2.35” centers. 0.25” solder/QC terminals. UL, CSA.
CAT# RLY-1241 $5.95 each
10 for $5.50 each

#### 12VDC SPST N.O. 16A RELAY
American Zettler AZ948-1AET-12DE 12Vdc, 720 Ohm coil. SPST, normally-open contacts rated 16A 125Vac. Miniature, epoxy sealed PBT polyester enclosure, 22 x 16 x 10.5mm high. PC leads. UL.
CAT# RLY-655 75¢ each • 25 for 55¢ each

#### 12VDC SPDT 20/10A PC MOUNT RELAY
CAT# RLY-658 $2.00 ea. • 10 for $1.75 ea.

#### 12 VDC SPDT 40A RELAY, PC MOUNT
Song Chuan 822U-1C-S 12VDC. 12 vdc 90 Ω coil. Contact ratings: N.O. 40 amp 14vdc, N.C. 20A/14 Vdc. Sealed type washable. 26.6mm x 21.4mm x 21.8mm high. PC pins.
CAT# RLY-658 $2.00 ea. • 10 for $1.75 ea.

#### 24 VDC SPDT 10 AMP
Omron# GSLE-14-DC24 High-capacity subminiature "sugar cube" relay with universal footprint. 24Vdc, 1.440Ω coil. SPDT contacts rated 10A. 22.5 x 16.5 x 19.0mm sealed case. PC leads. UL, CSA.
CAT# RLY-579 50¢ each • 10 for 45¢ each

#### 24VDC DPDT 25A RELAY
Tyco Electronics PRD-11DYO-24 Potter & Brumfield. 24 Vdc, 288 Ohm coil. Contacts rated 25A, 240 Vac. 3.375” x 2.51” x 2.50” high. Screw terminals. CSA, UL. 1HP, 2HP, 250 Vac, 1 PH. 25A, 240 Vac. 20A, 277 Vac.
CAT# RLY-2425 $7.95 each

### 14-PIN 4PDT RELAY

#### 12VDC 4PDT 3A "ICE CUBE" RELAY
MY4N. 12VDC, 1300Ω coil. 4PDT contacts rated 3A. Clear polycarbonate case, 26.5 x 20.5 x 34.5mm high. Solder or socket mount. For sockets see page 30.

#### 8-PIN DPDT RELAYS

Rated 10A or more. Clear polycarbonate dust cover. 1.1” x 0.83” x 1.37” high. 0.187” solder/ qc terminals or socket mount. For sockets, see page 31

#### 12 VDC 10A
LY2N. 135 Ohm coil.
CAT# RLY-2212 $2.85 each

#### 24 VDC 10A
650 Ohm coil Sky #SKNP-2C
CAT# RLY-556 $2.75 each
100 for $2.50 each

#### 120 VAC 10A
Solder/socket mount
CAT# 2PRLY-120 $11.00 • $8.75 each
10 for $8.50 each

#### 120 VAC 10A
NTE# R14-11A10-120P. PC mount.
CAT# 2PRLY-120P $10.65 each

### RELAY MODULES

Similar in function to solid-state relays, allowing use of data signals to switch mechanical relays. Rated for 10A loads. Onboard LED indicators light when a relay is switched. Screw terminals for relay outputs. 0.1” header for voltage and signal input. Ideal for Arduino and microcontroller applications.

#### 1-Channel
CAT# RLM-1 $3.50 each

#### 2-Channel
CAT# RLM-2 $4.75 each

#### 4-Channel
CAT# RLM-4 $8.00 each

Can be triggered by high or low signal by changing jumper position.

#### 1-Channel
CAT# RLM-21 $4.00 each
TIME DELAY RELAY MODULE
Time delay relay module can switch loads up to 10A @ 30Vdc with adjustable time delay of 0-25 seconds via multi-turn trim-potentiometer. Can be wired for on-delay or off-delay, 5Vdc input via solder terminals or micro-USB port. Momentary push-button activation. LED indicator is on during delay interval.
CAT# TDRLY-5 $5.75 each
5 for $5.25 each

NEW ITEM

DIP RELAYS
Miniature mechanical relays with pin configurations to fit standard DIP socket configurations (0.1” x 0.3”) grid. Some are sealed for PC bath with vents that should be clipped after installation.

3 VDC DPDT DIP RELAY
3 vdc 450 coil. DPDT contacts rated 2 amps. Small sealed case, 0.8” x 0.38” x 0.4” h. UL, CSA.
CAT# RLY-623 $2.00 each
10 for $1.85 each

5 VDC DPDT DIP RELAY
HUI Ki # HK 19F-DC 5V-SHG
5 Vdc 128Ω coil. D.P.D.T. contacts rated 1A 125Vac / 2A 30Vdc. 20 x 9.5 x 11.5mm high sealed case. cULus.
CAT# RLY-625 $2.00 each
10 for $1.85 each

5 VDC DIP REED RELAY
Meder# DIP5-1A57.
5 Vdc, 350 Ohm coil. S.P.S.T., normally-open contacts.
CAT# RLY-495 60¢ each
10 for 55¢ each • 100 for 45¢ each

12 VDC DPDT DIP RELAY
12 vdc 740Ω coil. DPDT contacts rated 2 amps. Small sealed case, 0.80” x 0.38” x 0.40” high. cULus.
CAT# RLY-622 $2.00 each
10 for $1.85 each

MISCELLANEOUS PC MOUNT RELAYS

4.5 VDC DPDT SURFACE-MOUNT RELAY
NAI #TX2SA-LT-4.5V
Low-profile. DPDT contacts rated 2A @ 30Vdc. 145 Ohm coil, polarized. 140mW operating power. 14 x 9 x 6mm. Surface-mount contacts on 9.5mm centers. UL, CSA.
CAT# RLY-561 $1.00 each
10 for 75¢ each

4.5 VDC DPDT LATCHING RELAY, SURFACE-MOUNT
NAI #TX2SA-LLT-4.5V
Miniature 2-coil latching relay. 4.5Vdc, 101.2 Ohm coils. D.P.D.T. contacts rated 2A @ 30Vdc. Sealed case, 15 x 7.4 x 8.2mm. Surface mount. UL, CSA.
CAT# RLY-715 $1.10 each

ULTRA-SMALL 5 VDC DPDT RELAY
Omron G6K-2P-5VDC
5.2 x 6.5 x 10mm ultra-small pc mount relay. 5Vdc, 237 Ohm coil. DPDT contacts rated 1A/30Vdc. UL, CSA.
CAT# RLY-620 $2.25 each

5 VDC SPDT SIP REED RELAY
Elec-Trol # BBS1C05A10
5 Vdc, 205Ω coil. S.P.D.T. switching action. 0.99” x 0.30” x 0.35” high. Single-in-line pc pins. 5 pin on 0.2” centers.
CAT# RLY-496 $1.00 ea. • 10 for 85¢ ea.

5 VDC S.P.S.T. REED RELAY
Hasco 711-5S.
5 Vdc S.P.S.T. N.O. reed relay. 500 Ohm coil. Contact ratings: 1.0A max. (carry), 0.3A max. (switching). Metal cover, 0.98” x 0.29” x 0.37” high. S.I.P. pc leads. UL, CSA.
CAT# RLY-572 65¢ each
10 for 60¢ each • 100 for 50¢ each

5 VDC DPDT 2A MINI-RELAY
Midtex # MMS-105
5vdc, 75 Ohm coil. SPDT 2 Amp contacts. 10 x 10 x 11mm. PC leads. CAT# RLY-567 70¢ each
10 for 60¢ each • 100 for 45¢ each

5VDC SPDT 2A MINI-RELAY
Midtex # MMS-205. Miniature epoxy sealed pc mount relay, 10.4mm (0.4”) cube. 5Vdc, 750Ω coil. 2A contacts. cULus.
CAT# RLY-587 $1.00 each
12 VDC 3A SPDT RELAY
N4100F-2CS3DC12A.
12 Vdc. 3A / 125 Vac. 400 ohm coil. 15.5 x 11 x 15.5mm. Sealed case. PC leads. cULus.
CAT# RLY-585 $0.60 each
10 for 55¢ each

12 VDC SPD RELAY
Hasco# SSD 103PU DC12V
Miniature sealed relay. 12Vdc, 320Ω coil. S.P.D.T., 3A contacts. 0.90” x 0.70” x 0.55” high. PC leads. UL.
CAT# RLY-498 2 for $1.00

12 VDC SPST N.O. PC RELAY
MSD Inc MagneCraft 276AXX-12D
12 Vdc S.P.S.T., normally-open, pc mount relay. 720 Ohm coil. Contacts rated 10A @ 120/250Vac 30Vdc. 20 x 13 x 10mm (0.78” x 0.50” x 0.38”). PC leads. UL, CSA.
CAT# RLY-557 65¢ each • 100 for 40¢ each

ORDER TOLL FREE 1-800-826-5432 29
12 VDC SPDT RELAY, 10A
American Zettler AZ943-1CH-12DE
Miniature PC board relay with SPDT contacts rated 10A @ 277 Vac. 400 Ohm coil. Epoxy sealed PBT polyester enclosure. 19 x 15 x 15mm. PC terminals. UL, TUV.
CAT# RLY-652 65¢ each
20 for 60¢ each • 100 for 50¢ each

MICROMINIATURE 12 VDC SPDT RELAY
Fujitsu #FB21D12
Subminiature PC mount relay, 7.5 x 10 x 10mm high. 12Vdc 534 Ohm coil. SPDT contacts rated 1A @ 24Vdc, 0.5A @120VAC. Maximum carry current, 2A. Note: PC leads are not as stiff as those on other relays. Not suitable for automatic insertion.
CAT# RLY-616 2 for $1.00 • 100 for $35.00

24 VDC SPST N.O. MINI-RELAY
Zettler # AZ695-24.
24VDC, S.P.S.T., normally-open contacts. Sensitive sub-miniature relay. 2880 Ohm coil. Contacts rated 5 Amps @ 30Vdc or 250Vac. 17.0 x 6.5 x 12.5mm high. PC pins. UL.
CAT# RLY-535 2 for $1.00 • 100 for 35¢ ea.

RELAY SOCKETS

KH RELAY SOCKETS

 Fits all KH & KHU style, 14 pin relays except PC mount style.

SOLDER-LOOP TERMINALS
Note: Terminals and contacts may be discolored.
CAT# PRLY-S 2 for $1.00
100 for 40¢ each • 800 for 25¢ each

SCREW TERMINALS
Omron PYF14A-E
Can be surface mounted or snap-mounted to aluminum DIN rail. UL, CSA, CE, TUV. Removed from new equipment in excellent condition.
CAT# RST-422U $3.85 each

PC PINS
CAT# PRLY-SC
75¢ each

8 PIN DPDT RELAY SOCKETS

For 8-pin, DPDT relays with rectangular base. Fits our CAT#s RLY-556, RLY-2212 and 2PRLY-120. UL, CSA.

SOLDER TERMINALS
CAT# RST-2SL
$1.35 each

SCREW TERMINALS
Bulkhead, surface mount. 2.6" x 0.87" x 1" high.
CAT# RST-2 $6.45 each

8 PIN OCTAL SOCKETS

PC mount socket for round base 8 pin relays and vacuum tubes.
CAT# OCT-PC $1.60 each
10 for $1.40 each

Screw terminals for easy connections and changes. Can be surface mounted or used with aluminum DIN rail. UL listed.
CAT# OT08-PC $3.50 each
10 for $3.00 each

AUTO RELAY SOCKETS

Pre-wired sockets for use in car alarms, door-locks, starter-interrupt, light circuits and other auto applications. Color-coded leads. Will fit our relay, CAT# RLY-351.

5 WIRE SOCKET
with two 18 AWG leads and three 14 AWG leads. Sockets can be interlocked side-to-side.
CAT# SRLY-2 $2.25 each • 10 for $ 17.50

4 WIRE SOCKET
For S.P.S.T., normally-closed applications in which relay contacts open when coil is energized. 12" leads, AWG 14 to contacts, AWG 20 to coil.
CAT# SRLY-35 $1.85 ea. • 10 for $1.70 ea.

DUAL RELAY SOCKET
Dual 5 wire sockets designed for door-lock applications.
CAT# SRLY-4 $ 3.25 each
10 for $ 27.50

ALUMINUM DIN RAIL

An easy way to attach multiple relay sockets. Sockets snap-on and off of rail. DIN rails come in 1 meter (39") lengths. Can be cut shorter.
CAT# C102P $ 3.25 each
10 for $ 27.50

MINI 12V PUSH-TYPE SOLENOID

Ledex™. 0.5" diameter x 1" long tubular solenoid with 3/8" dia. threaded bushing for mounting. 1/16" dia. x 1/2" long plunger. 40Ω coil. Operates on 12 Vdc. 1" wire leads.
CAT# SOL-102 $2.75 ea. • 10 for $2.50 ea.

12 VDC 100 MA SOLENOID VALVE

Open when activated. Body: 24mm dia. x 31mm long. 62mm overall length, including inlet and outlet ports and terminals. 0.19" dia. ports. Used, removed from equipment.
CAT# SOL-132 $2.50 each
MODULAR PHONE CONNECTORS

RJ-11 KEYSSTONE JACK
6-conductor jack for RJ-11 mod phone plugs. Use with Keystone wall plates.
CAT# KSF-1, 2, 3 or 4 (available online). White.
CAT# KSJ-7 $1.50 each

MODULAR LINE CORDS

4 WIRE - MOD PLUGS BOTH ENDS (RJ-11)
Cross wired for telephone-voice applications.

<table>
<thead>
<tr>
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<th>10+</th>
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<td>15 Feet</td>
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<td>25 Feet</td>
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6 WIRE - MOD PLUGS BOTH ENDS
Straight-wired for data applications.

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12' COILED HANDSET CORD, RJ22(4P4C) BLACK
12' coiled RJ22 (4P4C) handset cord, black.
For standard home telephone handsets.
RJ22 connectors (4P4C).
25" coiled length.
CAT# MCT-12BK $2.95 each

NETWORKING PRODUCTS

CRIMP-ON MODULAR PLUGS
For use with flat telephone wire. 8 pin plugs are for flat cable or CAT5/5E round cable.

6 PIN (6 x 6) RJ-12 MODULAR PLUGS
CAT # CMP-6 10 for $3.00
50 for $12.50 • 100 for $20.00

8 PIN RJ-45 MODULAR PLUGS
CAT # CMP-8 10 for $3.50
50 for $15.00 • 100 for $22.50

CAT-5E/6 ACCESSORIES

RJ-45 DATA COUPLER
Connects two CAT-5/6 cables. Straight-through connection.
CAT# MT-88 $2.50 each

25FT CATEGORY 5E PATCH CABLE
Snagless molded RJ45, 350Mhz, UTP, Pure Bare Copper stranded 24AWG, Blue.
CAT# CB-525 $5.85 each • 10 for $5.60 each

CATEGORY 6 CABLES
Standard, straight-through Ethernet patch cables. 4-pair, stranded copper terminated w/ 8-contact RJ45 modular plugs. Suitable for 350MHz high-speed data applications. All cables are CAT-6, UL, ETL.

<table>
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<tr>
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<tr>
<td>100'</td>
<td>CB-600</td>
<td>19.55</td>
<td>18.00</td>
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</tbody>
</table>

RJ-45 KEYSTONE JACKS
8-conductor jack for KSF-1,2,3,4 mounting plates (available online). Can be used with CAT5E or CAT6 cable.

CAT5E JACK
CAT# KSJ-5 $1.50 each

CAT6 JACK
CAT# KSJ-6 $1.50 each

CAT 5E INLINE COUPLER W/ KEYSTONE LATCH WHITE
One RJ45 female to one RJ45 female connector.
CAT# KSJ-1 $3.45 each

CAT-5E SURFACE-MOUNT JACK
UL certified surface mount RJ45 jack for CAT5E cables. Hardware included.
CAT# MT-80 $3.85 each
10 for $3.50 each

GEARS & ROTATING PARTS

92 PIECE ASSORTMENT OF GEARS, PULLEYS, AXLES
Large set of 92 various sized plastic gears, racks, wheel set, pulleys, belts and axles.
CAT# GR-53 $9.45 set

4 GEAR SET
Four matched unbreakable plastic gears. The three larger gears are beveled on one side and can mesh at 90° as well as the normal 180° angle. They have 5mm bores. Inserts are supplied to reduce the bore size to 3mm. The smallest gear has a 2mm bore. Gears are 41, 31, 21 and 13mm.
CAT# GR-86 $2.25 each

SHOP ON-LINE WWW.ALL-ELECTRONICS.COM
DC MOTORS

### 2-8 VDC MINI-MOTOR
- **Mabuchi #** FF-030PA 08250
- **Body:** 15.5 x 12 x 20mm long
- **Shaft:** 1.5mm diameter x 6mm
- **Two mounting holes, 10mm centers, M2.0 x 0.4**
- **No-load rating: 10,500RPM @ 6Vdc, 41ma**
- **Solder terminals**

**CAT #** DCM-433 70¢ ea. • 100 for 50¢ ea.

### 6 VDC MOTOR
- **Nissei Denki motor**
- **20.0mm dia. x 29.4mm**
- **Shaft, 10mm long x 1.5mm dia.**
- **No-load specs: 12,000 RPM @ 6Vdc, 40mA**
- **Operates on 1-8 Vdc range**
- **Two tapped mounting holes on 12mm centers**
- **Solder-lug terminals.**

**CAT #** DCM-410 $1.25 • $1.00 each

### 6 VDC 13,000 RPM MOTOR
- **Relatively powerful little motor**
- **13,000 RPM @ 6Vdc / 250 Ma**
- **1.08” diameter x 1.83”**
- **2mm diameter shaft with 9mm gear.**
- **18 AWG leads, red/black**

**CAT#** DCM-485 $1.50 • $1.25 each

### 6 VDC MINI-MOTOR
- **Mabuchi #** RF-130CH 12250
- **Body:** 17mm diameter x 22.5mm L including shaft
- **Rubber casing is 5 x 6.5 x 11mm**
- **Gold contacts**

**CAT #** DCM-371 $1.25 each

### 6 VDC 13,000 RPM MINI-MOTOR
- **Mabuchi #** FF-080PA 08250
- **Push wire into slots to make connection.**
- **Body:** 24.2 x 18.3 x 30.5mm
- **Splined shaft:**
- **2mm diameter x 9mm**
- **No-load rating: 11,800 RPM @ 12Vdc, 0.56A**

**CAT #** DCM-374 $1.25 • $1.00 each

### 12 VDC VIBRATING MOTOR
- **Powerful, smooth-running vibrating motor with offset weight**
- **Nichihōbō LD5B-12160E-R-CE**
- **12 Vdc @ 350ma/24Vdc @ 800mA**
- **Body:** 27.5mm dia. x 38mm long
- **Weight: 14mm dia. x 12mm long**
- **Solder-loop terminals**

**CAT #** DCM-494 $1.50 • $1.15 each

### 8 - 16 VDC MOTOR
- **Mabuchi #** FC-280PT-20150
- **Push wire into slots to make connection.**
- **Body:** 24.2 x 18.3 x 30.5mm
- **Splined shaft:**
- **2mm diameter x 9mm**
- **No-load rating: 11,800 RPM @ 12Vdc, 0.56A**

**CAT #** DCM-374 $1.25 • $1.00 each

### 2-8 VDC VIBRATING MOTOR
- **Powerful, smooth-running vibrating motor with offset weight**
- **Nichihōbō LD5B-12160E-R-CE**
- **12 Vdc @ 350ma/24Vdc @ 800mA**
- **Body:** 27.5mm dia. x 38mm long
- **Weight: 14mm dia. x 12mm long**
- **Solder-loop terminals**

**CAT #** DCM-494 $1.50 • $1.15 each

### 3 VDC DUAL SHAFT MOTOR
- **3 VDC, 0.35A**
- **Rotation speed: 15,000RPM**
- **Dimensions: 25 x 20 x 15mm**
- **Shaft: 2mm diameter x 6mm**
- **Solder tabs**

**CAT #** DCM-495 $1.25 each

### 1.5-6 VDC MOTOR
- **Ideal for battery-operated projects**
- **27 x 20 x 15mm**
- **2mm diameter shaft**
- **Solder-loop terminals**

**CAT #** DCM-496 95¢ each

### 1.5-4.5 VDC MINI-MOTOR, VIBRATOR
- **Tiny motor with offset weighted shaft. Vibrator in mobile communications devices. Rubber case surrounds motor, easily removable.**
- **Operates on 1.5-4.5 Vdc**
- **4mm D x 15mm L including shaft**
- **Rubber casing is 5 x 6.5 x 11mm**
- **Gold contacts**

**CAT #** DCM-371 $1.25 each

### 1.5 - 4.5 VDC VIBRATING MOTOR
- **Vibrating motor with offset weighted shaft. Fairly vigorous vibration at 3Vdc, 150mA. A nice low-voltage motor with or without weight. Weight is press-fit and easily removable.**
- **Operating voltage: 1.5-4.5Vdc**
- **Dimensions: 0.9” dia. x 1.05”**
- **2mm diameter shaft**
- **Half-moon weight: 0.81” dia. x 0.22”**
- **Solder loop terminals**

**CAT #** DCM-478 $1.00 each

### 6-12 VDC JOHN SON MOTOR
- **Johnson Motor HC613LG-6411**
- **1.5A @ 12Vdc, no load rating**
- **Operates as low as 2Vdc.**
- **37mm diameter x 57mm long.**
- **3mm diameter shaft**
- **Solder-lug terminals**

**CAT #** DCM-462 $1.75 each

### 2-8 VDC MINI-MOTOR
- **Mabuchi #** FF-030PA 08250
- **Body:** 15.5 x 12 x 20mm long
- **Shaft: 1.5mm diameter x 6mm**
- **Two mounting holes, 10mm centers, M2.0 x 0.4**
- **No-load rating: 10,500RPM @ 6Vdc, 41ma**
- **Solder terminals**

**CAT #** DCM-433 70¢ ea. • 100 for 50¢ ea.
**6-24 VDC MOTOR**
- Mabuchi # FK-130SH
- Body: 25.1 long x 15.4 x 20.4mm
- Shaft: 2mm diameter x 8mm
- No-load ratings: 7200 RPM @ 12Vdc @ 0.30A
- Solder-loop terminals

**CAT# DCM-476** $1.20 each
50 for $1.05 each • 600 for 90¢ each

**24 VDC MOTOR**
- Operates on 18-30 Vdc
- 24 Vdc, 0.2A no-load rating
- Body: 36mm diameter x 57mm
- Shaft: 3mm diameter x 20mm
- Solder/qc terminals

**CAT# DCM-461** $1.25 each
10 for $1.00 each

**16MM PRECISION DC MOTOR**
Namiki #SCL-16-3424.
Precision DC coreless motor.
The low inertia coil provides quick response, quiet operation, and no cogging.
- 16mm diameter x 34mm long
- 1.5mm dual shaft
- No-load: 9000 RPM @ 18V @11mA
- Power maximum: 3.7W (0.005 hp)
- Power minimum: 2.9W (0.004 hp)

**CAT# DCM-3424** $9.00 each

---

**DC GEAR MOTORS**

**MINI 3-12VDC GEAR MOTOR**
Mini DC gear motor. Light weight, high torque and low RPM. Metal gears.
- Model: GA12-N20
- 100RPM @ 6VDC, 0.07A
- Load Speed: 80RPM
- Reduction Ratio: 1:10
- Motor and Gearbox: 24 x 12 x 10mm
- Shaft: 3 x 10mm(D x L)
- Rated Torque: 2 kg.cm
- Stall Torque: 16 kg.cm
- Stall Current: 1A
- Net Weight: 10g

**CAT# DCM-497** $5.00 each

---

**SMALL DC GEAR MOTOR, 3V 20 RPM**
- Mini DC motor w/ plastic/nylon gear assembly.
- 20 RPM @ 3Vdc, no load
- Plastic gear housing, nylon gears
- Body: 42mm x 42mm x 17mm
- 2mm shaft with square plastic extension
- Overall shaft dimensions: 36mm L x 5mm diameter

**CAT# DCM-542** $3.00 • $2.75 each

---

**3.7 VDC MOTOR WITH PROPELLER**
- Tiny motor and gear-driven propeller for model airplanes or propeller driven cars
- Overall propeller length, 75mm
- Motor, 7mm diameter x 26mm long
- Approximately 5g

**CAT# DCM-498** $4.75 each

---

**6 VDC, 25 RPM GEAR MOTOR**
Gear head motor with an arm that rotates an offset axle in a 1” circle.
Includes a slotted link rod that can be used to facilitate reciprocating action.
- Motor dimensions: 1.45”D x 3.00”L
- No-load specs: 25RPM @ 6Vdc, 150mA
- Offset axle rotates in a 1” circle
- Includes a metal mounting bracket and slotted link rod
- Prepped w/ wire leads

**CAT# DCM-470** $4.25 each
10 for $4.00 each • 100 for $3.75 each

---

**6-24 VDC GEAR MOTOR, 1:84 RATIO**
- Hennkwell# PZ22GR9120R-084BBH
- 22mm dia. planetary gear brush motor
- Smooth, quiet operation.
- Wide operating range, 6-24Vdc.
- Dual ball bearings.
- Rated 142RPM @ 24Vdc, no-load.
- 113 RPM with load.
- 6mm diameter x 14mm shaft with hole.
- 2mm diameter shaft at rear of motor.
- Overall length of motor and gearbox, 60mm.
- Solder lug terminals.

**CAT# DCM-9120** $7.95 each

---

**12 VDC GEAR MOTOR**
- No-load measurements:
  - 520 RPM @ 12Vdc, 250mA
- Operates as low as 3Vdc (approx. 100RPM)
- Gearbox: 27mm diameter x 23mm long
- Motor: 24mm diameter x 30mm long
- Flatted shaft: 6mm diameter x 20mm long.
- 48mm leads

**CAT# DCM-475** $4.25 each
25 for $3.75 each • 100 for $3.25 each

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**85 RPM 12 VDC GEAR MOTOR**
- 33JPF-15380-50
- 12Vdc, 85rpm @ 42mA (no-load)
- Operates from 2 - 20vdc
- Approx. 160mA typical 12Vdc load
- Overall dimensions, 50mm L x 33mm D excluding shaft
- Flatted shaft 6.5mm L x 4.0mm D
- Solder lugs
- Ideal for robotics, modelers, hobby projects.

**CAT# DCM-416** $4.50 each
10 for $4.00 each

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**12-24 RPM VENDING MACHINE GEAR MOTOR W/ SWITCH**
- P/N CJM-2407-12
- 12-24 Vdc, 60-70mA, no-load rating
- Motor: 1” diameter x 1.5” long
- Plastic gearbox: 3.5” x 2.5” x 0.6”
- Plastic output shaft is 0.3” cube with holes on two sides
- Motor and switch terminals can be accessed via a pc board on rear of motor
- Actuates a momentary SPDT Microswitch once every rotation.

**CAT# DCM-594** $4.00 each

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ORDER TOLL FREE 1-800-826-5432
24 VDC GEAR MOTOR
W/ TURNTABLE
Relatively powerful, low-current DC motor and gearbox with a 4.9” dia. plastic (nylon?) turntable with a rubber o-ring circumference that could be used to drive another wheel. Turntable can be removed from motor and rubber ring on turntable can be removed as well.

- 45 RPM @ 24 Vdc, 60mA - 23 RPM @ 12Vdc
- Drive motor - Mabuchi RS-303SH, 1.1” D x 1.67” L
- Gearbox - Molon CHM-2435, 2.75” x 3.00” x 0.57”
- 5/16” diameter shaft, flatted and splined
- Threaded mounting holes in four corners.

CAT# DCM-351 $9.75 each

GEARMOTOR & WHEEL ASSEMBLY
- 4.5 - 10 Vdc gear motor
- 120 RPM @ 6 Vdc, 100Ma (no-load rating)
- Motor with gearbox is 2.5” x 0.75” x 0.9” excluding axle or wheel.
- 2.75” D x 1” hard plastic wheel and rubber tire
- Wheel can be attached to either side of motor

CAT# AC-32 $3.00 each

12VDC AUTOMOBILE DOOR LOCK ACTUATOR
- 12 Vdc motor-drive actuator for automotive door locks
- Push or pull 0.75” depending on polarity
- Overall dimensions (retracted): 5.50” x 2.45” x 1.25”
- Nylon plunger
- Mounting hardware w/ 9.5” metal linkage rod
- Rubber boot protects against moisture & dust

CAT # DLA-1 $5.50 each

MOTOR SPEED CONTROLLERS

3 AMP DC MOTOR SPEED CONTROLLER
Controls the speed of a DC motor using Pulse-Width-Modulation. Has a potentiometer with on-off switch and a four-position screw terminal strip for easy connection to motor & power source. Can be used as a lighting dimmer and similar applications with DC loads up to 3A. 30 x 28mm pc board.

CAT # MSC-35 $5.75 each

10A DC MOTOR SPEED CONTROL / DIMMER
Can also be used as a lighting dimmer for DC loads up to 10A. On-board potentiometer and knob. Four-position screw-terminal strip for easy connection to motor and power source. Replaceable fuse.

CAT # MSC-10 $7.95 each

STEPPER MOTORS

STEPPER MOTOR & DRIVER BOARD
Includes our driver board, CAT# ME-16 (see below) and a 5-wire stepper motor that plugs directly into the board. Ideal for beginning robotics projects. Motor is a 4-phase, unipolar stepper, #28BYJ-48.

CAT# ME-125 $5.35 set

STEPPER MOTOR DRIVER BOARD
Four LEDs indicate the status of the stepper. Jumper for 5V / 12V use. 5-contact header mates with connector on some standard stepper motors. 32 x 34 x 11mm.

CAT# ME-16 $2.50 each

HIGH-RESOLUTION BI-POLAR STEPPER MOTOR, USED
- Oriental Motor Co., VEXTA # PK244-01AA-C21
- 4V, 1.2A, 2-Phase, 1.8 Degrees per step
- 42mm square x 40mm
- 5mm dia. x 18mm flatted shaft w/ cogbelt pulley
- 6 leads, 120mm length with 6-pin female connector (2mm spacing).
- From used equipment, in good condition.

CAT # SMT-376 $6.50 each

TINY STEPPER MOTORS W/ WORM SCREW
- 2-phase, 4-conductor stepper motors w/ worm screw
- 3-5Vdc. Working current: 200-350mA
- Step angle: 22.5 degrees (16 pulses per revolution).
- Motors do not have drive sleeves
- Available w/ two drive screw lengths

CAT# SMT-585 $1.10 each
10 for 90¢ each

CAT# SMT-595 $1.15 each
10 for $1.00 each

STEPPE / SERVO MOTOR CONTROLLER,
DK Electronics V1.0.
Arduino compatible motor shield. The board has two STMmicroelectronics L293D Motor H-Bridge IC’s which can drive up to 4 DC motors (or up to 2 stepper motors) with 0.6 A per bridge (1.2 A peak). 70 x 54 x 13mm.

CAT# SMD-293 $6.95 each
STANDARD SERVO
Digital high torque servo.  Metal gears and
bushing, 180° rotation.  Servo arms and screws
included.  Dimensions: 40.7 x 19.7 x 42.9mm.
CAT # DCS-116
$9.20 each

SG92R MINI SERVO
TowerPro SG92R 9g digital servo.  POM with Carbon fiber gears.  180° rotation.  Teflon bushing.  Servo arms and screws included.  Servo Plug fits JR and Futaba "S" type connector. 23 x 12.2 x 27mm
CAT# DCS-118
$6.26 Reduced Price
$4.75 each
10 for $4.50 each

CONTINUOUS ROTATION SERVO
Model DS04-NFC 360° rotation, standard size servo. For remote control projects. 40.8 x 20 x 39.5mm Servo Plug fits JR and Futaba "S" type connector that fits most receivers.
CAT # DCS-117 $9.50 each

3-CHANNEL SERVO TESTER
Connect up to three servos simultaneously to test and compare speed and reaction time without use of transmitter/receiver. Three modes of operation are manual adjust - servo rotates in conjunction with rotation of pot, neutral position - servo centers itself in neutral or middle position, and automatic "window wiper" - servo independently cycles back and forth. Power input 4.8 - 6 Vdc. 1.3" x 1.1" x 0.5" h. Mode select button. Ideal for RC hobbyists.
CAT# STR-110 Reduced Price
$8.00 Reduced Price
$6.00 each

12A RC MODEL MOTOR CONTROLLER
HobbyWing Skywalker Series 12A ESC.  This motor controller is good choice for general R/C applications such as Airplane/Heli/Multi-copter projects. Full Protection Features: Low voltage cutoff protection / Over-heat protection / Throttle signal lost protection. Output: Continuous 12A, Burst 15A up to 10 Secs. Can be used with our 3-phase brushless motors.
CAT# SC-112 Reduced Price
$12.75 each

SERVOS

BRUSHLESS DC MOTORS

24 VDC BRUSHLESS DC MOTORS
Powerful brushless motors originally designed for electric scooters. Great low-end torque. Built-in 30A speed controller. Requires 5KΩ potentiometer or Hall-effect throttle to interface with speed control.

24VDC, 600W
MAC-BMC P/N 12570
- No-load Specs: 2480 RPM @ 24.6 VDC, 3A 142 Kv
- Motor dimensions: 5.0" diameter x 3.2"
- Shaft: 0.48" diameter x 0.95" long
- 11" power cable - mates with 2-pin connectors like our CAT# CON-319
- 11" cable to motor speed control - 3-pin Molex type connector
- CCW - counter-clockwise rotation
- 3-bolt mounting pattern.
CAT # DCM-2460 $49.00 each

24VDC, 300W
MAC-BMC P/N 12500 2
- No-load Specs: 3650 RPM @ 25.0V, 1.78A 145kV
- Motor dimensions: 5.0" diameter x 2.4"
- Shaft: 0.31" (8mm) dia. x 0.60" (15mm) long
- 11" power cable - mates with 2-pin connectors like our CAT# CON-319
- 11" cable to motor speed control - 3-pin Molex type connector
- CW - clockwise rotation
- 3-bolt mounting pattern
CAT # DCM-2430 Reduced Price
$44.00 each

3-PHASE BRUSHLESS DC MOTOR
- BEI # DIH23-30-013Z.
- Smooth, quiet, high-torque brushless DC motor
- 2.25" diameter x 3.0" long
- 0.25" diameter x 1" long shaft
- 5270 RPM with no load
- Built in speed sensor
- 7-15Vdc operating voltage.
- Spec sheet available in PDF format
Note: Requires a controller to function. See controllers (CAT# SC-120, SC-130 and SC-112) and servo tester (CAT# STR-110) for more information.
CAT# DCM-459 Reduced Price
$16.95 each

BRUSHLESS MOTOR
- Rotor motor for model helicopter.
- 14mm diameter x 10mm.
- Shaft: 1.5mm diameter x 6mm.
- 10" (254mm) leads with Hitec connector.
CAT # DCM-504 Reduced Price
$4.75 each
AC POWER CORDS, 2-CONDUCTOR

6' black 18AWG/2 SVT power cord. 0.23" nominal o.d. cable. Molded polarized 2-conductor plug. Molded strain relief pigtail leads with 0.25" QC connectors. UL, CSA.
CAT# LCAC-322 $1.60 each
10 for $1.50 each

2 CONDUCTOR CHEATER CORDS
6' black cable. Rated 7A.
Non-polarized
CAT# LCAC-390 $2.70 each • 10 for $2.50 each

Polarized
CAT# LCAC-400 $2.50 each • 10 for $2.25 each

AC POWER CORD W/ INLINE ROCKER SWITCH
70” two-conductor power cord with on-off rocker switch mid-way. Molded, polarized AC plug. Black SPT-2 18 AWG zip cord rated 300V, 105°C, cULus.
CAT# LCAC-456 $2.00 each
100 for $1.70 each • 1000 for $1.25 each

EASY INSTALL AC PLUGS AND RECEPTACLES
Snap-on plugs and sockets for quick installation on 18/2, SPT-1 zip cord. Non-polarized. No stripping required; makes contact through the insulation.
Plug, black CAT# ACP-47 $1.10 each
Plug, white CAT# ACP-47W $1.10 each
Socket, black CAT# ACS-71 $1.20 each
Socket, white CAT# ACS-71W $1.20 each

AC POWER CORDS, 3-CONDUCTOR

IEC POWER CORDS
Standard IEC (Sph-386) power cords. IEC female connector one end, standard 3 prong grounded AC plug other end. UL, CSA.

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>Each 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1’ 18/3 SVT</td>
<td>LCAC-301</td>
<td>2.25 2.10</td>
</tr>
<tr>
<td>3’ 18/3 SVT</td>
<td>LCAC-303</td>
<td>2.50 2.25 1.75</td>
</tr>
<tr>
<td>5’ 18/3 SVT</td>
<td>LCAC-305</td>
<td>3.00 2.75 2.20</td>
</tr>
<tr>
<td>6’ 18/3 SVT</td>
<td>LCAC-60</td>
<td>3.50 3.25 2.45</td>
</tr>
<tr>
<td>6’ 16/3 SJT</td>
<td>LCAC-435</td>
<td>4.60 4.35</td>
</tr>
<tr>
<td>6’ 14/3 SJT</td>
<td>LCAC-667</td>
<td>6.75</td>
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<tr>
<td>10’ 18/3 SVT</td>
<td>LCAC-310</td>
<td>4.50 4.00</td>
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<tr>
<td>10’ 14/3 SJT</td>
<td>LCAC-610</td>
<td>7.75</td>
</tr>
</tbody>
</table>

18/2 SJT POWER CORD, 6’
CAT # LCAC-386 $1.75 each
10 for $1.50 each

6' BLACK 2-CONDUCTOR POWER CORD
18/2, SPT-2 black power cord. Molded, polarized plug. UL, CSA.
CAT # LCAC-322 $1.60 each
10 for $1.50 each • 100 for $1.25 each

BLACK POWER CORD, SJT 16/3
6’, SJT 105° black power cord. Standard 3-prong grounded plug. Terminated with molded strain relief, 5-8” pigtail leads (two with crimp connectors). UL, CSA.
CAT# LCAC-330 $4.75 each
10 for $4.60 each

3-CONDUCTOR POWER CORD, 6’
18/3, SVT 105° black power cord. Standard 3-prong grounded plug. Terminated with molded strain relief, 8” pigtail leads wrapped around a ferrite toroid. UL, CSA.
CAT# LCAC-467 $3.00 each
100 for $2.60 each

10' POWER SPLITTER CABLE
8’ cable splits to pair of 2’ cables with standard IEC female ends. 16 AWG 3-conductor SJT 105°C cable. UL, CSA.
CAT# LCAC-433 $5.50 each
25 for $5.00 each

3 CONDUCTOR LAPTOP POWER CORD
Black, 6 ft. Frequently used with lap-top computers. SVT round cable. UL, CSA.
CAT# LCAC-187 $2.50 each
POWER CORD
3-conductor
14 AWG.
SJT 105° C.
Overall length, 24”.
Black, SJT, UL, CSA.
CAT# LCAC-410 $3.50 each
10 for $3.20 each

EXTENSION CORDS
Three-conductor, AWG 16 cord.
Black, SJT, UL, CSA.

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1’</td>
<td>EXT-11</td>
<td>$3.00 each</td>
</tr>
<tr>
<td>3’</td>
<td>EXT-31</td>
<td>$2.75 each</td>
</tr>
<tr>
<td>6’</td>
<td>EXT-13</td>
<td>$4.25 each</td>
</tr>
<tr>
<td>10’</td>
<td>EXT-14</td>
<td>$7.65 each</td>
</tr>
</tbody>
</table>

15' 3-OUTLET 16 AWG EXTENSION CORD
Black
3-conductor, grounded extension cord with right-angle plug.
SPT-3, 16AWG, 13Amps.
NEMA 5-15P to NEMA 5-15R. UL, CSA.
CAT# EXT-105 $8.95 ea. • 10 for $8.50 ea.

15' APPLIANCE CORD,
14/3 SPT-3
15’ long, grey, appliance / air-conditioner cord.
14/3 SPT-3.
15A-125V-1875W. cULus.
CAT# EXT-615 $9.95 each

6-OUTLET EXTENSION CABLE, 3FT
Heavy-duty power extension cable with two 3-outlet taps.
14/3 SJTW, weather-resistant power cable.
105C, 300V, 15A/ 125V. UL.
CAT# LCAC-336 $9.00 each

POWER STRIPS
4-OUTLET
15A circuit breaker/ lighted power switch.
Heavy-duty 10’ 14/3 power cord with space-saving right-angle plug.
Keyhole slots in rear to allow wall or desk mounting.
cULus.
CAT# PST-40 $7.95 each

6-OUTLET
6 outlet power strip.
White, Lighted
On/Off switch with circuit breaker.
1.6 ft. 14/3 AWG power cord. cULus.
CAT# PST-101 $5.95 each

3-WAY TAP
Hard rubber, 3-way grounded power tap. Rated 15 Amps @ 125 Vac. UL, CSA.
CAT# TPA-1 $3.75 each
10 for $3.50 each

STRAIN RELIEFS
Prevent power cords from pulling, pushing, or twisting in chassis hole.

<table>
<thead>
<tr>
<th>CAT</th>
<th>WIRE TYPE</th>
<th>HEYCO# or equiv.</th>
<th>HOLE SIZE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-40</td>
<td>flat 18/2 SPT-1</td>
<td>4P-4</td>
<td>.45”</td>
<td>10/ $1.00</td>
</tr>
<tr>
<td>SR-60</td>
<td>flat 18/2 SPT-2</td>
<td>4N-4</td>
<td>.50”</td>
<td>10/ $1.00</td>
</tr>
<tr>
<td>SR-50</td>
<td>18/2, 18/3, SV, SVT round</td>
<td>5L-1</td>
<td>.50”</td>
<td>10/ $1.00</td>
</tr>
<tr>
<td>SR-18</td>
<td>round, 0.2” dia.</td>
<td>5P3-4</td>
<td>.5”</td>
<td>10/ $1.00</td>
</tr>
<tr>
<td>SR-70</td>
<td>18/2, 18/3, 16/2, 6/3 SV, SVT, SJO round</td>
<td>6N-4</td>
<td>.65”</td>
<td>10/ $1.50</td>
</tr>
<tr>
<td>SR-80</td>
<td>18/3, 16/3, SJ, SJT, SJ round</td>
<td>6N3-4</td>
<td>.625”</td>
<td>10/ $1.50</td>
</tr>
<tr>
<td>SR-34</td>
<td>flat up to 0.29” X 0.65”</td>
<td></td>
<td></td>
<td>10/ $1.50</td>
</tr>
<tr>
<td>SR-34-2</td>
<td></td>
<td></td>
<td></td>
<td>2/ $1.00</td>
</tr>
</tbody>
</table>

GROUNDED AC PLUG
Leviton # 515PR
Black 15 Amp grounding 3-wire AC plug.
Rubber body is dirt and moisture resistant. Tough elastomeric husk.
Built-in cord grip adjusts to 0.245” to 0.665” cords, 18-3 to 12-3. UL, CSA.
CAT# ACP-8 $3.35 ea. • 10 for $3.00 ea.

AC SOCKETS
3-PRONG GROUNDED SOCKET
Leviton # 114.
Heavy-duty 3 prong socket for AC power cords. For 0.396” to 0.562” diameter cords. 18-14 AWG stranded conductors. Rubberized shell resists chemicals & remains flexible even in low temperatures. UL, CSA.
CAT# ACS-27 $4.75 ea. • 10 for $4.55 ea.

15 AMP GROUNDED OUTLET
Leviton # 1374-001 or equiv.
Black, three-conductor outlet.
Snap-mounts in 1” square cutout.
Rated 15 Amps @ 125Vac.
Two 6” 14 AWG leads and one 6” 16 AWG ground lead. UL, CSA.
CAT# ACS-31 $1.95 ea. • 100 for $1.70 ea.
HOSPITAL GRADE 3-CONDUCTOR IN-LINE GROUNDED SOCKET
Cooper Wiring Devices® #8269
2-Pole, 3-Wire grounding receptacle. Meets federal
WC-596 requirements.
High-impact resistant thermoplastic housing. Clamp for 0.250” to
0.650” diameter cord. NEMA construction and standard compliances. Color-coded screw
terminals. 15 amp, 125 volt. UL, CSA.
CAT # ACS-72 $5.25 each
10 for $5.00 each

IEC POWER CONNECTOR
Power Dynamics #43R01-2311
IEC female straight plug for
up to 16 AWG wire. Integral
cable clamp, strain relief and screw terminals.
Rated 10A 250Vac (15A for UL, CSA only).
RoHS compliant. UL, CSA, VDE.
CAT # ACS-430 $2.00 each
10 for $1.75 each • 100 for $1.50 each

IEC POWER INPUT
Mounting ears with holes on
1.575” (40mm) centers. 0.25” QC connector.
Rated 15A 250Vac. UL, CSA.
CAT # ACS-48 $1.25 each
10 for $1.10 each • 100 for 90¢ each
Same as ACS-48 above, but with solder-loops.
CAT # ACS-70 $1.00 each
10 for 90¢ each • 100 for 75¢ each

DUPLEX RECEPTACLES WITH 4.2A USB PORTS
Standard duplex power receptacle with two integrated
USB charging ports. Rapid
4.2 Amp USB charger provides
efficient power to charge cell-
phones, tablets and most USB
powered devices. Over-current,
over-charging, short circuit
protection. Tamper Resistant (TR).
15A receptacles. Includes wall-plate and
hardware. cULus, CSA ANSI/UL.
White CAT # ACS-73W $11.95 each
Ivory CAT # ACS-73IV $11.95 each

INTERNATIONAL PLUG ADAPTERS
EURO TO USA
Converts 2-pin round European
plugs to 2-pin flat power plugs.
CAT# AP-USA $1.50 ea. • 10 for $1.25 ea.
USA TO EURO
Converts 2-pin flat USA plugs
to 2-pin round Euro plugs.
Can be used with 3-pin grounded
USA plugs, but ground pin is voided.
CAT# AP-EU $2.00 each

SPEAKERS
13MM 32 OHM SPEAKER
Possibly designed for headphones.
Pin terminals.
CAT# SK-850 75p each

20 MM, 150 OHM SPEAKER
Hosiden HDR960. 20mm, 150 ohm
dynamic element. 0.79” diameter x
0.1” thick. Large quantity available.
CAT# SK-215 2 for $1.00
100 for 40¢ each • 1000 for 25¢ each

8 OHM 40MM SPEAKER
40mm diameter x 6mm thick.
8 Ohm, general purpose speaker.
2” leads with 2-conductor female
connector, 2mm centers.
Large quantity available
CAT# SK-840 75p each
10 for 70¢ each • 100 for 60¢ each

8 OHM 57MM SPEAKER
Kobitone# 254-PS610-R01
OBO # OBO-57008F-01
Great-sounding 2.24” mylar
cone speaker. 2.24” dia. x 0.33”
NeFeB magnet. Solder spot connections.
Specifications:
• Power Rating: Normal 500mW Max. 1.0W
• Frequency Range: 350 - 13,000Hz
CAT# SK-224 $1.75 each
10 for $1.60 each • 100 for 85¢ each

2.25” 8 OHM 0.5 WATT SPEAKER
Paper cone, 1.43” diameter
ceramic magnet. 0.85” overall depth.
3” leads w/ 2-conductor female
connector, 2mm centers.
CAT# SK-85 $1.50 each

2.5” 45 OHM SPEAKER
Ideal for intercom applications.
Rubber gasket on perimeter.
Tough, coated paper cone.
Terminals are solder spots with
flexible plastic extension -- can
be easily bypassed or removed.
Heavy Alnico magnet, 1.8” diameter.
Specs: 45 Ohm, 0.25W. Overall diameter
including removable rubber gasket,
2.7”. Overall depth, 0.9”.
CAT# SK-451 $1.25 each
10 for $1.10 each • 100 for 95¢ each

MID-RANGE & WOOFERS
2” 4 OHM SPEAKER
Boston Acoustics
# 304-050001-00
2” cone with soft rolled edge.
4 Ohm impedance. Shielded
magnet. Overall depth, 1.61”.
CAT# SK-304 $2.00 each
10 for $1.75 each

VISIT OUR ON-LINE STORE WWW.ALELECTRONICS.COM
4" 40W SHIELDED WOOFER, 8 OHM
Rolled foam edge. Shielded for use with computers or video. 11 oz magnet. 1" voice coil. 40 Watts / 70 Watts max. 70 - 10 KHz frequency response. 83 dB @ 1W/ 1m.
CAT# GW-2048 $12.50 each

5.25" 50W
5.25" diameter midrange speaker. 8 ohms. 0.75" voice coil. 10 oz magnet. Rolled foam edge. 50 Watts RMS. 550 - 15 KHz. 92 dB @ 1W/ 1m.
CAT# GM-658 $9.10 each

5.25" 60W
5.25" diameter midrange speaker. 8 ohms. 1" voice coil. 12 oz magnet. Poly-mica cone with rolled foam edge. 60 Watts RMS. 500 - 15 KHz. 96 dB @ 1W/ 1m.
CAT# GM-858 $11.90 each

5.25" 70W SHIELDED WOOFER, 8Ω
Rolled foam edge. Shielded for use with computers or video. 16 oz magnet. 1" voice coil. 70W / 130W max. 62 - 9 KHz frequency response. 84 dB @ 1W/ 1m.
CAT# GW-2058 $14.70 each

6" WOOFER, 4 OHM
6" diameter cone with rubber surround. Shielded magnet. Overall frame diameter, 7". Mounting cut-out diameter, 6". Depth behind frame, 3.5".
CAT# SK-606 $14.95 each

8" 100W WOOFER, 8Ω
100 Watts RMS, 190 Watts Max. 25 - 6000Hz frequency response. 84 db / reference 8 Ohm / 85 Vrms. 1.5" aluminum voice coil. 20oz magnet. Poly mica cone. Butyl rubber surround. Stamped steel frame. Fits enclosure hole size of 7.25". Mounting depth is 3.25".
CAT# GW-8028 $32.50 each

8" CERWIN-VEGA WOOFER, 8 OHM
Cerwin-Vega # LSCL42030 8" woofer with foam surround. 3.35" diameter magnet. Cone diameter, 7.25". Overall frame diameter, 8". Mounting cut-out diameter, 7.20". Overall depth, 3.68" including gasket.
CAT# SK-808 $17.95 each

10" 110W WOOFER, 8 OHM
Rolled foam edge with poly laminated cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 110 Watts / 220 Watts max. 40 - 5 KHz freq. response. 90 dB @ 1W/ 1m.
CAT# GW-2108 $27.50 each

TWEETERS

CERWIN-VEGA DOME TWEETER, 4Ω
• Cerwin-Vega LSETH2152
• Nice, heavy-duty textile dome tweeter.
• 4 Ohm impedance.
• Faceplate, 4.17" x 3.48" with 4 mounting holes on 2.56" centers. 1.50" behind faceplate depth.
• Magnet, 2.90" diameter x 1.25"
• Solder/quick-connect terminals. 0.187" & 0.25"
Reduced Price
CAT # TW-2152 $25.00 $6.00 each

3.5" ROUND PIEZO
3.5" diameter wide dispersion piezo tweeter. 60 Watts RMS @ 5 KHz. Frequency response, 3.5 - 30 KHz. 96 db @ 1W/ 1m.
CAT# GT-1056 $3.50 each

3.25" SQUARE PIEZO TWEETER
3.25" square, wide dispersion tweeter. 50 Watts RMS. Frequency response, 3.5K - 30 KHz. 10" color-coded pigtail leads. New, individually boxed with mounting screws.
CAT# SK-350 $4.50 each

8Ω 15W SPEAKER
3.5" speaker in break-resistant wall-mount enclosure. Durable poly-cone for indoor and sheltered outdoor use. White enclosure, 4.25" square x 2.20" deep. 10" color-coded pigtail leads. New, individually boxed with mounting screws.
CAT# SK-808 $3.75 each

PAGING HORN
Universal# SP-20B. Horn-type communication speaker. 20 Watt 8 Ohms. 5.25" diameter x 6" long. 3-hole adjustable mounting bracket. 12" leads.
CAT# PHS-20 $4.95 each 24 for $4.25 each
TERMINAL STRIPS

DUAL ROW TERMINAL STRIPS


DUAL ROW 20 AMP
Rated 20 A @ 300 Volts. Accepts wire from 22 to 12 AWG. 0.375" (9.5mm) centers. 0.85" wide x 0.52" high. Mounting holes on 8mm centers.

<table>
<thead>
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<th>Length</th>
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<td>3.36</td>
<td>3.12</td>
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</tbody>
</table>

DUAL ROW 25 AMP
Rated 25 A @ 300 Volts. Accepts wire from 22 to 12 AWG. 0.438" (11mm) centers. 1.1" wide x 0.65" high. Mounting holes on 10.7mm centers.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Circuits</th>
<th>Length</th>
<th>Ea</th>
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</table>

DUAL ROW 30 AMP
Rated 30 Amps @ 600 Volts. Accepts wire from 22 to 10 AWG. 1.34" wide x 0.63" high.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Circuits</th>
<th>Length</th>
<th>Ea</th>
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<tr>
<td>TS-404</td>
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<td>3.13&quot;</td>
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<td>1.89</td>
<td>1.76</td>
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<td>TS-406</td>
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<td>TS-410</td>
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<td>5.06</td>
<td>4.73</td>
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</tbody>
</table>

JUMPERS FOR DUAL ROW STRIPS
Ties two consecutive terminals together. May be overlapped to tie more than two.

For TS-200 series (Dual Row 20 Amp Strips)
CAT# JMP-24 5 for 90¢ • 100 for $14.00

For TS-300 series (Dual Row 25 Amp Strips)
CAT# JMP-25 5 for 90¢ • 100 for $14.00

For TS-400 series (Dual Row 30 Amp Strips)
CAT# JMP-26 5 for 95¢ • 100 for $15.00

INTERLOCKING PC MOUNT TERMINAL STRIPS
PC mount screw-clamp blocks with terminals on 5mm (0.197") centers. Interlock two or three position blocks to provide strips of any required length. Accepts up to 14 AWG wire. Rated 10A, 300 Volts.

<table>
<thead>
<tr>
<th>COND.</th>
<th>CAT#</th>
<th>EACH</th>
<th>100</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>TER-202</td>
<td>65¢</td>
<td>45¢ each</td>
</tr>
<tr>
<td>3</td>
<td>TER-203</td>
<td>60¢</td>
<td>45¢ each</td>
</tr>
</tbody>
</table>

PC MOUNT TERMINAL STRIPS
PC-mount screw-clamp terminals on 5mm (0.197") centers. 10mm (0.40") high. Blocks longer than 3 positions consist of 2 & 3 position interlocking strips. Will interlock w/ other similar strips to make longer configurations. Accepts up to 14 AWG wire. Rated 10 A, 300 Volts. Numbered in the following configurations:

3-POSITION, NUMBERED 1 - 3
CAT# TER-403
3 for 99¢ • 100 for 18¢ each
500 for 14¢ each • 1000 for 10¢ each

4-POSITION (2 X 2), NUMBERED 1 - 4
Two interlocking 2-position blocks.
CAT# TER-404
45¢ each • 100 for 20¢ each
500 for 15¢ each • 1000 for 12¢ each

5-POSITION, NUMBERED 1 - 5
Two interlocking blocks, 1-3 & 4-5.
CAT# TER-405
53¢ each • 100 for 25¢ each
500 for 20¢ each • 1000 for 15¢ each

5-POSITION, NUMBERED 6 - 10
Two interlocking blocks, 6-8 and 9-10. Interlock with TER-405 for consecutive numbering 1-6 or 1-10.
CAT# TER-461
53¢ each • 100 for 38¢ each

6-POSITION, NUMBERED 1 - 6
Two interlocking 3-position blocks.
CAT# TER-406
53¢ each • 100 for 28¢ each
500 for 23¢ each • 1000 for 18¢ each

INTERLOCKING 3-POSITION TERMINAL STRIPS
PC mount, screw-clamp terminal strips. Interlocking 3-terminal segments can be combined to make desired length strip. PC pins on 5mm (0.197") centers. Side wire entry. Screws on 45° angle. Each segment is 15.0 x 12.5 x 12.5mm. Accept up to 14 AWG wire. Sold in 21 terminal strips (7 x 3 segments).

CAT# TER-328 75¢ ea.
2 for $1.20
10 strips 50¢ each • 100 strips 35¢ each
1000 for 20¢ each

ORDER TOLL FREE 1-800-826-5432

Reduced Price

Revised Price
**4-POSITION PLUGGABLE TERMINAL STRIP & HEADER**

Ricon 4-position screw-clamp terminal block and mating friction-lock header. Terminals on 5mm centers. For 12-28 AWG wire. Rated 6A/125Vac. UL, CSA.

- **CAT# TER-104** 95¢ pair
- 10 for 75¢ per pair • 100 for 60¢ per pair

**24-POSITION SINGLE-ROW TERMINAL STRIP, FEED-THRU**

RDI/ Buchanan 4-series / AMP 796598-6. Single-row barrier strip. Screw terminals on 0.325” centers. 0.5” feed-through pins. 7.9” x 0.60” x 0.50” high. Rated 15A, 150V. For 14-22 AWG wire. UL, CSA.

- **CAT# TER-24FT** $2.00 each
- 10 for $1.70 each

**EUROSTYLE TERMINAL STRIPS**

For connecting stripped wires from 8-22 AWG depending on the block size. Flexible white (natural) Nylon 66 body, 94V2 rated for 105º C. 400 Volts. All metal parts are completely recessed in the housing to prevent shorts. Each strip has 12 circuits, with a mounting hole between each circuit. Can be easily shortened with a knife or saw.

- **7 AMP**
  - For 22-18 wire. 3.78” x 0.67” x 0.57” h. 0.32”(8mm) terminal centers. UL, CSA, VDE.
  - **CAT # TB-7** $2.00 each
    - 10 for $1.80 each • 100 for $1.60 each
- **20 AMP**
  - For 18-14 wire. 4.6” x 0.80” x 0.67” h. 0.39”(10mm) terminal centers. UL, CSA, VDE.
  - **CAT # TB-20** $2.25 each
    - 10 for $2.10 each • 100 for $1.80 each
- **35 AMP**
  - For 14-10 wire. 5.38” x 0.93” x 0.75” h. 0.46”(11.5mm) terminal centers. UL.
  - **CAT # TB-35** $2.70 each
    - 10 for $2.45 each • 100 for $2.15 each
- **50 AMP**
  - For 20-8 wire. 6.25” x 1.00” x 0.99” h. 0.53”(13.5mm) terminal centers. UL.
  - **CAT # TB-50** $4.00 each
    - 10 for $3.85 each • 100 for $3.60 each

**100 AMP BRASS BUSS BAR**

Bocatech® Inc BTMH-15B

**Specifications:**
- Rated voltage: 48 Volt DC / 300 Volt AC
- Two feed terminals 1/4-20 thread brass studs
- Ten distribution terminals 8-32 brass screws
- Solid brass on insulated base
- Dimensions: 5-3/4” (L) x 1-1/4” (W) x 1-1/16” (height at the stud)
- Two mounting holes: 5-1/4” center to center

- **CAT# BR-100** $6.95 ea. • 10 for $6.50 ea.

**SPRING-LEVER TERMINAL STRIP**

2.25” SQUARE BEZEL

Red and black spring-lever terminals in a recessed cup that fits a 50mm (1.95”) diameter round cut out. 57mm (2.23”) square bezel with countersunk mounting holes in each corner.

- **CAT# SWT-202** 2 for $1.00 • 100 for 35¢ ea.

**ELECTRET MICROPHONES**

The electret microphones listed below require a low current voltage of 1.5 - 10 Vdc to operate. They will not function in applications that are not specifically wired for electret microphones.

**ELECTRET MICROPHONE**

Hosiden# KUB6133-010070. 6mm diameter x 2.7mm element with 30mm red and black leads.

- **CAT# MIC-613** 50¢ each
  - 100 for 30¢ each

**ELECTRET MICROPHONE**

Panasonic # WM-063 6mm diameter x 5mm. Solder spot connections.

- **CAT# MIC-063** 2 for $1.00
  - 10 for 45¢ each • 100 for 40¢ each

**MINI-ELECTRET CONDENSER MICROPHONES**

Omni-directional. 6.0mm dia. x 1.8mm. Frequency range: 20-200,000Hz. 2.2KΩ impedance.

- **EM-B6018P.** PC pins on 1.9mm centers.
  - **CAT # MIC-36** 3 for 99¢ • 100 for 25¢ ea.
- **EM-B6018.** Solder pads on 1.9mm centers.
  - **CAT # MIC-37** 3 for 99¢ • 100 for 25¢ ea.

**ELECTRET MICROPHONE, 15' CORD**

Durable rubberized housing, 13mm dia. x 31mm long. Mounting plate with adjustable ball-joint. 15’ shielded cable.

- **CAT# MIC-12** $1.15 each
  - 50 for 95¢ each

**FAST FRIENDLY SERVICE** 41
### DC Fans

#### 12 VDC 25MM
- **PSC Select RDM2510B**
  - 12 Vdc, 0.08A, 0.96W
  - 25 x 25 x 10mm
  - Ball bearing axial fan
  - 10,000 RPM. 2.3 CFM, 23 dBA.
  - Three 12” leads. UL/Ultras.
  - **CAT# CF-2512** $3.00 each

#### 12 VDC 38MM HIGH-SPEED FAN
- **Delta Electronics FFB03812HHN**
  - High speed fan, moves a lot of air for its size
  - 12 VDC. 0.57 Amp. 17.3 CFM
  - 14000 RPM, 55.5 dBA, 6.60 W
  - Ball bearing
  - 38mm square x 28mm brushless axial fan
  - Four 12” wire leads. CE, UL, CSA, VDE
  - **Caution: Sharp blades. For fan guard, see our CAT# CFG-40.**
  - **CAT# CF-599** $2.95 each

#### 12 VDC 40MM
- **Adda Corp. # AD0412MS-G70.**
  - 12 Vdc 0.08A
  - 40 x 40 x 10mm
  - 5.7CFM, 20 dBA, 4800 RPM
  - Sleeve bearings
  - Two 2” wire leads. UL/CUL/TUV/CE
  - **CAT # CF-466** $3.75 each

#### 12 VDC 50 MM
- **T & T # MW-510M12C.**
  - 50mm square x 10mm CPU style fan
  - 12 vdc 0.11A
  - 9CFM, 27dB/A
  - Two 10” leads with 3 pin connector. UL/TUV/CE
  - **CAT # CF-467** $3.00 each

#### 12 VDC 60 MM
- **DC Tiny 25 III # TUDC12Z4F-022**
  - 12 Vdc 0.14A 1.8W.
  - 60 x 60 x 25mm
  - 19 CFM, 4300 RPM, 32 dBA
  - Two 5” leads prepped with 2-pin female (0.1”) connector
  - UL, CSA, TUV
  - **CAT# CF-408** $2.75 each

- **NMB# 2408NL-04W-B40**
  - 12 Vdc, 0.12A brushless fan
  - 60 x 60 x 20mm
  - Ball bearing
  - 29 dBA, 4000 RPM, 15.9 CFM
  - Two 1-inch wire leads.
  - CSA, UL
  - **CAT # CF-349** $2.55 each
  - 10 for $2.40 each

#### 12 VDC 80 MM
- **Delta Electronics # FFB0812HVE-H715.**
  - 12 Vdc, 0.57 Amp
  - 80 x 80 x 38mm
  - 57.21 CFM, 4200 RPM, 44.5 dBA
  - Ball-bearing
  - Three 9” wire leads with 3-pin connector (Molex 2510)
  - With speed sensor (Tach) / locked rotor alarm
  - CE, UL, CSA, VDE.
  - **Note: May have some discoloration on metal parts due to storage conditions.**
  - **CAT# CF-590** $3.00 ea. • 10 for $2.75 ea.

#### 12 VDC 120 MM HIGH-POWER AXIAL FAN
- **TK Fan Model: DCH12038HV12B**
  - High-speed DC brushless, ball bearing fan.
  - 120 x 120 x 38mm
  - 12 Vdc (8-13.5 Vdc), 2.5A
  - 5200 RPM, 285 CFM, Noise: 71.9 dBA
  - Three 7” leads with 4-pin Molex-type plug
  - RoHS, CE
  - **Note: Because of the high-velocity of this fan we suggest using fan guards and/or filters to prevent accidental injury. Our CAT#s CFG-120 and FF-120 are designed for this purpose.**
  - **CAT # CF-1225** $6.75 each

- **Controller for two CF-1225 fans and another 12V device. See online for full description.**
  - **CAT# CBF-1** $4.50 each

#### 24 VDC 172 MM
- **Comair Rotron Patriot DC Model PD2486TDNX**
  - 24 Vdc 1.0 amp
  - 172 dia. x 51.00 mm
  - 235 CFM, 52 dB
  - Ball Bearings
  - Three 4” leads.
  - UL, CSA.
  - **CAT# CF-481** $18.50 each

### Additional Notes
- **Adda AD0612MS-A70GL.**
  - 12 Vdc, 0.14A
  - 60 x 60 x 25mm
  - Sleeve bearings
  - 3500 RPM, 18 CFM, 24 dBA
  - Two 12” leads. UL, CSA, CE.
  - **CAT# CF-583** $2.65 each

- **Delta Electronics# AUB0612LDD**
  - 12 vdc 0.99A
  - 60 x 60 x 20mm
  - 13.06 CFM, 24 dBA, 3200 RPM
  - Superflow bearings
  - Two 3” wire leads with 2 pin connector
  - UL, TUV, CE, CSA.
  - **CAT # CF-468** $2.85 each
### AC FANS

**115 VAC 80 MM**
- EZ Fan# FP-108A-S-3
- 80 x 80 x 38mm
- 110/120 Vac, 50/60 Hz, 0.08/0.06 A, 6/5 W
- 17 CFM
- Zinc housing with thermoplastic impeller
- Terminals for standard fan plug or can be soldered. UL, CSA.

CAT# CF-117  $14.80 each

**120 VAC 120 MM**
- EZ Fan # FP-108-1-S3B.
- 4.69” square x 1.5”.
- 110/120 Vac, 0.11 Amps.
- 1800/2000 RPM, 54 CFM, 30/34 dBA
- Ball bearings
- Aluminum housing
- Terminals accept standard fan plug or can be soldered. UL, CSA.

CAT# CF-281  $15.00 each

**120 VAC 120 MM**
- EZ Fan FP-108-1 SU-BB-T.
- 110/120 VAC, 50/60 Hz, 0.25 / 0.19 Amps.
- 3000 RPM, 120 CFM, 45 dBA
- 120 x 120 x 38mm
- Sleeve bearings
- Aluminum housing.
- 7-blade thermoplastic impeller
- Terminals accept standard fan plug or can be soldered. UL, CSA, TUV, CE.

CAT# CF-282  $19.00 each

**120VAC 120MM COOLING FAN**
- AC Infinity -- Axial 1238
- 100-125Vac 50/60H 22/18Watt
- 120 x 120 x 38mm
- 110 CFM airflow, 2600 RPM, 47 dBA
- Die-cast aluminum frame
- Thermoplastic impeller
- Ball bearings
- Terminals for standard fan plug or can be soldered.

CAT# CF-1238  $12.95 each

**125VAC 172MM**
- Thermocool G17050HASB
- 125Vac, 0.4A
- 172mm dia. x 51mm
- Ball bearings
- 2900 RPM, 198 CFM, 59 dBA
- Terminals for standard fan plug or solder
- cULus, CE, TUV, RoHS.

CAT# CF-415  $21.95 each

### CORDS WITH FAN PLUGS

- 2-conductor fan plug fits most AC cooling fans.

**STRAIGHT PLUG W/ 3’ CORD**
CAT# CFC-14  $1.25 each  10 for $1.00 each

**45° PLUG W/ 6’ CORD AND AC PLUG**
CAT# CFC-15  $2.00 each

### METAL FAN GUARDS

- for square fans.

**Fan size** | **CAT#** | **each**
--- | --- | ---
40mm | CFG-40 | $1.00
60mm | CFG-60 | $1.00
80mm | CFG-80 | $1.25
92mm | CFG-92 | $1.00
120mm | CFG-120 | $1.00
172mm | CFG-172 | $1.60

### PLASTIC FILTER KITS

**STRAIGHT PLUG W/ 3’ CORD**

- Press-fits into the mounting holes of most cooling fans. Absorbs unwanted cooling fan vibration.

CAT# RFM-1  4 for $1.00

### RUBBER FAN MOUNTS

- 120VAC 172MM
- Thermocool G17050HASB
- 125Vac, 0.4A
- 172mm dia. x 51mm
- Ball bearings
- 2900 RPM, 198 CFM, 59 dBA
- Terminals for standard fan plug or solder
- cULus, CE, TUV, RoHS.

CAT# CF-415  $21.95 each

**Cords with Fan Plugs**

- 2-conductor fan plug fits most AC cooling fans.

**STRAIGHT PLUG W/ 3’ CORD**
CAT# CFC-14  $1.25 each  10 for $1.00 each

**45° PLUG W/ 6’ CORD AND AC PLUG**
CAT# CFC-15  $2.00 each

### THERMOELECTRIC (PELTIER) DEVICE

- When current is applied one side gets hot and the other gets cool. Commonly used to cool, heat or regulate temperature, it can also take advantage of a temperature differential to generate electricity. The hot side should be attached to a heatsink.

- 40 x 40 x 3.6mm
- Imax - 7A • Umax - 15.4V
- Qcmax - 62.2W • Tmax - 69C
- 1.7 Ohm resistance • 127 thermocouples

CAT# PJT-13  $4.95 each
10 for $4.80 each

VISIT OUR WEBSITE - WWW.ALLELECTRONICS.COM 43
HEAT SINKS

**MINI BLACK HEAT SINK W/ FINS**
Black anodized aluminum heat sink with seven fins. 0.73” x 0.59” x 0.20” high (19mm x 15mm x 5mm high).
CAT# HS-205 4 for $1.00

**22 X 22 X 13MM HEATSINK**
Black anodized aluminum heat sink with 6 fins. Prepped with 22mm square of adhesive thermal gasket on bottom.
CAT# HS-491 75¢ each

**TO-263 D2PAK HEAT SINK**
Surface mount heat sink for D2PAK TO-263 package. Tin plated matte finish. Opening: 12.7mm (.50”). 26.16 x 12.7 x 10.16mm high.
CAT# HS-206 4 for $1.00

**TO-220 HEAT SINK**
Wakefield 270-AB
Black anodized aluminum heatsink for TO-220 semiconductors. 1.75” x 0.70” x 0.36”
CAT# HS-270 5 for $1.00 100 for 15¢ each

**HEAT SINK FOR TO-220**
Thermalloy/Aavid 6298B, black anodized aluminum heatsink for TO-220 package semiconductor. 1.38” H x 1.64” W x 0.99”. PC pins on 1” centers.
CAT# HS-629 $1.50 each

**TO-220**
Aluminum heatsink, 19 x 14 x 9mm.
CAT# HS-317 4 for $1.00 100 for 19¢ each

**HEAT SINK FOR TO-220**
Thermalloy/Aavid 6298B, black anodized aluminum heatsink for TO-220 package semiconductor. 1.38” H x 1.64” W x 0.99”. PC pins on 1” centers.
CAT# HS-317 4 for $1.00 100 for 19¢ each

**TO-220 CLIP-ON HEATSINK**
Aavid Thermalloy #7139D Copper heat sink with integrated slide-on mounting clip.
Tin plated. 19.81 x 13.21 x 13.08mm (0.780” x 0.520” x 0.515”).
CAT# HS-7139 3 for $1.00 • 100 for $25.00

**CLIP-ON HEATSINK**
For TO-220 / TO-202
CAT# HS-6047 5 for $1.00 100 for 19¢ each

**THERMAL COMPOUNDS**

**1.5 GRAM SYRINGE**
For a wide range of applications including high-power CPUs, GPUs & high-performance heatsinks or water-cooling solutions.
CAT# TG-215 $1.50 each

**THERMAL GREASE, 40 GRAM SYRINGE**
Halnziye HY510. High conductivity gray thermal compound for use with CPUs and other semiconductors, thermoelectric coolers.
Convenient 40 Gram syringe applicator.
Thermal Conductivity: >1.93W/m-k.
Thermal Resistance: < 0.225°C·in²/W
CAT# TG-7 $9.95 each

**STEREO AMPLIFIER MODULES**

**Based on the PAM8610 chip, this little board just needs speakers, power and a signal source to provide lots of crisp, clear stereo sound. Operates on 7-15Vdc.**
CAT# AMP-8610 $7.95 each

**High-quality 3W stereo amplifier based on the PAM8403 chip. 24.5 x 15.0 x 3.5mm pc board. Low current drain. Operates on 2.5-5Vdc. Clearly marked solder or header connections.**
CAT# AMP-8403 $2.50 each

**3W STEREO AMPLIFIER W/ POT**
High-quality 3W stereo amplifier based on the PAM8403 chip.
Small footprint is ideal for portable application. Low current drain. Easy to connect, clearly marked solder or header connections. 23.5 x 28.0 x 13.0mm. Onboard pot with 7mm threaded bushing, 6mm knurled, split shaft.
CAT# AMP-8403VC $4.50 each

**VOICE RECORD / PLAY MODULES**

**Based on the ISD1820 chip, this multiple-message record/ playback device offers true single-chip voice recording, non-volatile storage, and playback capability for 8-20 seconds. Features on-board microphone as well as internal audio amplifier which can drive the included 8Ω 0.5W speaker directly. Supply voltage 3.3-5 Vdc.**
CAT# ME-63S $7.00 each
Above module without the speaker, CAT# ME-63 $6.00 each

**STANTON DJ PHONO CARTRIDGE**
Specially designed for DJs but works great for casual listening. 0.6 mil conical bonded stylus tracks the center of the record groove for reliable performance and excellent fidelity. Standard 2-screw mount. Includes hardware.
CAT# CT-554 $14.95 each
RECHARGEABLE BATTERIES

RECHARGEABLE NICKEL METAL HYDRIDE

Nickel Metal Hydride batteries have double the capacity of standard nickel cadmium cells and can be charged faster without the “memory problems” associated with nickel cadmium batteries.

AAA CELL W/ SOLDER TABS
1.2V 600 mAh. Solder tabs.
CAT# NMH-AAAT $2.75 ea. • 10 for $25.00

AA CELL
1.2 Volt, 1000 mAh.
CAT# NMH-AAA $2.60 ea. • 10 for $22.00

AA CELL, 2500 mAH
1.2 Volt, 2500 mAh. Solder tabs.
CAT# NMH-AAT $4.25 each

AA CELL, 2500 mAH
Ultra-high capacity. 1.2 Volt, 2500 mAh.
CAT# NMH-AAA $2.95 each
8 for $2.75 each • 60 for $2.40 each

SUB-C 3000 mAH RECHARGEABLE, W/ SOLDER TABS
1.2V 3000mAh. Solder tabs. 43mm x 23mm x 22mm diameter.
CAT# NMH-SC $8.00 each

C-CELL, 5000 mAH
1.2V. Standard charge, 16 Hours @ 300mA. Rapid charge, 2 Hours @ 3000 mA.
CAT# NMH-C $6.82 each

D-CELL, 10,000 mAH
1.2V. 33mm dia. x 60mm long. Standard charge, 15 Hours @ 800mA. Rapid charge, 3 Hours @ 4000 mA. Weight, 0.36 lbs per cell.
CAT# NMH-D $14.00 each

9V 250 mAH
CAT# NMH-925 $6.80 each • 10 for $6.30 each

LITHIUM - RECHARGEABLE

3.7V 2600mAH. Button-top 18650 Lithium-Ion rechargeable battery.
High energy density and capacity.
Long life-span. Built-in protective circuitry prevents voltages outside of 2.5-4.25V. 2.70” long x 0.71” diameter.
CAT# LBAT-18650 $12.00 each

BATTERY CHARGER BOARD LI-ION / LI-POLYMER

Originally a conditioning charger for a 14.4V 2600 mAH LI-ION/ LI-POLYMER battery.
The circuit board has a 100uh, 4.3A inductor, C TX100-2-52M, that is well worth the price of the board. With a little effort you can remove the inductor, 3 sets of header connectors, a MOSFET, two voltage regulators, two TO-220 aluminum heatsinks, three 330 uf 35v radial electrolytic capacitors.
CAT# EX-57 $2.00 ea. • 10 for $1.75 ea.

LITHIUM BATTERY CHARGER

TP4056 charger for up to 1A Lithium Ion rechargeable battery. Input: 4.5-5.5Vdc. Suitable for USB-powered charger. Mini-USB input jack. 1.05” x 0.75” x 0.20”.
CAT# BC-4056 $2.75 each

CHARGERS FOR NIMH / NICAD

NI-CD / NI-MH BATTERY CHARGER
Charges 1-4 D, C, AA, AAA batteries or 1 - 2 9V batteries, Ni-cad or Nickel Metal-Hydride. Charge status lights for each battery. Automatic charging current control. Trickle charge keeps batteries topped off. Reverse polarity protection.
CAT# BC-27 $19.50 each

INTELLIGENT 4-BAY UNIVERSAL CHARGER
Tenergy T4S. An automatic smart-charger that is compatible with almost all rechargeable batteries, Li-ion, Ni-MH and Ni-Cd, thus eliminating the need to own several chargers. Capable of charging 4 batteries simultaneously.
CAT# BC-650 $39.95 each
CHARGERS FOR LEAD ACID

DUAL-STAGE CHARGERS
Regulated current control prevents damage to battery. “Fast-charge” brings battery to fully charged state at which point the float-charge takes over, maintaining the battery at a constant voltage. LED indicates charge state. All have screw terminals, except BC-215* which has 6” output cable with 2.5mm co-ax plug. UL.

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Charge Rate</th>
<th>CAT#</th>
<th>Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>6V</td>
<td>500 mA</td>
<td>BC-612</td>
<td>$14.00</td>
</tr>
<tr>
<td>12V</td>
<td>350 mA</td>
<td>BC-215*</td>
<td>$9.75</td>
</tr>
<tr>
<td>12V</td>
<td>500 mA</td>
<td>BC-212</td>
<td>$14.00</td>
</tr>
<tr>
<td>12V</td>
<td>1A</td>
<td>BC-201</td>
<td>$19.00</td>
</tr>
</tbody>
</table>

13.4VDC, 30A POWER SUPPLY / CHARGER, USED
Two-stage charger/power supply widely used in RV, Solar, Electric Vehicle and Telecommunications industries. Delivers its full-rated current when the battery capacity falls sufficiently low. As the battery nears its full capacity, it automatically drops the current, providing a float-charge to prevent self-discharge of the cells. Used equipment – good condition.

- Input voltage: 108-132 Vac – design for transient voltage
- Current limit and thermal/overload protection
- Reverse polarity protection from incorrect battery connection
- Modular plug jumper converts it to 14.2V fast charger – for temporary use only
- Fan-cooled
- Multiple supplies can be connected in series or parallel for higher voltage or current
- Compatible with the IOTA IQ4 Charge Controller (not included)
- Wall-mountable
- Screw-clamp output terminals, up to AWG 4 cable
- Overall dimensions: 9.67” x 6.7” x 3.4”
- 18” AC power cord w/ pigtail ends, 0.25” qc terminals • cULus listed
- Spec sheet available online

CAT # BC-1230 $45.00 each

4A CHARGER / MAINTAINER
3-stage charger for charging and maintaining 10-40 Amp-Hour sealed lead acid batteries on motorcycles, boats, RVs and autos. Short-circuit protection, over- current protection, over-voltage protection. Includes harness with alligator clips and ring terminals.

CAT# BC-84 $44.95 each

SEALED LEAD ACID BATTERIES
Maintenance-free, rechargeable sealed lead-acid batteries. Can be used in any position and can be trickle charged for long periods of time. Excellent for alarms, communications and back-up applications. WILL NOT LEAK.

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Ah</th>
<th>Size</th>
<th>LB.</th>
<th>CAT#</th>
<th>Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>6V</td>
<td>1.2</td>
<td>3.8 x 1.0 x 2.2”</td>
<td>0.7</td>
<td>GC-612</td>
<td>8.65</td>
</tr>
<tr>
<td>6V</td>
<td>4.5</td>
<td>2.8 x 1.9 x 4.2”</td>
<td>1.8</td>
<td>GC-64</td>
<td>10.00</td>
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<tr>
<td>6V</td>
<td>7</td>
<td>6.0 x 1.3 x 3.7”</td>
<td>2.9</td>
<td>GC-67</td>
<td>16.00</td>
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<tr>
<td>6V</td>
<td>12</td>
<td>6.0 x 2.0 x 3.8”</td>
<td>4.1</td>
<td>GC-610</td>
<td>21.50</td>
</tr>
<tr>
<td>12V</td>
<td>1.2</td>
<td>3.8 x 1.7 x 2.1”</td>
<td>1.3</td>
<td>GC-1212</td>
<td>12.50</td>
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<tr>
<td>12V</td>
<td>2.3</td>
<td>7.0 x 1.4 x 2.5”</td>
<td>2.2</td>
<td>GC-2123</td>
<td>15.75</td>
</tr>
<tr>
<td>12V</td>
<td>3.4</td>
<td>5.3 x 2.6 x 2.4”</td>
<td>3.2</td>
<td>GC-1234</td>
<td>21.00</td>
</tr>
<tr>
<td>12V</td>
<td>5</td>
<td>3.5 x 2.8 x 4.2”</td>
<td>3.1</td>
<td>GC-125</td>
<td>17.50</td>
</tr>
<tr>
<td>12V</td>
<td>7.5</td>
<td>5.9 x 2.6 x 3.9”</td>
<td>5.0</td>
<td>GC-1270</td>
<td>23.50</td>
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<tr>
<td>12V</td>
<td>12</td>
<td>5.9 x 3.9 x 4.0”</td>
<td>8.4</td>
<td>GC-1214</td>
<td>43.00</td>
</tr>
<tr>
<td>12V</td>
<td>18</td>
<td>7.1 x 3.0 x 6.6”</td>
<td>12</td>
<td>GC-217</td>
<td>59.00</td>
</tr>
</tbody>
</table>

BATTERIES NON-RECHARGEABLE

INDUSTRIAL ALKALINE

DURACELL® PROCELL®

AAA CELL 1.5 VOLT 1000 mAH CAT # PRC-2400 75¢ each

AA CELL 1.5 VOLT 2100 mAH CAT # PRC-1500 75¢ each

C CELL 1.5 VOLT 7000 mAH CAT # PRC-1400 $ 1.75 each

D CELL 1.5 VOLT 14000 mAH CAT # PRC-1300 $1.75 each

9 VOLT BATTERY 565 mAH CAT # PRC-1604 $ 2.75 each

ALKALINE BATTERIES

6V 4LR44, L1325, 28A, A544, PX28A. 25mm long x 13mm diameter.

CAT# BAT-44 $2.00 ea. • 5 for $1.75 ea.

12V 27A MN27. For remote controls, lighters and other electronic devices. Also known as G27A / MN27A / A27 / L828 / EL812 / EL-812 / CA22 / VR22 / CN22 / CN23A / Bronica B-1. 0.3” dia. x 1.08” long.

CAT# BAT-27 $1.75 each

12V 0.41” dia. x 1.13” long cylindrical cell used in keychain alarm remotes and photo apps. CAT # BAT-12 $1.25 each • 10 for $10.00
1.5V BUTTON CELLS

**AG-13** 11.5mm diameter x 5.5mm.  
**CAT# BAT-7** 75¢ each • 10 for $5.00

**AG10/L1131** L1131. Cross to LR54, 189, RW89, AG10. 11.6mm diameter x 3mm high.  
**CAT# BAT-11** 75¢ each • 10 for $5.00 each

**AG-3** Cross to AG-3, 392A, SR41, CX41, LR41W & others. 6.8mm diam x 2.6mm. Silver oxide.  
**CAT# BAT-3** 50¢ each • 10 for $4.00 each

**SG-4** replaces AG-4, 626A, 377A, CX66W & others. 6.8mm diam x 2.6mm. Silver oxide.  
**CAT# BAT-4** 95¢ each • 10 for 65¢ each

**386S** (silver oxide) replaces SG12/ G12/ SR43/ 386/ 548/6/RW24, 44 button cell.  
0.45” diameter x 0.15” thick. For watches, cameras, games etc.  
**CAT # BAT-8** 95¢ each • 10 for $7.00

3V LITHIUM BUTTON CELLS

Lithium batteries have a very long shelf life, typically 10 years or more. These are not rechargeable.

**CR1220.** 40 mAh. 12.5mm diam x 2mm thick.  
**CAT# LBAT-62** $1.50 each

**CR1616.** 50 mAh. 16mm diam x 1.6mm thick.  
**CAT# LBAT-28** $1.00 each

**CR1632.** 3 volt. 16mm diam x 3.2mm thick.  
**CAT# LBAT-63** $1.00 each

**CR1620.** 70 mAh. 16mm diam x 2mm thick.  
**CAT# LBAT-58** 85¢ each • 10 for 75¢ each

**CR2016.** 75 mAh. 0.787” diam x 0.06” thick.  
**CAT# LBAT-21** 75¢ each  
10 for $6.50 • 100 for $45.00

**CR2025.** 150 mAh. 0.8” diam x 0.1” thick.  
**CAT# LBAT-44** $1.00 ea. • 10 for 75¢ ea.

**CR2032.** 180 mAh. 3 volt. 180 mAh. 0.8” diam.  
**CAT # LBAT-20** $1.00 each  
10 for $8.50 • 100 for $70.00

**BR2335.** 300 mAh. 23mm x 3.5mm.  
**CAT# LBAT-64** $3.50 each

**CR2450.** 560 mAh. 0.96” diam x 0.19” thick.  
**CAT# LBAT-52** $3.50 each

**CR2430.** 620 mAh. 24mm diam x 3mm high.  
**CAT# LBAT-2430** $1.90 each

COIN CELL HOLDERS, PC LEADS

<table>
<thead>
<tr>
<th>Dia.</th>
<th>CAT#</th>
<th>Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>20mm</td>
<td>BH-21</td>
<td>$1.00</td>
</tr>
<tr>
<td>20mm top load</td>
<td>BH-25</td>
<td>75¢ each</td>
</tr>
<tr>
<td>24.5mm two cells</td>
<td>BH-222</td>
<td>$1.25 each</td>
</tr>
<tr>
<td>25mm</td>
<td>BH-23</td>
<td>$1.00</td>
</tr>
</tbody>
</table>

LITHIUM BATTERIES

**LITHIUM BATTERY CR123A** 3V, 1300 mAh. Long-life power source used in high-performance flashlights, cameras and digital electronics. 1.34” long x 0.65” diameter. Replaces: Energizer EL123APB2, Duracell DL202, Panasonic CR123A, Kodak K123LA, GE Sanyo CR123A.  
**CAT# LBAT-123** $2.65 ea. • 10 for $2.50 ea.

**3.6V 16.5AH LITHIUM BATTERY.**  
ENCLOSED  
Made by or for Honeywell for airline use, these appear to be Tadiran Lithium thionyl chloride (Li/SOC12) batteries enclosed in a rugged plastic enclosure with a 3-contact female connector (0.1” centers) on a 1.5” lead. 3” x 1.5” x 1.5”. Non-rechargeable cells designed for applications that require a long shelf life and high-current draw.  
Notes: 2017 Date Code --- Shelf life of 10 years (2027). These batteries cannot be shipped by air. Ground shipment only.  
**CAT # LBAT-36A** $4.00 ea. • 10 for $3.75 each

BATTERY TESTER

**SE BT20.** Test AAA, AA, C, D, 9V and button cell batteries. Features easy-to-read, color-coded reading meter. Separate scale for button cells. 4-3/8” x 2-3/8”.  
**CAT# BC-22** $5.95 each

BATTERY LEVEL METER

Monitor battery usage in lead-acid and lithium-ion batteries. LCD displays percentage of voltage remaining in numerical and graphic format. Designed for use with 12, 24, 36 or 48V lead-acid batteries or 3 to 15 cell (8-63V) lithium-ion batteries. Battery symbol flashes when level reaches 5%. Black digits with blue backlight. Display size: 1.7” x 0.4”. Includes instructions.  
**CAT# BT-3** $7.75 each

LI-PO BATTERY LEVEL METER

Prevent complete battery drain, increase battery life and preserve performance with this Li-Po battery voltage tester with low voltage buzzer alarm. Instantly outputs the voltage of individual cells and the total voltage of the battery pack to the digital LED meter by simply connecting to battery balance plug. Also onboard is a loud buzzer with flashing LED to indicate when the voltage of any individual cell drops below the adjustable threshold. For use with 1-8S Li-Po / Li-Ion / Li-Mn / Li-Fe. Board dimensions 40 x 25 x 10mm.  
**CAT# LBT-79** $4.75 each • 10 for $3.95 each

ORDER TOLL FREE 1-800-826-5432 47
### AAA Battery Holders

<table>
<thead>
<tr>
<th># of Cells</th>
<th>CAT#</th>
<th>Termination</th>
<th>Style</th>
<th>Single</th>
<th>Double</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BH-41</td>
<td>6&quot; wire</td>
<td>Single</td>
<td>85¢</td>
<td>75¢</td>
</tr>
<tr>
<td>2</td>
<td>BH-42</td>
<td>6&quot; wire</td>
<td>Single</td>
<td>75¢</td>
<td>65¢</td>
</tr>
<tr>
<td>3</td>
<td>BH-431</td>
<td>5.5&quot; wire</td>
<td>Single</td>
<td>90¢</td>
<td>80¢</td>
</tr>
<tr>
<td>4</td>
<td>BH-44</td>
<td>6&quot; wire</td>
<td>Single</td>
<td>$1.10</td>
<td>95¢</td>
</tr>
<tr>
<td>4</td>
<td>BH-442</td>
<td>6&quot; wire</td>
<td>Double</td>
<td>95¢</td>
<td>80¢</td>
</tr>
</tbody>
</table>

### AA Battery Holders

<table>
<thead>
<tr>
<th></th>
<th>CAT#</th>
<th>Description</th>
<th>Style</th>
<th>Single</th>
<th>Double</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BH-31</td>
<td>Solder tabs</td>
<td>Single</td>
<td>75¢</td>
<td>65¢</td>
</tr>
<tr>
<td>1</td>
<td>BH-311</td>
<td>6&quot; wire</td>
<td>Single</td>
<td>75¢</td>
<td>65¢</td>
</tr>
<tr>
<td>2</td>
<td>BH-32</td>
<td>6&quot; wire</td>
<td>Single</td>
<td>85¢</td>
<td>75¢</td>
</tr>
<tr>
<td>2</td>
<td>BH-321</td>
<td>9V battery snaps</td>
<td>Double</td>
<td>85¢</td>
<td>75¢</td>
</tr>
<tr>
<td>2</td>
<td>BH-322</td>
<td>2 cells / pc leads</td>
<td>Single</td>
<td>85¢</td>
<td>75¢</td>
</tr>
<tr>
<td>2</td>
<td>BH-421</td>
<td>Solder lugs</td>
<td>Single</td>
<td>85¢</td>
<td>75¢</td>
</tr>
<tr>
<td>3</td>
<td>BH-331</td>
<td>5.5&quot; wire</td>
<td>Single</td>
<td>95¢</td>
<td>85¢</td>
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<tr>
<td>4</td>
<td>BH-342</td>
<td>6&quot; wire</td>
<td>Double</td>
<td>$1.10</td>
<td>95¢</td>
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<tr>
<td>4</td>
<td>BH-341</td>
<td>6&quot; wire</td>
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<td>95¢</td>
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<tr>
<td>4</td>
<td>BH-443</td>
<td>9V battery snaps</td>
<td>Double</td>
<td>$1.20</td>
<td>$1.00</td>
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<tr>
<td>4</td>
<td>BH-446</td>
<td>9V battery snaps</td>
<td>Double</td>
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<tr>
<td>6</td>
<td>BH-361</td>
<td>9V battery snaps</td>
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<td>$1.55</td>
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<tr>
<td>8</td>
<td>BH-38</td>
<td>9V battery snaps</td>
<td>Double</td>
<td>$2.25</td>
<td>$2.10</td>
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<tr>
<td>8</td>
<td>BH-448</td>
<td>9V battery snaps</td>
<td>Single</td>
<td>$2.30</td>
<td>$2.15</td>
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### C Battery Holders

<table>
<thead>
<tr>
<th></th>
<th>CAT#</th>
<th>Description</th>
<th>Style</th>
<th>Single</th>
<th>Double</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BH-241</td>
<td>8&quot; wire</td>
<td>Single</td>
<td>$1.90</td>
<td>$1.75</td>
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</tbody>
</table>

### D Battery Holders

<table>
<thead>
<tr>
<th></th>
<th>CAT#</th>
<th>Description</th>
<th>Style</th>
<th>Single</th>
<th>Double</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BH-145</td>
<td>wire leads</td>
<td>Single</td>
<td>70¢</td>
<td>65¢</td>
</tr>
<tr>
<td>2</td>
<td>BH-142</td>
<td>8&quot; wire leads</td>
<td>Single</td>
<td>$1.95</td>
<td>$1.75</td>
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<tr>
<td>2</td>
<td>BH-143</td>
<td>9V battery snaps</td>
<td>Single</td>
<td>$1.85</td>
<td>$1.70</td>
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<tr>
<td>4</td>
<td>BH-141</td>
<td>6&quot; wire leads</td>
<td>Single</td>
<td>$2.00</td>
<td>$1.80</td>
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<tr>
<td>4</td>
<td>BH-144</td>
<td>6&quot; wire leads</td>
<td>Single</td>
<td>$2.00</td>
<td>$1.80</td>
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</table>

### CR123A Battery Holder

<table>
<thead>
<tr>
<th></th>
<th>CAT#</th>
<th>Description</th>
<th>Style</th>
<th>Single</th>
<th>Double</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BH-123</td>
<td>PC leads</td>
<td>Single</td>
<td>80¢</td>
<td>70¢</td>
</tr>
</tbody>
</table>

### 9 Volt Battery Drawer

Easy to remove and reload standard 9V battery. Mounts in 34.5 x 24.5mm rectangular cut out. Behind-panel depth, 60mm. Flange mount. Holes on 43mm centers. Solder lug terminals.

**Cat# BH-59** $3.60 each

100 for $3.15 each

### 9 Volt Battery Snaps

**I-Type** 5" leads.

**Cat# BST-51** 3 for 99¢

100 for $28.00

**T-Type** 6" leads

**Cat# BST-61** 2 for $1.00

100 for $30.00

**Dual** 6" leads

**Cat# BH-29** 85¢ each

100 for $70.00

### 9 Volt Battery Clips

Holds one 9V battery. Nickel plated steel.

Holds battery flat.

1.04” L x 0.63” W x 0.76” H.

**Cat# BH-9H** 50¢ each

100 for 45¢ each

Holds battery edgewise.

0.68” L x 0.63” W x 1.14” H.

**Cat# BH-9V** 50¢ each

100 for 45¢ each

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**Battery holders for breadboarding**

**Leads with machined pins**

See page 80
### CABLES, CONNECTORS AND ADAPTERS

#### CABLES W/ F CONNECTORS

75 Ohm, RG-6U high-definition cable. AWG 18 solid copper-clad steel center. Double Aluminum foil shield plus 67% tinned-copper braid shield. UL-AWM style 1354 80º C, 300V.

<table>
<thead>
<tr>
<th>FEET</th>
<th>COLOR</th>
<th>CAT#</th>
<th>PRICE</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'</td>
<td>Black</td>
<td>VHR-3B</td>
<td>$1.25</td>
<td>$1.00 0.90</td>
</tr>
<tr>
<td>6'</td>
<td>Black</td>
<td>VHR-6B</td>
<td>$2.25</td>
<td>$2.00</td>
</tr>
<tr>
<td>25'</td>
<td>White</td>
<td>VHR-25W</td>
<td>$6.50</td>
<td>$6.25</td>
</tr>
<tr>
<td>50'</td>
<td>Black</td>
<td>VHR-50B</td>
<td>$8.00</td>
<td>$7.00 6.20</td>
</tr>
</tbody>
</table>

#### HDMI CABLES & ADAPTERS

State-of-the-art connectivity for HDTV sets, DVD players/recorders.

- **3’ Special**
  - CAT# HDM-3: $2.50 each
- **6’**
  - CAT# HDM-6: $8.50 each
- **10’**
  - CAT# HDM-10: $10.50 each
- **15’**
  - CAT# HDM-15: $12.00 each
- **30’**
  - CAT# HDM-30: $26.00 each

#### HDMI FEMALE-FEMALE COUPLER

Join two HDMI cables. Female to female cord coupler.
- CAT# AD-57: $6.95 each

#### HDMI MALE TO FEMALE RIGHT-ANGLE ADAPTER

For tight fits behind TVs & monitors.
- CAT# AD-62: $4.50 each

#### DISPLAY PORT CABLES

**MALE TO MALE**

Connect a DisplayPort (DP, DP++, DisplayPort++) equipped computer to a HD monitor or projector with DisplayPort input.

- **3’**
  - CAT# DPC-3: $9.25 each
- **6’**
  - CAT# DPC-6: $10.75 each

**MALE DISPLAY PORT TO HDMI CABLE**

Connect a DisplayPort (DP, DP++, DisplayPort++) equipped computer to a HD monitor or projector with HDMI input.

- **3’**
  - CAT# HDM-DP3: $17.50 each
- **6’**
  - CAT# HDM-DP6: $18.75 each
- **10’**
  - CAT# HDM-DP10: $21.35 each

### COAX CONNECTORS

#### F CONNECTORS & ADAPTERS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>PRICE</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-56R</td>
<td>4 for $1.20</td>
<td>$26.00</td>
</tr>
<tr>
<td>FTO-56R</td>
<td>4 for $1.20</td>
<td>$26.00</td>
</tr>
<tr>
<td>FTO-59R</td>
<td>4 for $1.00</td>
<td>$20.00</td>
</tr>
<tr>
<td>FTC-6</td>
<td>75¢ each</td>
<td>$58.00</td>
</tr>
</tbody>
</table>

- Push-on F-59. Makes threaded F-connector into a quick connect
- POF-SW: 90¢ each $75.00

#### RIGHT-ANGLE CONNECTOR

- R-36
- Right-angle F connector: $1.95 each $170.00

- 75 ohm terminator
  - FTER: 3 for $1.00 $26.00

- F-61. Chassis mount female
  - F-61: 40¢ each $26.00

- Splicer, female. Connects 2 male connectors
  - F-81: 4 for $1.00 $20.00

- Splicer, male. Connects 2 female connectors
  - F-71: $1.00 each

#### COMPRESSION TOOL KIT

Includes a crimping tool, a coax cable stripper and 20 compression F-connectors for RG6 coaxial cable. More info online.
- CAT# CTK-6: $21.95 each

### BNC CONNECTORS

#### MALE CRIMP-ON

3-piece

<table>
<thead>
<tr>
<th>CAT#</th>
<th>PRICE</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNC-59</td>
<td>RG-59/62 Cable</td>
<td>1.35</td>
<td>1.20</td>
</tr>
<tr>
<td>BNC-6</td>
<td>RG-6</td>
<td>.85</td>
<td>.70</td>
</tr>
<tr>
<td>BNC-58</td>
<td>RG-58 Cable</td>
<td>1.00</td>
<td>.90</td>
</tr>
</tbody>
</table>

#### MALE TWIST-ON

UG-6TW: RG-6 Cable: $1.00 .85 .70

#### BNC JACK ISOLATED PANEL MOUNT CONNECTOR

3/8’’ diameter nylon threaded feed-thru bushing
- CAT# BNC-148: $1.85 each 10 for $1.50 each

#### BNC CONNECTOR, CHASSIS MOUNT FEMALE

- CAT# BNC-1094: $2.00 each 10 / $1.90 ea. • 100 / $1.75 ea.
### BNC CABLES

#### 50 OHM, RG-58 MALE-MALE

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 foot</td>
<td>CBL-27</td>
<td>4.00</td>
<td>3.50</td>
<td>3.25</td>
</tr>
<tr>
<td>6 foot</td>
<td>CBL-28</td>
<td>4.00</td>
<td>3.50</td>
<td>3.25</td>
</tr>
<tr>
<td>15 foot</td>
<td>CBL-29</td>
<td>5.25</td>
<td>5.00</td>
<td>4.75</td>
</tr>
<tr>
<td>25 foot</td>
<td>CBL-35</td>
<td>7.00</td>
<td>6.50</td>
<td></td>
</tr>
<tr>
<td>50 foot</td>
<td>CBL-45</td>
<td>8.65</td>
<td>8.30</td>
<td>7.50</td>
</tr>
</tbody>
</table>

#### 75 OHM, RG-59 MALE-MALE

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 foot</td>
<td>CBL-30</td>
<td>3.75</td>
<td>3.50</td>
<td>3.20</td>
</tr>
<tr>
<td>15 foot</td>
<td>CBL-157</td>
<td>2.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 foot</td>
<td>CBL-35</td>
<td>6.00</td>
<td>5.75</td>
<td></td>
</tr>
</tbody>
</table>

### BNC ADAPTERS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>UG-914</td>
<td>.90</td>
<td>.75</td>
<td>.60</td>
</tr>
<tr>
<td>BNC COUPLER</td>
<td>thru chassis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UG-492</td>
<td>2.10</td>
<td>1.75</td>
<td>1.40</td>
</tr>
<tr>
<td>UG-491A/U</td>
<td>FEMALE COUPLER</td>
<td>Males both ends</td>
<td></td>
</tr>
<tr>
<td>BNC-BNC</td>
<td>1.80</td>
<td>1.50</td>
<td>1.30</td>
</tr>
<tr>
<td>UG-306</td>
<td>RT. ANGLE ADAPTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UG-306</td>
<td>2.75</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>BNC-T</td>
<td>1.50</td>
<td>1.25</td>
<td>1.00</td>
</tr>
<tr>
<td>BNC-T ADAPTER</td>
<td>(3 female fittings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BNC-T2</td>
<td>2.10</td>
<td>1.75</td>
<td>1.40</td>
</tr>
<tr>
<td>50 OHM BNC TERMINATOR</td>
<td>With tether chain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BNC-50C</td>
<td>1.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 OHM BNC TERMINATOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BNC-75</td>
<td>1.20</td>
<td>1.00</td>
<td>.90</td>
</tr>
</tbody>
</table>

### AUDIO, POWER, SIGNAL, PLUGS AND JACKS

#### RCA PLUGS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHIELDED, METAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRP</td>
<td>1.00</td>
<td>.85</td>
<td>.75</td>
</tr>
<tr>
<td>REDUCER</td>
<td>for RG-58 cable (Fits PL-259)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UG-175</td>
<td>1.25</td>
<td></td>
<td>1.10</td>
</tr>
<tr>
<td>MALE COUPLER</td>
<td>PL-258</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UHF-UHF</td>
<td>1.50</td>
<td>1.25</td>
<td>1.10</td>
</tr>
<tr>
<td>SO-239</td>
<td>CHASSIS MOUNT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO-239</td>
<td>2.00</td>
<td>1.80</td>
<td>1.60</td>
</tr>
</tbody>
</table>

#### RCA JACKS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECONOMY - 6mm mounting hole</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCMJ</td>
<td>.40</td>
<td>.35</td>
<td>.25</td>
</tr>
<tr>
<td>IN-LINE METAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIRJ</td>
<td>.90</td>
<td>.80</td>
<td>.70</td>
</tr>
<tr>
<td>With N.C. switch. Plain bushing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCJ-65</td>
<td>.20</td>
<td>.15</td>
<td>.10</td>
</tr>
<tr>
<td>3.5mm PLUGS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MONO, PLASTIC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMP</td>
<td>.85</td>
<td>.75</td>
<td>.60</td>
</tr>
<tr>
<td>MONO, PLASTIC -- SPECIAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMP-35</td>
<td>.70</td>
<td>.60</td>
<td>.50</td>
</tr>
<tr>
<td>MONO, METAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMP</td>
<td>1.00</td>
<td>.85</td>
<td>.70</td>
</tr>
<tr>
<td>AMPHENOL, MONO, DIECAST</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMP-2</td>
<td>3.28</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>STEREO, PLASTIC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMP</td>
<td>1.25</td>
<td>1.15</td>
<td>.95</td>
</tr>
<tr>
<td>STEREO, METAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMPM</td>
<td>1.50</td>
<td>1.35</td>
<td>1.25</td>
</tr>
<tr>
<td>AMPHENOL, STEREO, DIECAST</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMP-3</td>
<td>3.35</td>
<td>3.15</td>
<td></td>
</tr>
<tr>
<td>4-CONDUCTOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPP-4</td>
<td>1.30</td>
<td>1.20</td>
<td></td>
</tr>
</tbody>
</table>
### 3.5mm JACKS - 2 CONDUCTOR

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5MM MONO JACK W/ SWITCH</td>
<td>Chassis mount 2-conductor jack with normally closed switch, opens when plug is inserted.</td>
<td>MMJ-S</td>
<td>.80</td>
</tr>
<tr>
<td>MONO JACK 2-conductor. 6mm diameter threaded bushing.</td>
<td></td>
<td>MMJ</td>
<td>.65</td>
</tr>
<tr>
<td>MONO PLASTIC, IN-LINE</td>
<td></td>
<td>MJI</td>
<td>.90</td>
</tr>
<tr>
<td>MONO 3.5MM JACK</td>
<td>6mm plain bushing, PC mount.</td>
<td>SMJ-8</td>
<td>.25</td>
</tr>
</tbody>
</table>

### 3.5mm JACKS - 3 CONDUCTOR

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5MM STEREO JACK W/ SWITCH</td>
<td>Chassis mount 3-conductor jack w/ n.c. switch, opens when plug is inserted.</td>
<td>SMJ-S</td>
<td>1.00</td>
</tr>
<tr>
<td>3.5MM STEREO JACK, Amphenol. Vertical PCB mount. Threaded bushing M6 x 0.5 hex nut.</td>
<td></td>
<td>MMJ-3</td>
<td>1.20</td>
</tr>
<tr>
<td>3.5MM STEREO JACK W/ SWITCHES, Amphenol. Two normally closed switches open when plug is inserted. Vertical PCB mount. Threaded bushing M6 x 0.5 hex nut.</td>
<td></td>
<td>MMJ-3S</td>
<td>1.20</td>
</tr>
<tr>
<td>STEREO 3.5MM MINI-PHONE JACK</td>
<td>6mm dia. plain (non-threaded) bushing. With two normally-closed shunts that open when plug is inserted, PC mount.</td>
<td>SMJ-7</td>
<td>.30</td>
</tr>
<tr>
<td>STEREO PLASTIC, IN-LINE</td>
<td></td>
<td>SJI</td>
<td>1.00</td>
</tr>
</tbody>
</table>

### 1/4” JACKS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphenol. Stereo, solder lug, metal nut and insert.</td>
<td>PHJS-3</td>
<td>1.37</td>
<td></td>
</tr>
<tr>
<td>Stereo. 3 PC leads. Threaded mounting bushing w/ hardware.</td>
<td>PHJS-4</td>
<td>.75</td>
<td></td>
</tr>
</tbody>
</table>

### BANANA PLUGS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>each</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED PLASTIC</td>
<td></td>
<td>.60</td>
<td>.55</td>
</tr>
<tr>
<td>BLACK PLASTIC</td>
<td></td>
<td>.60</td>
<td>.55</td>
</tr>
<tr>
<td>Heavy-duty with set screw</td>
<td>RED PLASTIC</td>
<td>BP-26R</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>BLACK PLASTIC</td>
<td>BP-26B</td>
<td>.90</td>
</tr>
<tr>
<td>DUAL-SCREW LOCKING</td>
<td>LOGICO. High quality. Plug is brass with 24K gold plating.</td>
<td>CAT# BP-28</td>
<td>$3.50 per pair</td>
</tr>
</tbody>
</table>

### DUAL STACKING BANANA PLUGS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphenol. Stereo, solder lug, metal nut and insert.</td>
<td>PHJS-3</td>
<td>1.37</td>
<td></td>
</tr>
</tbody>
</table>

### BANANA JACKS / BINDING POSTS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>color</th>
<th>each</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>BP-B</td>
<td>Black</td>
<td>1.10</td>
<td>.95</td>
</tr>
<tr>
<td>Red</td>
<td>BP-R</td>
<td>Red</td>
<td>1.10</td>
<td>.95</td>
</tr>
</tbody>
</table>

### RCA / PHONE PLUG ADAPTERS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCA jack to RCA jack</td>
<td>CAT# AD-3</td>
<td>75¢ each</td>
<td></td>
</tr>
<tr>
<td>Dual RCA Jack Couplers</td>
<td>CAT# AD-203</td>
<td>$1.50 each</td>
<td></td>
</tr>
<tr>
<td>RCA plug to RCA plug</td>
<td>CAT# AD-33</td>
<td>75¢ each</td>
<td></td>
</tr>
<tr>
<td>RIGHT-ANGLE RCA JACK ADAPTER, Gold-plated.</td>
<td>CAT# RCA-RT</td>
<td>$1.00 each</td>
<td></td>
</tr>
</tbody>
</table>

RCA plug to two RCA jacks

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCA plug to two RCA plugs</td>
<td>CAT# AD-4</td>
<td>$1.00 each</td>
<td></td>
</tr>
<tr>
<td>RCA jack to 3.5mm mono plug</td>
<td>CAT# RCA-3.5</td>
<td>75¢ each</td>
<td></td>
</tr>
</tbody>
</table>
### 3.5mm stereo plug to 1/4" stereo jack

- **CAT# ADMP-2** 75¢ each
- **CAT# ADMP-4** 75¢ each
- **CAT# AD-21** $1.75 each
- **CAT# AD-5** 75¢ each
- 2.5mm stereo plug to 3.5mm stereo jack

### 3.5mm mono plug to 3.5mm stereo jack

- **CAT# ADMP-4** 75¢ each

### 1/4" mono jack to RCA plug

- **CAT# 54-421** $1.00 each

### 1/4" stereo plug to 3.5mm stereo jack

- **CAT# ADMP-1** 75¢ each

### 3.5mm stereo plug to 2 RCA jacks

- **CAT# AD-18** $1.25 each
- **CAT# AD-66** $1.50 each

### 3.5mm stereo plug to 2 3.5mm stereo jacks

- **CAT# CB-52** $1.25 each

### 3.5mm stereo plug to 1/4" stereo jack

- **CAT# ADMP-2** 75¢ each

### 1/4" mono jack to RCA plug

- **CAT# 54-421** $1.00 each

### 1/4" stereo plug to 3.5mm mono jack

- **CAT# ADMP-4** 75¢ each

### 3.5mm stereo plug to 2 RCA plugs

- **CAT# AD-18** $1.25 each

### 1/4" stereo plug to 2 RCA plugs

- **CAT# AD-66** $1.50 each

### 3-PIN XLR CONNECTORS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHASSIS MOUNT FEMALE</td>
<td></td>
<td>1.90</td>
<td>1.89</td>
</tr>
<tr>
<td>MIKE-3CF</td>
<td>2.00</td>
<td>1.75</td>
<td>1.50</td>
</tr>
<tr>
<td>CHASSIS MOUNT MALE</td>
<td></td>
<td>1.90</td>
<td>1.89</td>
</tr>
<tr>
<td>MIKE-3CM</td>
<td>1.75</td>
<td>1.50</td>
<td>1.25</td>
</tr>
</tbody>
</table>

### IN-LINE XLR CONNECTORS

| MIKE-3F | 2.50 | 2.35 | 2.00 |
| MIKE-3F, Amphenol AC3F XLR-3F | 3.75 |
| MIKE-3M | 2.00 | 1.80 | 1.60 |
| MIKE-3M, Amphenol AC3M XLR-3M | 3.25 |

### MICROPHONE CABLE

1/4" PLUG TO XLR JACK

- **CAT# CB-289** $6.25 $4.75 each

### SCREW-LOCK CONNECTORS --- 4 CONDUCTOR

#### 4-PIN MALE-FEMALE PAIR

Solid, screw-together connection. Panel-mount female with threaded bushing. Mounts in 0.61" (15mm) diameter hole. Solder-cup connections and cable clamp for up to 0.22" diameter cable.

- **CAT# CON-434** $3.50 pair

### 4-COND. TWIST-LOCK MIC CONNECTOR WITH COIL CORD

Coil cord stretches to 6 ft. Terminated with 4-contact female microphone connector. Connects to three insulated conductors and copper drain wire. 6mm od. Removed from new equipment.

- **CAT# CB-232** $4.95 each

### CABLES WITH 1/4" PHONE PLUGS

#### MONO 1/4" PLUGS BOTH ENDS

- **10' SPECIAL**
  - **CAT# MCB-10** $2.75 each • 10 for $2.50 each
- **25' CABLE**
  - **CAT# MCB-25** $4.50 each • 10 for $4.25 each

#### STEREO 1/4" PLUGS BOTH ENDS

- **6' CABLE**
  - **CAT# MCB-6S** $4.00 each • 10 for $3.60 each
- **15' CABLE**
  - **CAT# MCB-15S** $6.00 each • 10 for $5.40 each

### 5-PIN DIN PLUGS/JACKS 240°

- **5-PIN DIN PLUG**
  - **CAT# DIN-524** $1.00 each
- **5-PIN DIN SOCKET**
  - **CAT# DIN-524C** $1.25 each

### 5-PIN DIN PLUGS/JACKS 180°

<table>
<thead>
<tr>
<th>CAT#</th>
<th>10</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALE PLUG DIN-5</td>
<td>1.25</td>
<td>1.10</td>
</tr>
<tr>
<td>FEMALE JACK DIN-5SC</td>
<td>1.00</td>
<td>.80</td>
</tr>
<tr>
<td>5 PIN JACK, CHASSIS MOUNT DIN-5C</td>
<td>1.60</td>
<td>1.45</td>
</tr>
<tr>
<td>5 PIN DIN JACK, VERTICAL, SNAP-IN DIN-5CS</td>
<td>.55</td>
<td>.40</td>
</tr>
</tbody>
</table>

### 8-PIN IN-LINE DIN SOCKET, 180°

Will mate with 5-pin, 180° DIN plug

- **CAT# DIN-80F** 75¢ each

### 2.5MM PLUG

#### MONO, PLASTIC

- **CAT# PMMP** 40¢ each
  - 10 for 35¢ each • 100 for 30¢ each

---

52 30 DAY MONEY-BACK GUARANTEE
2.5MM JACKS
Mono. 4mm (0.15") threaded bushing. Normally-closed shunt (shunt opens when plug is inserted).
Solder/pc terminals.
CAT# MJS-2 50¢ each 10 for 45¢ each • 100 for 35¢ each
Mono. 4mm (0.15") threaded bushing. Normally-closed shunt (shunt opens when plug is inserted).
Solder terminals.
CAT# MJS-3 2 for $1.00 100 for 35¢ each
Mono. 4mm (0.15") threaded bushing. Chassis mount 2-conductor jack.
CAT# SMMJ 65¢ each 10 for 57¢ each • 100 for 46¢ each
For 3-conductor stereo, 2.5mm sub-mini phone plug. 5mm diameter, plain, non-threaded bushing. P.C. leads.
CAT# MJS-1 4 for $1.00 • 100 for $15.00

3.5MM STEREO PLUG TO 2 RCA PLUGS
Commonly used to connect portable audio players to home stereos and to connect speakers to computers.

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>1-9</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 feet</td>
<td>CB-42</td>
<td>1.50</td>
<td>1.25</td>
<td>1.00</td>
</tr>
<tr>
<td>6 feet</td>
<td>CB-390</td>
<td>1.75</td>
<td>1.40</td>
<td>1.20</td>
</tr>
<tr>
<td>12 feet</td>
<td>CB-406</td>
<td>2.25</td>
<td>2.05</td>
<td>1.55</td>
</tr>
</tbody>
</table>

CABLES W/ 3.5MM STEREO PLUGS
For connecting iPads, MP3 players and other audio devices.

MOLDED PLASTIC PLUGS

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>1-9</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 foot</td>
<td>CB-424</td>
<td>$1.20</td>
<td>$1.05</td>
<td>90¢</td>
</tr>
<tr>
<td>3 foot</td>
<td>CB-452</td>
<td>$1.35</td>
<td>$1.20</td>
<td>95¢</td>
</tr>
<tr>
<td>6 foot</td>
<td>CB-121</td>
<td>$1.50</td>
<td>$1.25</td>
<td>$1.05</td>
</tr>
<tr>
<td>12 foot</td>
<td>CB-389</td>
<td>$2.00</td>
<td>$1.65</td>
<td>$1.35</td>
</tr>
</tbody>
</table>

6' CABLE W/ 3.5MM STEREO PHONE PLUG
3-conductor, 24 AWG cable. Right-angle 3.5mm stereo phone plug. Strain-relief at end.
CAT# CB-220 2 for $1.50 • 100 for 50¢ ea.
5 foot, flexible, good-quality cable, made for Motorola (MOT# SKN6393A). Straight plug on one end, right-angle on other.
CAT# CB-453 $1.00 each 50 for 75¢ each • 100 for 60¢ each

SINGLE RCA CABLES
Shielded one conductor audio cable with RCA style phone plug both ends.

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>1-9</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 feet</td>
<td>ACB-6</td>
<td>1.10</td>
<td>1.00</td>
<td>.85</td>
</tr>
<tr>
<td>10 feet</td>
<td>ACB-10</td>
<td>1.50</td>
<td>1.30</td>
<td>1.10</td>
</tr>
<tr>
<td>25 feet</td>
<td>ACB-25</td>
<td>2.50</td>
<td>2.25</td>
<td>2.00</td>
</tr>
</tbody>
</table>

EXTENSION CORDS, 3.5MM STEREO PHONE PLUGS
3.5mm stereo plug to 3.5mm stereo jack.

<table>
<thead>
<tr>
<th>6' CABLE</th>
<th>CAT#</th>
<th>1-9</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT# CB-333</td>
<td>$1.60</td>
<td>$1.45</td>
<td>10 for $1.25 each</td>
<td></td>
</tr>
<tr>
<td>CAT# CB-371</td>
<td>$2.00</td>
<td>$1.80</td>
<td>10 for $1.60 each</td>
<td></td>
</tr>
</tbody>
</table>

25' CABLE
CAT# CB-188 $3.50 each

Y-CABLE, 6 INCH
3.5mm stereo phone plug to two 3.5mm stereo phone jacks.
CAT# AD-54 $1.35 each

CABLES W/ 3.5MM MONO PLUGS
Shielded cables with molded plugs.

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>1-9</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5 MM MONO PLUG BOTH ENDS</td>
<td>CB-352</td>
<td>$1.60</td>
<td>$1.45</td>
<td>10 for $1.25 each</td>
</tr>
</tbody>
</table>

SHIELDED AUDIO RCA CABLES
Shielded cables with molded color-coded RCA pin plugs both ends. Used for stereo/audio hook-up.

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>1-9</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 FT</td>
<td>DCC-36</td>
<td>$1.05</td>
<td>90¢</td>
<td>80¢</td>
</tr>
<tr>
<td>6 FT</td>
<td>DCC-72</td>
<td>$1.40</td>
<td>$1.20</td>
<td>95¢</td>
</tr>
<tr>
<td>12 FT</td>
<td>DCC-144</td>
<td>$2.50</td>
<td>$2.00</td>
<td>$1.50</td>
</tr>
<tr>
<td>25 FT</td>
<td>DCC-300</td>
<td>$3.50</td>
<td>$3.00</td>
<td>$2.60</td>
</tr>
<tr>
<td>50 FT</td>
<td>DCC-600</td>
<td>$7.35</td>
<td>$7.00</td>
<td>$6.75</td>
</tr>
</tbody>
</table>
COAX POWER PLUGS AND JACKS

RETROFIT 2.1MM PLUG & SOCKET

Screw terminals provide an easy, no-solder way to add a 2.1mm coax plug or jack.

Plug CAT# SDP-P $2.00 ea.
Socket CAT# SDP-S $2.20 ea.

COAX POWER PLUGS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCJ-21</td>
<td>1.75</td>
<td>1.60</td>
<td>1.45</td>
</tr>
</tbody>
</table>

--- Q uantity Special!

2.1mm coax power jack on 15" leads. Comparable to our CAT# DCJ-25. Shunt pin not wired, but available. Threaded bushing mount. Nut included. Molex-type connector on opposite end.

CAT# DCJ-25 $1.50 each

COAX POWER PLUGS, RIGHT-ANGLE

Right angle coax power plugs with solder terminals. 0.22" x 0.12" cable opening.

2.1mm I.D. – 5.5mm O.D.
CAT# RCP-21 $1.95 each

2.5mm I.D. – 5.5mm O.D.
CAT# RCP-25 $1.95 each

1.7MM COAX POWER JACK & PLUG

CUI Inc # PJ-018.
Right angle 1.7mm coax power jack with a normally closed shunt that opens when plug is inserted. Fits our CAT# DCP-37. PC pins.

CAT# DCJ-37 $1.00 each

1.7MM COAX POWER PLUG

CUI Inc # PP3-013.
Coax power plug, 1.7mm ID x 4mm OD. Fits our CAT# DCJ-37.

CAT# DCP-37 $1.85 each

2.1MM COAX POWER JACKS

Mates with CAT# DCSID. All jacks have a normally closed shunt that opens when plug is inserted.

CAT# 1-9 | 10-99 | 100+ |
|--------|-------|------|
| panel mount. Threaded bushing fits in 0.45" mounting hole.
| DCJ-36 | 1.10 | 1.00 | .85 |

--- Q uantity Special!

2.1mm male connectors. 12" length.

CAT# CB-210 $4.50 each

2.1MM COAX POWER PLUG WITH 9V BATTERY SNAP

2.1mm ID coax plug on two 4" wire leads terminate to 9 volt T-type battery snap.

CAT# CB-239 $1.30 each

2.5MM COAX POWER JACKS

Mates with CAT# DCLID. All jacks have a normally closed shunt that opens when plug is inserted.

CAT# 1-9 | 10-99 | 100+ |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel mount. DCJ-25</td>
<td>2.20</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Solder lugs. DCJ-34 .60 .55 .45

PC pins. DCJ-33 2 for 90¢ • 100 / 30¢ ea.

2.5mm coax power jack on 15" leads. Comparable to our CAT# DCJ-25. Shunt pin not wired, but available. Threaded bushing mount. Nut included. Molex-type connector on opposite end.

CAT# DCJ-252 $1.50 each

1.3MM SOCKET

Normally closed shunt opens when plug is inserted. Fits coax plugs with 3.5mm od, 1.3mm id.

CAT# DCJ-27 35¢ each

10 for 30¢ each • 100 for 20¢ each

CABLES W/ 2.1MM PLUGS & SOCKETS

Plug. 10" color-coded leads.
CAT# CB-213 $1.65 each

Jack. 10" color-coded leads.
CAT# CB-209 $1.75 each

Male/female 2.1mm coax power connectors. Molded on 9" length of 22AWG stranded zip cord.
CAT# CB-2118 $3.25 pair

Y-Adapter. Use one power source for two devices. Two plugs to one jack.
CAT# CB-207 $2.25 each • 100 for $2.00 each

Power four cameras or other devices with a single power supply. One 2.1mm female coax connector to four

2.1mm male connectors. 12" length.

CAT# CB-210 $4.50 each

Y-Adapter. Use one power source for two devices. Two plugs to one jack.
CAT# CB-207 $2.25 each • 100 for $2.00 each

Power four cameras or other devices with a single power supply. One 2.1mm female coax connector to four

2.1mm male connectors. 12" length.

CAT# CB-210 $4.50 each

2.1MM ID COAX POWER PLUG WITH 9V BATTERY SNAP

2.1mm ID coax plug on two 4" wire leads terminate to 9 volt T-type battery snap.

CAT# CB-239 $1.30 each

10 for $1.15 each
**DC POWER PLUG CONVERTERS**

If your wall transformer doesn’t have the correct coax power plug, these adapters may help. They will change the plug size, not the polarity. If you need to change polarity, cut off the plug, reverse the wires and respole it.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Converts</th>
<th>Price</th>
<th>20+</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCA-1</td>
<td>2.5mm to 2.1mm</td>
<td>$1.25</td>
<td>$1.10</td>
</tr>
<tr>
<td>DCA-2</td>
<td>2.1mm to 2.5mm</td>
<td>$2.00</td>
<td>$1.80</td>
</tr>
<tr>
<td>DCA-3</td>
<td>2.1mm to 1.3mm</td>
<td>$2.75</td>
<td>$2.50</td>
</tr>
<tr>
<td>DCA-4</td>
<td>2.1mm to 1.7mm</td>
<td>$3.00</td>
<td>$2.75</td>
</tr>
<tr>
<td>DCA-6</td>
<td>2.1mm to 3.5mm phone plug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCA-7</td>
<td>2.1mm coax plugs to 2.5mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any of the adapters above $2.75 each

**RC MODEL CONNECTORS**

**2 CONDUCTOR, RC BATTERY CONNECTORS**

plug | socket
--- | ---
15 Amp, two-conductor locking nylon connectors. Industry standard for remote control cars. 5.5” silicon-rubber-insulated leads (16 AWG) are very flexible and heat-resistant.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Each</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-210P</td>
<td>1.25</td>
<td>1.10</td>
<td>0.95</td>
</tr>
<tr>
<td>CON-210S</td>
<td>1.25</td>
<td>1.10</td>
<td>0.95</td>
</tr>
</tbody>
</table>

**BEC-JST TRANSMITTER CONNECTORS**

Red & black leads. Flexible silicone rubber insulation. 22 AWG stranded wire. BEC-JST Male, battery end, 6” leads.

CAT# CON-230P | $1.75 each • 20 for $1.50 each
Female – Motor end, 6” leads.
CAT# CON-230S | $1.75 each • 20 for $1.50 each

**2-CONDUCTOR MINI BATTERY CONNECTORS**

With 7.5” red and black leads. Frequently used on rechargeable battery packs like those found in cordless phones. Mating headers for pc mounting also available.

**CONNECTOR, 0.1” SPACING (Beige)**

<table>
<thead>
<tr>
<th>CAT#</th>
<th>pins</th>
<th>AWG</th>
<th>spacing</th>
<th>price</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC-2</td>
<td>2</td>
<td>18</td>
<td>0.156”</td>
<td>$1.00 per set</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>50g</td>
<td>each</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>35g</td>
<td>each</td>
<td></td>
</tr>
</tbody>
</table>

0.1” HEADER, PC MOUNT

<table>
<thead>
<tr>
<th>CAT#</th>
<th>pins</th>
<th>AWG</th>
<th>spacing</th>
<th>price</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBH-2</td>
<td>30g</td>
<td>22</td>
<td>0.1”</td>
<td>$1.10 per set</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>25g</td>
<td>each</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>15g</td>
<td>each</td>
<td></td>
</tr>
</tbody>
</table>

**CONNECTOR, 2MM SPACING (White)**

<table>
<thead>
<tr>
<th>CAT#</th>
<th>pins</th>
<th>AWG</th>
<th>spacing</th>
<th>price</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC-1</td>
<td>60g</td>
<td>18</td>
<td>0.156”</td>
<td>$1.60 per set</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>50g</td>
<td>each</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>35g</td>
<td>each</td>
<td></td>
</tr>
</tbody>
</table>

2MM HEADER, PC MOUNT

<table>
<thead>
<tr>
<th>CAT#</th>
<th>pins</th>
<th>AWG</th>
<th>spacing</th>
<th>price</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBH-1</td>
<td>30g</td>
<td>18</td>
<td>0.156”</td>
<td>$2.00 per set</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>25g</td>
<td>each</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>15g</td>
<td>each</td>
<td></td>
</tr>
</tbody>
</table>

**3-CONDUCTOR SERVO EXTENSION**

Universal connectors fit both Futaba and Hi-Tec/JR(S). Male to female. Very flexible, 22 AWG stranded wire. Black, red, white silicone rubber insulation.

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>Price</th>
<th>20+</th>
</tr>
</thead>
<tbody>
<tr>
<td>4”</td>
<td>CON-404</td>
<td>$1.25</td>
<td>$1.10</td>
</tr>
<tr>
<td>8”</td>
<td>CON-408</td>
<td>$2.00</td>
<td>$1.80</td>
</tr>
<tr>
<td>12”</td>
<td>CON-412</td>
<td>$2.75</td>
<td>$2.50</td>
</tr>
<tr>
<td>24”</td>
<td>CON-424</td>
<td>$3.00</td>
<td>$2.75</td>
</tr>
</tbody>
</table>

12” long. Universal, Fits both Futaba and Hi-Tec/Jr connectors. Brown, red, orange leads.

CAT# CON-412B | $2.85 ea • 10/$2.50 ea

**MULTI-PIN CONNECTORS**

**LOCKING CONNECTORS**

Mating pairs of polarized multi-pin connectors with wire leads. Pins on 2.5mm centers. Black nylon housing with release on male side of connector. Female side of connector can be snap-mounted into a rectangular chassis mounting hole. 12” color-coded leads, 22 AWG stranded wire on both connectors.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>PINS</th>
<th>EACH</th>
<th>10</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-240</td>
<td>2</td>
<td>1.35</td>
<td>1.20</td>
<td>.95</td>
</tr>
<tr>
<td>CON-340</td>
<td>3</td>
<td>1.55</td>
<td>1.40</td>
<td>1.15</td>
</tr>
<tr>
<td>CON-440</td>
<td>4</td>
<td>2.25</td>
<td>2.00</td>
<td>1.50</td>
</tr>
<tr>
<td>CON-540</td>
<td>5</td>
<td>2.50</td>
<td>2.20</td>
<td>1.95</td>
</tr>
<tr>
<td>CON-640</td>
<td>6</td>
<td>2.80</td>
<td>2.40</td>
<td>2.05</td>
</tr>
</tbody>
</table>

**PRE-WIRED CONNECTORS WITH MATING HEADERS**

Nylon connectors and mating pc mount, snap-lock headers. Female socket connector is pre-wired with 11” long color-coded stranded wire.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>pins</th>
<th>AWG</th>
<th>spacing</th>
<th>price</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-232</td>
<td>18</td>
<td>0.156”</td>
<td>$1.60 per set</td>
<td></td>
</tr>
<tr>
<td>CON-242</td>
<td>2</td>
<td>1.1”</td>
<td>$1.95 per set</td>
<td></td>
</tr>
<tr>
<td>CON-233</td>
<td>3</td>
<td>0.156”</td>
<td>$1.45 per set</td>
<td></td>
</tr>
<tr>
<td>CON-243</td>
<td>4</td>
<td>0.1”</td>
<td>$1.10 per set</td>
<td></td>
</tr>
<tr>
<td>CON-234</td>
<td>5</td>
<td>0.156”</td>
<td>$1.70 per set</td>
<td></td>
</tr>
<tr>
<td>CON-244</td>
<td>6</td>
<td>0.1”</td>
<td>$1.30 per set</td>
<td></td>
</tr>
<tr>
<td>CON-236</td>
<td>7</td>
<td>0.156”</td>
<td>$2.25 per set</td>
<td></td>
</tr>
<tr>
<td>CON-238</td>
<td>7</td>
<td>0.156”</td>
<td>$3.00 per set</td>
<td></td>
</tr>
<tr>
<td>CON-2410</td>
<td>10</td>
<td>1.1”</td>
<td>$2.90 per set</td>
<td></td>
</tr>
</tbody>
</table>

**MATING CONNECTORS**

Male / female ends connected with 10” wires. All have flat pins, except CON-104 has round.

<table>
<thead>
<tr>
<th># of Cond.</th>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CON-30</td>
<td>2.40</td>
<td>2.15</td>
<td>1.95</td>
</tr>
<tr>
<td>4</td>
<td>CON-40</td>
<td>2.50</td>
<td>2.25</td>
<td>1.60</td>
</tr>
<tr>
<td>4</td>
<td>CON-104</td>
<td>3.25</td>
<td>3.00</td>
<td>2.85</td>
</tr>
<tr>
<td>6</td>
<td>CON-60</td>
<td>2.65</td>
<td>2.40</td>
<td>2.00</td>
</tr>
<tr>
<td>9</td>
<td>CON-90</td>
<td>3.00</td>
<td>2.75</td>
<td>2.35</td>
</tr>
<tr>
<td>12</td>
<td>CON-1200</td>
<td>3.70</td>
<td>3.45</td>
<td>2.85</td>
</tr>
</tbody>
</table>
SHORTING JUMPERS FOR HEADERS
Designed for use with above double and single row headers. Used to short out adjoining posts on headers.

<table>
<thead>
<tr>
<th>Positions</th>
<th>CAT#</th>
<th>1-9</th>
<th>10-99</th>
<th>100+</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>SJ-1</td>
<td>.10</td>
<td>.08</td>
<td>.07</td>
</tr>
<tr>
<td>6</td>
<td>SJ-6</td>
<td>.30</td>
<td>.25</td>
<td>.15</td>
</tr>
</tbody>
</table>

STACKABLE HEADERS, 0.1”
Mates with double row posts on 0.100” centers. 0.100” x 0.100” for 0.050” pitch cables. Press mount on standard flat ribbon cable.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CAT#</th>
<th>each</th>
<th>100+</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 pin (2 X 5)</td>
<td>RCSC-10</td>
<td>.55</td>
<td>.35</td>
</tr>
<tr>
<td>14 pin (2 X 7)</td>
<td>RCSC-14</td>
<td>.65</td>
<td>.55</td>
</tr>
<tr>
<td>16 pin (2 X 8)</td>
<td>RCSC-16</td>
<td>.75</td>
<td>.65</td>
</tr>
<tr>
<td>20 pin (2 X 10)</td>
<td>RCSC-20</td>
<td>.75</td>
<td>.65</td>
</tr>
<tr>
<td>26 pin (2 X 13)</td>
<td>RCSC-26</td>
<td>.75</td>
<td>.70</td>
</tr>
<tr>
<td>50 pin (2 X 25)</td>
<td>RCSC-50</td>
<td>1.00</td>
<td>.90</td>
</tr>
</tbody>
</table>

SNAPPABLE SIP SOCKETS, 0.10” CENTERS
Single-row, machine-contact socket. Pins on 0.10” centers.

<table>
<thead>
<tr>
<th>PINS</th>
<th>CAT#</th>
<th>EACH</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>SIP-30</td>
<td>$1.20</td>
<td>$1.05</td>
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<tr>
<td>40</td>
<td>SIP-40</td>
<td>$2.35</td>
<td>$2.05</td>
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</table>

SNAPPABLE 48-PIN DUAL-ROW MACHINED PIN SOCKET
0.10” matrix. 48 Contact (2 x 24).

<table>
<thead>
<tr>
<th>Length</th>
<th>CAT#</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.45 ea.</td>
<td>DHP-48</td>
<td>$2.45 ea.</td>
</tr>
</tbody>
</table>

JUMPER WIRES
Jumpers for light-duty breadboarding or temporary connection to header strips. Assorted colors. Sold in packs.

<table>
<thead>
<tr>
<th>Description</th>
<th>Length</th>
<th>CAT#</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>M-M 2.35”</td>
<td>JMM-60</td>
<td>$2.00 / 10 pack</td>
</tr>
<tr>
<td>Female</td>
<td>M-M 2.35”</td>
<td>JMM-60</td>
<td>$2.00 / 10 pack</td>
</tr>
<tr>
<td>Male</td>
<td>M-M 3.5”</td>
<td>JMM-217</td>
<td>$4.00 / 40 pack</td>
</tr>
<tr>
<td>Female</td>
<td>M-M 3.5”</td>
<td>JMM-217</td>
<td>$4.00 / 40 pack</td>
</tr>
<tr>
<td>Male</td>
<td>M-M 6”</td>
<td>JM6-10</td>
<td>$2.00 / 10 pack</td>
</tr>
<tr>
<td>Female</td>
<td>M-M 6”</td>
<td>JM6-10</td>
<td>$2.00 / 10 pack</td>
</tr>
<tr>
<td>Male</td>
<td>M-M 7”</td>
<td>JMM12-10</td>
<td>$3.00 / 10 pack</td>
</tr>
<tr>
<td>Female</td>
<td>M-M 7”</td>
<td>JMM12-10</td>
<td>$3.00 / 10 pack</td>
</tr>
<tr>
<td>Male</td>
<td>M-M 12”</td>
<td>JMM12-10</td>
<td>$3.00 / 10 pack</td>
</tr>
<tr>
<td>Female</td>
<td>M-M 12”</td>
<td>JMM12-10</td>
<td>$3.00 / 10 pack</td>
</tr>
</tbody>
</table>

D-SUBMINIATURE CONNECTORS

SOLDER STYLE

<table>
<thead>
<tr>
<th>SOCKET</th>
<th>PLUG</th>
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<tr>
<td>DB-9P</td>
<td>DB-9H</td>
</tr>
<tr>
<td>DB-9S</td>
<td>DB-9H</td>
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<tr>
<td>DB-15P</td>
<td>DB-15H</td>
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<tr>
<td>DB-15S</td>
<td>DB-15H</td>
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<tr>
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<td>DB-25H</td>
</tr>
<tr>
<td>DB-25S</td>
<td>DB-25H</td>
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</table>

MINI AND MICRO USB CABLES

<table>
<thead>
<tr>
<th>MINI-USB to USB</th>
<th>Length</th>
<th>CAT#</th>
<th>each</th>
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</thead>
<tbody>
<tr>
<td>3”</td>
<td>CB-422</td>
<td>2.25</td>
<td>2.10</td>
</tr>
<tr>
<td>5”</td>
<td>CB-378</td>
<td>2.95</td>
<td>2.75</td>
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</table>

<table>
<thead>
<tr>
<th>MICRO-USB to USB</th>
<th>Length</th>
<th>CAT#</th>
<th>each</th>
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</thead>
<tbody>
<tr>
<td>8”</td>
<td>CB-429</td>
<td>1.50</td>
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<td>2”</td>
<td>CB-242</td>
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</tr>
<tr>
<td>3”</td>
<td>CB-427</td>
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</tr>
<tr>
<td>4”</td>
<td>CB-446</td>
<td>2.50</td>
<td>2.25</td>
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<tr>
<td>6”</td>
<td>CB-416</td>
<td>3.25</td>
<td>3.00</td>
</tr>
<tr>
<td>10”</td>
<td>CB-417</td>
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<tr>
<td>15”</td>
<td>CB-434</td>
<td>4.00</td>
<td>3.75</td>
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<table>
<thead>
<tr>
<th>MICRO-USB to USB ADAPTER</th>
<th>Length</th>
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<th>each</th>
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<tbody>
<tr>
<td>6”</td>
<td>CB-438</td>
<td>2.95</td>
<td></td>
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</tbody>
</table>
**USB GENDER CHANGER**

A (F) to A(F)

CAT# AD-532 $2.75 each
10 for $22.50 each

**A-A USB CABLES**

For standard USB peripherals.

2’ CAT# CB-384 $2.00 ea. 10 for $15.00
10’ CAT# CB-124 $4.50 ea. 10 for $37.50

**A-B USB CABLES**

For standard USB peripherals.

3’ CAT# CB-126 $1.85 ea. 10 for $17.00
10’ CAT# CB-125 $4.50 ea. 10 for $37.50

**USB EXTENSION CABLES**

USB 2.0 A Male – Female extension cables.

3’ CAT# CB-407 $2.75 each
6’ CAT# CB-408 $3.00 each
10’ CAT# CB-409 $3.25 each

**USB CHARGER / POWER MODULE**

Input: 6-24Vdc.

Output: 5Vdc 1.75A max. Tiny DC-DC converter to charge and power devices that get their power from a USB connection. 1.05” x 0.59” x 0.34”

CAT # USB-5V $2.50 each

**USB BREAKOUT CONNECTORS**

USB connector with screw terminals. Allows you to tap into your computer or other USB device for data or power. Note: most computer USB ports provide 500mA or less.

Female CAT# USB-FS $3.00 each
Male CAT# USB-MS $3.00 each

**2.1MM CO-AX POWER PLUG TO USB CABLE**

2.1mm co-ax power plug to USB-A cable. This 4.9’ cable allows for a USB port to power a 5 VDC device that requires a 2.1 mm x 5.5 mm co-axial DC connector.

CAT # CB-245 $1.95 each

**RUGGED MINI-USB RECEPTACLE**

Amphenol Canada MUSB-E151 Right-angle pc board mount. 5 contact female connector. 1.5A current rating. Die-cast zinc alloy outer shell. Rear mount. Front gasket. Threaded mounting holes on 15mm centers. 10 x 20mm mounting faceplate.

CAT # MUSB-151 $6.00 each

---

**C-TYPE USB CABLES AND ADAPTERS**

C-type or USB-C connectors are found on many new devices including MacBook, Chromebook Pixel, Galaxy Note 7 and others.

**USB-C TO STANDARD USB CHARGE / SYNC CABLE**

Connects new Type-C devices to standard USB ports

<table>
<thead>
<tr>
<th>LENGTH</th>
<th>CAT#</th>
<th>EACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>3’</td>
<td>CB-442</td>
<td>$6.50</td>
</tr>
<tr>
<td>6’</td>
<td>CB-443</td>
<td>$7.95</td>
</tr>
</tbody>
</table>

New Item

**USB-C TO USB ADAPTER**

Type-C plug to standard USB female. Allow use of your standard USB charge and sync cables in automobiles and other devices with Type-C ports. 6.25" length.

CAT # AD-70 $6.25 each

New Item

**MICRO-USB TO USB-C ADAPTER**

Connect Micro-USB cables to Type-C ports. Micro-USB female to Type-C male.

CAT # AD-67 $4.35 each

New Item

**2-CONDUCTOR BULLET CONNECTORS**

Mating, weather-resistant polarized connectors. 12” red and black. Stranded wire leads.

10 gauge CAT# CON-321 $3.00 each
10 for $2.75 each • 100 for $2.25 each

14 gauge CAT# CON-319 $2.50 each
10 for $2.30 each • 100 for $1.95 each

18 gauge CAT# CON-320 $1.95 each
10 for $1.80 each • 100 for $1.50 each

**3-CONDUCTOR WEATHER-RESISTANT CONNECTOR**

Mating, weather-resistant polarized connectors. 12” white, yellow and brown 16 gauge stranded wire leads.

CAT # CON-330 $2.25 each

**3-POLE BULLET CONNECTOR SET**

3.5mm gold-plated bullet connectors. Polarized, tough plastic (Nylon) connectors that fit securely together. Solder cups for up to AWG12 wire. Includes sleeves to hide solder connections. 46 x 12 x 12mm.

CAT # CON-37 $3.25 set
WEATHERPACK IN-LINE CONNECTOR KITS

Pictured is 3-conductor kit WP3-(XX)

Delphi Weatherpack Connectors are environmentally sealed electrical connections designed to withstand exposure to extreme temperatures and moisture. Terminals are tin plated and have special core wings which allow crimp-only connections, eliminating the need for solder. The connector and cavity seals are triple-ribbed and made of self-lubricating silicone. Cavity plugs are available to fill unused cavities. Pin and sleeve-type terminals rated 0.5 - 16V @ 20A. Designed for automotive, marine and heavy industrial use. See our website for refills or individual connectors.

155 PIECE KIT
includes 2 each male and female connectors, 1, 2, 3, 4, 6-contact with pins, seals, plugs, insertion tool and storage box.
CAT# CKT-155
$80.00 each

1104 PIECE KIT
includes the following male and female connectors, 10 1-contact, 8 2-contact, 6 3-contact, 4 4-contact, 3 5-contact, 4 6-contact with pins, seals plugs, insertion tool & storage box.
CAT# CKT-1104
$195.00 each

CRIMP TOOL FOR WEATHERPACK CONNECTORS
Durable, hardened crimp stations and steel parallel jaws eliminate faulty crimps on a wide range of gauge wire terminations. These tools work well with our Weatherpack kits.
CAT# CT-18
$37.50 each

LOSIX CONNECTOR SET
Connector set with wires: Micro-T/B/DT
Female: 2.7” leads
Male: 1” leads
CAT# CON-860
$1.00 pair

2-CONDUCTOR RC POWER CONNECTOR
Also know as a Deans connector, this connector is frequently used with Lithium-ion battery packs in RC applications. One male, one female connector. 13 x 7mm.
CAT # CON-2D
$1.00 pair

WEATHER-RESISTANT CONNECTORS

SCREW-LOCK CONNECTORS
Male and female screw-together connectors in weather-tight plastic housings with rubber O-ring seals. VW-1 cables rated 80° with color-coded 18 AWG stranded conductors. Suitable for indoor or outdoor use.

2-CONDUCTOR – Male and female – 2.1mm coax connectors on 15” cables, stripped and tinned ends. Mates with WTC-482 extension cable.
CAT# WTC-152
$3.35 / pair

3-CONDUCTOR – Male and female connectors on 15” cables, stripped and tinned ends. Mates with WTC-483 extension cable.
CAT# WTC-153
$3.75 / pair

3-CONDUCTOR EXTENSION CABLE, 48”
CAT# WTC-483
$4.40 / pair

LCD CHARACTER DISPLAYS

Incredible Price!!!
24 CHARACTER X 1 LINE LCD
Wintek# WDC2401P-1GNNA.
Module size: 4.25” x 0.79” x 0.3”.
Display size: 3.5” x 0.4”. Built-in driver.
CAT# LCD-111
2 for $1.00
100 for 25¢ each • 500 for 23¢ each
1000 for 20¢ each

256 X 128 LCD PANEL
Hyundai # HG25504.
5.8” x 4.58” graphic display module with SED1330F onboard controller. Viewing area is 5” x 2.75”. 5 Vdc logic. 18 Vdc LCD voltage.
Includes hook-up diagram.
CAT # LCD-101
$6.00 each

SERIAL INTERFACE MODULE FOR 16 X 2 LCDS
Arduino compatible controller for 16 x 2 LCD modules. Output for LED backlight. 16-pin header solders into LCD. 42 x 19 x 8mm pc board (excluding header pins).
CAT# LCD-SI
$3.00 each

MOST ORDERS SHIPPED WITHIN 24-48 HOURS
### Integrated Circuits

#### Voltage Regulators

<table>
<thead>
<tr>
<th>CAT#</th>
<th>DESCRIPTION</th>
<th>CASE</th>
<th>each</th>
</tr>
</thead>
<tbody>
<tr>
<td>7805T</td>
<td>+5 Volt 1 AMP (LM340T-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7806T</td>
<td>+6 Volt 1 AMP (LM340T-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7809T</td>
<td>+8 Volt 1 AMP (LM340T-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7812T</td>
<td>+12 Volt 1 AMP (LM340T-12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7815T</td>
<td>+15 Volt 1 AMP (LM340T-15)</td>
<td></td>
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</tr>
<tr>
<td>78L05</td>
<td>+5 Volt 100 MA</td>
<td></td>
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<tr>
<td>78L12</td>
<td>+12 Volt 100 MA</td>
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#### Positive Regulators

<table>
<thead>
<tr>
<th>CAT#</th>
<th>DESCRIPTION</th>
<th>pins</th>
<th>ea.</th>
</tr>
</thead>
<tbody>
<tr>
<td>74HC07</td>
<td>OCT D FLIP FLOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4001Q</td>
<td>QUAD NOR GATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4013</td>
<td>FLIP FLOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4017</td>
<td>DECADE COUNTER / DIVIDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4027</td>
<td>FLIP FLOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4052</td>
<td>DIFFERENTIAL ANALOG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4068</td>
<td>8 INPUT NAND GATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4071</td>
<td>QUAD OR GATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4093</td>
<td>QUAD NAND SCHMITT TRIG.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4511</td>
<td>LATCH/DECODER/DRIVER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC14049</td>
<td>HEX INVERTING BUFFER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC14050BCP</td>
<td>HEX NON-INV. BUFF./CON.</td>
<td></td>
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</table>

#### Negative Regulators

<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
<th>pins</th>
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</thead>
<tbody>
<tr>
<td>78V12-MS</td>
<td>+12 Volt 500MA, Surface-mt.</td>
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<tr>
<td>C7J8M05</td>
<td>+5 Volt 500MA, Surface-mt.</td>
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<tr>
<td>49LV040V</td>
<td>+5 Volt 1.5 AMP</td>
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<tr>
<td>LM317MP</td>
<td>500 MA</td>
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<tr>
<td>LM2940CT-12</td>
<td>+12 Volt</td>
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<td>S81250</td>
<td>+5 Volt 100 MA</td>
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#### Adjustable Regulators

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<tbody>
<tr>
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<td>ADJ. POSITIVE (1.2-37V)</td>
<td></td>
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<tr>
<td>LM317LZ</td>
<td>ADJ. POSITIVE (1.2-37V)</td>
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<td></td>
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<tr>
<td>LM337T</td>
<td>ADJ. NEGATIVE (1.2-37V)</td>
<td></td>
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<td>LM338T</td>
<td>ADJ. POSITIVE 5 AMP</td>
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<tr>
<td>LM350T</td>
<td>ADJ. POSITIVE 3 AMP</td>
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<tr>
<td>LM2941S</td>
<td>5-20V, Surface-mount</td>
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<td>1.2-5.5V, Surface-mount</td>
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#### Logic - Surface Mount

<table>
<thead>
<tr>
<th>PIN#</th>
<th>CAT#</th>
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<tr>
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<td>74HC574</td>
<td>OCT D FLIP FLOP</td>
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<td>4001Q</td>
<td>QUAD NOR GATE</td>
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<td>4013</td>
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</tr>
<tr>
<td>4027</td>
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</tr>
<tr>
<td>4052</td>
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<tr>
<td>4068</td>
<td>8 INPUT NAND GATE</td>
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</tr>
<tr>
<td>4071</td>
<td>QUAD OR GATE</td>
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<tr>
<td>4093</td>
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<tr>
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<td>LATCH/DECODER/DRIVER</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MC14049</td>
<td>HEX INVERTING BUFFER</td>
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</tr>
<tr>
<td>MC14050BCP</td>
<td>HEX NON-INV. BUFF./CON.</td>
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### Linear - Surface Mount

<table>
<thead>
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<tbody>
<tr>
<td>LM311D</td>
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<tr>
<td>LM339D</td>
<td>QUAD COMPARATOR</td>
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<td>OP AMP, SMD</td>
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<td>TL084C</td>
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### SMPS Controller

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<tr>
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### Microcontrollers

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### IC Sockets

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### Soldertail

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### High Reliability (Machined Pins)

<table>
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<th>CAT#</th>
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<tr>
<td>16</td>
<td>HRICS-16</td>
<td></td>
<td>.70</td>
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</tbody>
</table>

### Photo Diode

BPW34: Tiny general purpose PIN photo-diode. Sensitive to a wide range of light wavelengths (430-1100nm). The rated open circuit voltage is 350mV (900nm, 1mW/cm² light source), short circuit current is 47µA.

<table>
<thead>
<tr>
<th>PIN#</th>
<th>CAT#</th>
<th>DESCRIPTION</th>
<th>ea.</th>
</tr>
</thead>
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<tr>
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### Photo-Transistor

LEDtech # LT9593-91-0125. Water-clear T 1 3/4 w/ flat face.

<table>
<thead>
<tr>
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<th>CAT#</th>
<th>DESCRIPTION</th>
<th>ea.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.70</td>
</tr>
<tr>
<td>22</td>
<td>HRICS-22</td>
<td></td>
<td>.50</td>
</tr>
</tbody>
</table>

### Footnotes

- **Fast Friendly Service**: 59
FULL WAVE BRIDGE RECTIFIERS

MINI-DIPS

For 45¢ each • 100 for $2.00

CAT# FWB-48
2 W 08 G, round epoxy case.

2 AMP 800 VOLT BRIDGE

For $2.00

CAT# FWB-28
200 P.I.V. FITS 8 -pin DIP socket.

IN-LINE BRIDGE RECTIFIERS

Four leads on 0.2" centers.

25 AMP BRIDGES

1 1/8" square.

For $2.00

CAT# FWB-352
200 P.I.V.

35 AMP BRIDGES

1 1/8" square.

For $2.00

CAT# FWB-353
200 P.I.V.

HIGH-VOLTAGE RECTIFIER

CAT#              VOLTS              AMP     PRICE              100      1000
R6000              6000              0.2      .50             40.00     300.00

SCHOTTKY DIODES

CAT#              amp     PIV     price    100    1000
1N5817              1      20      3/$1.00     27.00     27.00
1N5819              1      40      3/$1.00     27.00     27.00
1N5822              3      40      3/$1.25     35.00     35.00
STPS140A             1      40      4/$1.00     17.00     17.00
S310 - surface mt.   3      100     4/$1.00     22.00     22.00

ULTRAFAST DIODES

Axial

Amp     Volt     CAT#              price    100
1      400     1N4936     15 for $1.00     4.00
3      1000     UF5408     10 for $3.00     25.00

TO-220 case.

Amp     Volt     CAT#              price    100
10     200     BYQ28X-200   50¢ ea.     40.00

TO-218AC case.

Amp     Volt     CAT#              price    100
15     400     RURH1540C   85¢ ea.     65.00

TO-247AD case.

Amp     Volt     CAT#              price    100
30     200     MUR3020PT   90¢ ea.     70.00

SWITCHING DIODES

CAT#              PRICE    100    1000
1N914     15 for $1.00     $5.00     $35.00
1N916     15 for $1.00     $5.00     $35.00
1N4148  15 for $1.00     $5.00     $25.00

5 WATT ZENER DIODES

CAT#              VOLTS     PRICE    100    1000
1N5349B   12V      4 for $1.00     $20.00
1N5366B   39V      4 for $1.00     $20.00

1 WATT ZENER DIODES

All Zeners listed are 5 OF ONE VALUE $1.00

100 OF ONE VALUE $15.00

CAT#              VOLTS     CAT#              VOLTS
1N4728   3.3      1N4734     5.6
1N4729   3.6      1N4735     6.2
1N4730   3.9      1N4737     7.5
1N4731   4.3      1N4739     9.1
1N4733   5.1      1N4740     10

1N34A GERMANIUM DIODE

Old-style germanium diode. Used mainly in crystal radio projects. Axial leads.

CAT # 1N34A     $1.00 each

DIODES

RECTIFIER DIODES

CAT#              VOLTS     AMP     PRICE     100     1000
1N4001   50      1      15 / $1.00     5.00     40.00
1N4002   100     1      12 / $1.00     5.50     45.00
1N4003   200     1      4 / $1.00     6.00     50.00
1N4004   400     1      9 / $1.00     6.50     55.00
1N4005   600     1      8 / $1.00     7.00     60.00
1N4007  1000     1      10 / $1.00     5.00     35.00
1N4093   400     1      15 / $1.00     4.00     35.00
1N4097  6000     1      10 / 90¢     6.00     45.00
HER203  200     2      10 / $1.00     6.00     50.00
1N5400  50      3      3 / 60¢      12.50     100.00
1N5401  100     3      3 / 66¢      13.00
1N5402  200     3      3 / 70¢      15.00     110.00
1N5404  400     3      4 / $1.00     17.00     130.00
1N5406  600     3      4 / $1.00     15.00     150.00
1N5408  1000     3      5 / $1.00     15.00     110.00
D610  100     6      3/$      31.00     270.00
D620  200     6      2 / 90¢     40.00     350.00
D660  600     6      2 / $1.00     45.00     400.00
P600M  1000     6      2 / $1.20     50.00
GI851  100     3      4 / $1.00     15.00     110.00
GI756  600     6      2 / $1.00     30.00

Surface mount SMA / D0214SAC. Cut tape.

GF1B  5 for $1.00     100 for $15.00

SPECIAL, 1N4003 DIODES (1A 200V)

CAT# 1N4003-TR  100 for $3.00
1000 for $20.00 • 5500 for $55.00

60 NO HASSLE RETURN POLICY
**TRANSISTORS**

**Most Orders Shipped Within 24-48 Hours**

**8A 200V TO-202 SCR. 200 uA gate current.**

**CAT# S306B1**

- 45¢ each • 10 for 40¢ each

Gate voltage sensitive SCR, Teccor T106F41. Off-state voltage: 50V. Gate trigger. Gate: 200uA 3-pin DIP package.

**CAT# T106F41**

- 2 for $1.00

**N-Channel MOSFETS, TO-220**

**BUZ71A**

- ST Micro. 50V, < 0.12 Ohms, 13A.

**CAT# BUZ71A**

- 75¢ each

- 10 for 65¢ each • 100 for 53¢ each

**IRF734**

- 1.2 Ohms (max.). 450 V (min.).

- 4.9 A (max.). 62 deg C.

**CAT# IRF734**

- 65¢ each

- 10 for 55¢ each • 100 for 45¢ each

**IRFZ40**

- 50 Amp 50 Volt

**CAT# IRFZ40**

- $1.25 each

- 10 for $1.10 each

**MTP75N03HDL**

- 75 Amp 25V power

**CAT# MTP75N03HDL**

- $1.75 each

- 10 for $1.50 each

**IRF820**

- 500V, 3.0 Ohm, 2.5A.

**CAT# IRF820**

- 85¢ each

- 10 for 75¢ each • 100 for 65¢ each

**IRFBG30**

- 1000V, 3.1A, 5.0 Ohms.

**CAT# IRFBG30**

- 75¢ each

- 10 for 65¢ each • 100 for 45¢ each

**Bilateral Trigger (DiAC)**

**Cat # DB-3**

- 28-36 volt

- 3 for $1.00

**OptoIsolators**

**6 pin DIP package**

**Cat#**

**Description**

**Price**

**100**

**4N25**

- NPN transistor output

- 45¢ • .40

**4N26**

- NPN transistor output

- 40¢ • .35

**4N27**

- NPN transistor output

- 45¢ • .30

**4N33**

- darlington output

- 50¢ • .45

**4N35**

- NPN transistor output

- 60¢ • .50

**4N38**

- NPN transistor output

- 40¢ • .37

**MOC3011**

- Triac output

- .50 • .45

Surface mount. 3.4 x 2.7 x 1.5mm.

**PI-721**

- Photo interrupter

- 2 for $1.00

**SLOTTED OPTICAL SWITCHES**

**TLPB31 photo transistor output.**

- 4.2mm gap. Overall dimensions: 13.6 x 5.2 x 9.3mm high.

**Cat # OSU-62**

- 75¢ each

With flange. TCST2103 photo transistor output. 3.1mm gap.

- Overall dimensions: 24.5 x 6.3 x 10.8mm. Rated: 6V 60ma. Daylight blocking filter. Typical output current under test: IC = 4 mA. Four 12mm long leads.

**Cat # OSU-61**

- 75¢ each
TRANSFORMERS

10V / 5V @ 5VA TRANSFORMER
Triad # VPL10-500
Primary: 115/230V 50-60Hz
Secondary: Series: 10Vct @ 0.5A
Parallel: 5V @ 1A
36.52 x 44.00 x 36.52mm h.
8" wire leads. c.CULus.
CAT# TX-105 $6.85 ea. • 10 for $6.65 ea.

24V @ 30VA
115 Vac primary, 50/60 Hz.
2.13" x 2.25" x 1.87" high. Wire leads.
CAT# TX-2432 $7.00 each

ISOLATION TRANSFORMER

Bel Signal Transformer
# DP-241-7-120
Primary: 115/230V 50/60 Hz
Secondary: 120 VCT 56 VA
Signal’s 241 transformers use a split bobbin construction that provides superior isolation and low capacitive coupling.
2.70" x 1.94" x 2.28" high. Mounting holes on 3.12" centers. 0.187" QC/ solder lugs. UL, CSA.
CAT # TX-1255 $11.00 each

COUPLING TRANSFORMERS

Midcom 671-1538.
Designed to reflect 600 Ohms on primary with 536 Ohms on secondary. 1.12" x 0.79" x 0.47".
CAT# TCTX-18 $2.75 each

DATATRONIC# STM501-1
600:600 Ohms. 12.50 x 9.60 x 7.36mm.
Surface-mount. UL60950-1.
Cut-tape (tape & reel) packaging.
CAT# TCTX-501 $1.50 each
10 for $1.30 each

IMPEDEANCE MATCHING TRANSFORMER

Current Controls Inc. CC030517.
Primary: 80 Ohms, 10mH/0.8Q.
Secondary: 1K Ohms, 170mH/0.9Q @1KHz.
Secondary: 12K Ohms, 2.6H/1Q @ 1KHz.
0.78" x 0.66" x 0.48" high. PC pins.
CAT# MTX-4 $1.00 each

VARIABLE TRANSFORMERS

Input: 110 Vac
Output: 0 - 130 Vac
Fully enclosed variable transformers in ventilated steel cases with 6’ power cord, 3 prong grounded receptacle, output voltage meter, on/off switch, fuse and power cord.

<table>
<thead>
<tr>
<th>Amps</th>
<th>Size</th>
<th>Weight</th>
<th>CAT#</th>
<th>Each</th>
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<tbody>
<tr>
<td>3</td>
<td>5.35&quot; x 4&quot; x 5.5&quot;</td>
<td>6.5 lbs.</td>
<td>SC-3M</td>
<td>64.00</td>
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<tr>
<td>5</td>
<td>4.75&quot; x 7&quot; x 6&quot;</td>
<td>8 lbs.</td>
<td>SC-5M</td>
<td>120.00</td>
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<tr>
<td>10</td>
<td>6.75&quot; x 8&quot; x 8&quot;</td>
<td>21 lbs.</td>
<td>SC-10T</td>
<td>195.00</td>
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<tr>
<td>20</td>
<td>6.5&quot; x 9&quot; x 7.5&quot;</td>
<td>22 lbs.</td>
<td>SC-20M</td>
<td>220.00</td>
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CURRENT TRANSFORMER

5A CURRENT SENSOR MODULE ZHT103
A simple and effective way of monitoring current in your project. Accurate AC current measurement up to 5 Amps. A proportional voltage signal is provided on the output pin, at a 1000:1 ratio.
CAT # TXC-4 $3.85 each

DC-DC UP/DOWN REGULATORS

1.2 AMP
Input: 4-32V,
1.2A continuous current. 3A max.
Output: 1.25-35V adjustable.
1.90" x 0.98" x 0.5". Mounting holes.
CAT# UDC-5 $6.50 each

7 AMP
Input: 5-32 Vdc.
Output: 1-30 Vdc, continuously adjustable.
Output current: 7A continuous, 10A peak.
Output power: 80W continuous, 130W peak.
Output ripple: 50Mv. 1.83" x 3.05" x 0.58".
CAT# UDC-10 $27.50 each

2A STEP-UP VOLTAGE CONVERTER
Step-up voltage “Boost” converter based on the MT3608 chip.
1.47” x 0.69” x 0.25” pc board with solder spots for input and output voltage.
On-board trimmer for adjustment.
• Input: 2-24 Vdc
• Output: up to 28Vdc @ 2A
CAT# UDC-2 $3.00 each

STEP-UP VOLTAGE CONVERTER
XL6009 DC-DC UP voltage regulator (boost driver).
Input: 4-32V, 1.2A continuous current. 3A max.
Output: 5-35V adjustable.
1.90” x 0.98” x 0.5”. Mounting holes.
CAT# UDC-3 $4.50 each

DC STEP-DOWN REGULATORS

With LED digital display and screw terminals. 2.6” x 1.4”
CAT# DCC-3M $8.75 each
CAT# DCC-3 $7.50 each
WALL TRANSFORMERS

A.C. WALL TRANSFORMERS

<table>
<thead>
<tr>
<th>VOLTS</th>
<th>AMPS</th>
<th>TERMINATION</th>
<th>STYLE</th>
<th>CAT#</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>9 Vac</td>
<td>500 ma</td>
<td>2.1mm coax</td>
<td>A</td>
<td>ACTX-951</td>
<td>4.85</td>
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<tr>
<td>9 Vac</td>
<td>1 amp</td>
<td>2.1mm coax</td>
<td>A</td>
<td>ACTX-912</td>
<td>11.00</td>
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<tr>
<td>9 Vac</td>
<td>400 ma</td>
<td>2.1mm coax</td>
<td>A</td>
<td>ACTX-940</td>
<td>3.75</td>
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<td>12 Vac</td>
<td>1.67 amp</td>
<td>Screw terminals</td>
<td>C</td>
<td>ACTX-12167</td>
<td>14.50</td>
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<tr>
<td>12 Vac</td>
<td>5 amp</td>
<td>2.1mm coax</td>
<td>B</td>
<td>ACTX-1250</td>
<td>21.95</td>
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<tr>
<td>12 Vac</td>
<td>40 VA</td>
<td>Screw terminals</td>
<td>C</td>
<td>ACTX-1243</td>
<td>15.95</td>
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<tr>
<td>16 Vac</td>
<td>20 VA</td>
<td>Screw terminals</td>
<td>C</td>
<td>ACTX-1620</td>
<td>14.00</td>
</tr>
<tr>
<td>16 Vac</td>
<td>40 VA</td>
<td>Screw terminals</td>
<td>C</td>
<td>ACTX-1640</td>
<td>14.75</td>
</tr>
<tr>
<td>24 Vac</td>
<td>830 mA (20 VA)</td>
<td>Screw terminals</td>
<td>C</td>
<td>ACTX-2420</td>
<td>11.95</td>
</tr>
<tr>
<td>24 Vac</td>
<td>1.6 amp (40 VA)</td>
<td>Screw terminals</td>
<td>C</td>
<td>ACTX-2440</td>
<td>17.75</td>
</tr>
</tbody>
</table>

A Note on Wall Transformers: A.C. and D.C. Wall Transformers are not regulated unless otherwise stated. They provide a specified voltage at a specified load. If the load is lower than specified, the voltage will be higher than specified. With a higher load, the voltage will drop below that specified. For example, a 12 volt 500 ma. wall transformer may read 20 volts with no load or 9 Volts with a 600 ma. load.

D.C. WALL TRANSFORMERS

<table>
<thead>
<tr>
<th>VOLTS</th>
<th>AMPS</th>
<th>TERMINATION</th>
<th>CENTER</th>
<th>STYLE</th>
<th>CAT#</th>
<th>PRICE</th>
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</thead>
<tbody>
<tr>
<td>6 Vdc</td>
<td>750 ma</td>
<td>3.5mm phone</td>
<td>negative</td>
<td>A</td>
<td>DCTX-6750</td>
<td>4.25</td>
</tr>
<tr>
<td>9 Vdc</td>
<td>300 ma</td>
<td>1.3mm coax</td>
<td>positive</td>
<td>A</td>
<td>DCTX-936</td>
<td>3.00</td>
</tr>
<tr>
<td>9 Vdc</td>
<td>1 amp</td>
<td>2.5mm coax</td>
<td>positive</td>
<td>A</td>
<td>DCTX-9111</td>
<td>6.00</td>
</tr>
<tr>
<td>12.5 Vdc</td>
<td>410 VA</td>
<td>2.5mm coax</td>
<td>positive</td>
<td>A</td>
<td>DCTX-1241</td>
<td>3.50</td>
</tr>
<tr>
<td>18 Vdc</td>
<td>600 VA</td>
<td>2.1mm coax</td>
<td>positive</td>
<td>A</td>
<td>DCTX-1860</td>
<td>12.00</td>
</tr>
</tbody>
</table>

SINGLE OUTPUT SWITCHING POWER SUPPLIES

Ideal for scanners, cameras and sensitive equipment requiring a constant, regulated output. Unless otherwise noted, all of the following power supplies operate on 120-240 Vac.

5.5 VDC 0.75 A (Style A)
Model: MTP051UL-055075
6' cable with 2.5mm coax plug, center+. cULus.
CAT# PS-5575 $2.63 ea. • 10 for $2.50 ea.

5 VDC 1 AMP (Style A)
3' cable with 1.3mm coax plug, center+. cULus, CE.
CAT# PS-581 $4.25 ea. • 100 for $3.75 ea.

5 VDC 1 AMP (Style A)
5' cord, with unknown/custom coax connector, center positive. cULus, CE.
CAT# PS-517 $3.25 each 100 for $3.00 each

5 VDC 2A (Style A) New Item
6.5' long cord terminates to non-standard (smaller than 1.3mm id) right-angle coax plug. UL.
CAT # PS-5020 $4.50 each

5 VDC 3A (Style A)
6' output cord with 1.7mm coax power plug, center positive. UL. Used, functional power supplies. Guaranteed.
CAT# PS-531U $3.50 ea. • 10 for $3.25 ea.

9 VDC 600 MA (Style A)
2.1mm x 5.5mm coax power plug. Center+. UL.
CAT# PS-961 $12.00 each

9 VDC 0.66 AMP (Style A)
6' cord with ferrite EMI suppression bead. Custom coax plug on output. cULus, RoHS.
CAT# PS-966 $3.75 ea. • 20 for $3.50 ea.
600 for $3.15 each • 1200 for $2.85 each

9 VDC 1 AMP W/ INTERNATIONAL PLUG SET (Style A)
4' cable with 2.1mm coax plug, center positive. Includes five snap-on/ snap-off AC plugs for use in the USA, Europe, UK, Asia and Australia. cULus, CE.
CAT# PS-914 $7.75 each

12 VDC 1 AMP (Style A)
Flypower® PS12K1201000UE.
4' long cord with 2.1mm coax power plug, center positive. cULus, FCC.
CAT# PS-121 $7.20 ea. • 10 for $6.85 ea.
12 VDC 2 AMP (Style A)  
4’ cord with 2.1mm coax power plug. Tip+.  
CAT# PS-1227  
$10.50 $8.50 each Reduced Price

12 VDC 2.5 AMP, USED (Style A)  
Model: DC1202500. 6’ cable with 2.1mm coax plug, center+. cULus.  
CAT # PS-1295 $4.95 each

12 VDC 3 AMP (Style B)  
4.42” x 2.12” x 1.35” high. 6’ output cable with 2.1mm coax plug, center+. cULus.  
CAT# PS-1272 $8.95 each  
50 for $6.45 each • 100 for $6.00 each

12 VDC 5 AMP (Style B)  
4.73” x 2.11” x 1.27”.  
4’ output cable with 2.5mm coax plug, center positive with ferrite EMI suppression bead. Includes detachable 3-conductor power cord. FCC, CE, cULus.  
CAT# PS-12005 $10.95 each

12 VDC 5 AMP (Style B)  
2.1mm coax power plug, center+.  
CAT# PS-1273 $21.50 each

12 VDC 8 AMP (Style B)  
Model: PS-D1208.  
5.52” x 2.39” x 1.36” high. Detachable IEC power input cord. 3.5’ output cable with 2.5mm coax power plug, center positive. cULus.  
CAT# PS-1280 $32.00 each

24 VDC 1 AMP (Style A)  
Triad WSU240-1000.  
6’ cord with 2.1mm coax plug, center+. cULus.  
CAT# PS-2414 $8.45 each

24 VDC 3.75A (Style B)  
GlobTek®, ITE Power Supply  
6.88” x 2.46” x 1.32”. Output cable is 33” long with ferrite bead EMI suppressor. Cable is split at end into two outputs with female Molex connectors. Detachable IEC input power cable included. cULus, CE, RoHS.  
CAT# PS-2438 $15.00 each

24 VDC 4.2AMP  
EOS™ Model: LFVLT100-1003  
Input: 100-240V 50-60Hz 2.2A  
Output: 24Vdc @ 4.2A  
Standard 3" x 5" x 1" thick configuration. Removed from new equipment. Two capacitors are soldered to the pc board between the ground and power input terminals of the board. Input and output header connectors included. cULus, CE, DVE.  
CAT# PS-2443 $12.00 each

48 VDC 0.38A (Style B)  
Phihong #PSC18U-480. 5’ cord with molded 2.5mm coax power plug, center+. Includes detachable IEC power cord. cULus, CE, RoHS.  
CAT# PS-480 $2.00 each

48 VDC 0.625A (Style B)  
DVR# DSA-0421S-501. 6’ cord with 2.1mm coax plug, center+. Detachable 3-conductor power cord. CE, cULus, TUV.  
CAT# PS-4530 $4.50 ea. • 100 for $3.50 ea.

SELECTABLE OUTPUT SUPPLIES
Regulated switching power supplies with selectable voltages, 3, 5, 6, 7.5, 9, 12 Vdc. For portable electronics and bread boarding. Includes a variety of connectors.

1A Max. current  
CAT# PS-10 $19.95 each

2.2A Max current  
CAT# PS-22 $24.95 each

MULTIPLE OUTPUT SUPPLIES

500 WATT ATX POWER SUPPLY  
Macron Model# MPT-5018AP  
AC Input:  
100-240V full range, 50-60 Hz.  
DC Outputs:  
+3.3V @ 24A, +5V @ 20A, +12V @ 18A, +12V @ 18A, -12V @ 0.8A, +5Vsb @ 2.5A.  
Total Power: 500 Watts.  
5.91” x 5.50” x 3.42”  
CE, FCC, RoHS, TUV, cULus.  
CAT # PS-5018AP $19.95 each

DC LAB POWER SUPPLY
0-30 VDC – 10 A MAX  
• Input voltage:  
110 VAC 60 Hz 2, 4 A 420W  
• Output voltage:  
0-30 VDC adjust. max.  
• Output current:  
0-10 A adjustable max.  
• Ripple: \( \leq 100 \text{mVp-p} \)  
• 3.35 x 6.3 x 9.06 in  
• Weight: 3.7 lbs  
CAT# PS-3010 $165.00 each

MICRO-SD MEMORY

MICRO-SD CARDS

<table>
<thead>
<tr>
<th>Size</th>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 GB</td>
<td>MSD-16</td>
<td>$9.45</td>
</tr>
<tr>
<td>32 GB</td>
<td>MSD-32</td>
<td>$14.00</td>
</tr>
</tbody>
</table>

MICRO-SD ADAPTER

Enables use of MicroSD card with devices equipped with a standard SD card slot. Adapter has a write protection switch.  
CAT# SDR-6 $1.25 each
**FERRITES**

**TOROIDS**

<table>
<thead>
<tr>
<th>Description</th>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.5MM O.D. x 13MM I.D. x 7MM</td>
<td>TOR-64</td>
<td>5 for $1.00</td>
</tr>
<tr>
<td>12.5MM O.D x 6MM ID x 25.5MM</td>
<td>FB-109</td>
<td>2 for $1.00</td>
</tr>
<tr>
<td>9.5MM O.D. X 6MM I.D. X 14.5MM</td>
<td>FB-94</td>
<td>2 for $1.00</td>
</tr>
<tr>
<td>22MM O.D. X 14MM I.D. X 6.6MM</td>
<td>TOR-61</td>
<td>45¢ each</td>
</tr>
<tr>
<td>25MM O.D. X 12.5MM I.D. X 12.5MM</td>
<td>TOR-77</td>
<td>2 for $1.00</td>
</tr>
<tr>
<td>29MM O.D. X 19MM I.D. X 7.5MM</td>
<td>TOR-75</td>
<td>40¢ each</td>
</tr>
</tbody>
</table>

**INDUCTORS**

<table>
<thead>
<tr>
<th>Description</th>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.676 µH ADJUSTABLE CHOKE 0.375” x 0.375” x 0.75” high coil with adjustable ferrite. PC leads on 0.38” (10mm) centers.</td>
<td>RC-676</td>
<td>3 for 99¢ • 100 for $25.00</td>
</tr>
<tr>
<td>10 µH INDUCTOR Gowanda #GA30-102K 10µH 3.2A axial choke. 0.4” dia. x 0.8” long.</td>
<td>CC-102K</td>
<td>$1.15 each</td>
</tr>
<tr>
<td>100 uH AXIAL CHOKE RFE International # LGA-X1123-101K. 0.43” dia. x 0.79” long.</td>
<td>ACB-101</td>
<td>$1.00 ea. • 100 for 70¢ ea.</td>
</tr>
<tr>
<td>100 µH 4.3A PC MOUNT INDUCTOR CTX100-2-52M on battery charger board with other useful parts. Requires desoldering.</td>
<td>EX-57</td>
<td>$2.00 each</td>
</tr>
<tr>
<td>345 µH TOROIDAL INDUCTOR 0.6” diameter x 0.415” high. Two pc leads on 0.38” centers. 345 µH. Max. DCR: 0.2. Large quantity available.</td>
<td>CR-345</td>
<td>3 for 99¢ • 240 for 20¢ each 480 for 15¢ each • 1680 for 10¢ each</td>
</tr>
</tbody>
</table>

**FERRITE SPLIT BEAD WITH SNAP SLEEVE**

Used to suppress RFI, EMI and unwanted spurious signals. Self-locking plastic snap sleeve. 7mm (0.27”) I.D. snap-bead. 32.5 x 19.0 x 19.5mm case.

**CIGARETTE LIGHTER CORDS**

**CIGARETTE LIGHTER “Y”**

1 plug to 2 sockets. 6” cord.

**CIGARETTE LIGHTER POWER CORDS**

4.5’ good-quality, UL rated, shielded cable. Replaceable fuse. Terminated with right-angle 1.3mm coax power plug (1.3mm id x 2.3mm od x 10mm), center positive. Output rated 12Vdc, 3 Amps.

**CIGARETTE LIGHTER SOCKETS**

**EXTENSION CORDS**

**10’ IEC POWER SPLITTER CABLE**

Connect two pieces of equipment with one cord. 8’ cable splits to pair of 2’ cables with standard IEC female ends. Frees up space on UPS systems, surge suppressors and power strips. 16 AWG 3-conductor SJT 105°C cable. UL, CSA.

**6’ APPLIANCE/AIR CONDITIONER CORD, 14/3**

6’ long, grey, air-conditioner cord. 14/3 SPT-3. 15A-125V-1875W. cETLus. Conforms to UL STD 817. Certified to CSA STD C22.2

**ORDER TOLL FREE 1-800-826-5432**
BUZZERS, BEEPERS, AUDIO ALARMS

SIRENS

EXTRA-LOUD MINI PIEZO SIREN
Small, painfully-loud two-tone piezo siren for auto or home security devices. Operates 6-12 Vdc, 110 ma. 108dB output (30cm). 1.81” x 1.55” x 0.88” high black plastic body. Two mounting holes on diagonal 1.80” centers. 3” wire leads.

CAT# SBZ-100 $6.50 each
10 for $6.25 each

12 VDC ALARM SIREN
Extremely loud 12 VDC car alarm siren. Distinctive siren pattern cycles through 6 different sounds every 30 seconds. Overall dimensions: 3.20” x 2.85 x 3.75” high including mounting bracket. Two 66” wire leads. 2.55” mounting centers on adjustable metal base.

CAT# ES-25 $5.85 each
10 for $5.65 each

PIEZO AUDIO ALERTS

High pitched piezo alarm signals with built-in oscillator circuitry. Low power consumption. Used in alarms, smoke-detectors, games, cameras and telephones.

PASSIVE BUZZER MODULE
3-pin piezo beeper module produces high-pitched tone when energized. Requires an external signal to operate. Ideal for use with Arduino, RaspberryPi, Adafruit type microcontrollers. Board is 15 x 20mm. 11mm thickness.

CAT # SBZ-14 $1.35 each

ACTIVE BUZZER MODULE
3-pin piezo beeper module produces high-pitched tone when energized. Operates on low voltage, 3.5 - 5.5 Vdc. Built-in oscillator circuit produced sound. Ideal for use with Arduino, RaspberryPi, Adafruit type microcontrollers. Board is 15 x 20mm. 11mm thickness.

CAT # SBZ-15 $1.50 each

3-24 VDC BUZZER
Continuous tone piezo beeper. High-pitched, medium-loud sound. Operates on 3-24 Vdc. 23mm dia. x 11mm (0.90” x 0.42”). Mounting ears with holds on 30mm (1.18”) centers. 108mm (4.25”) color-coded leads.

CAT # SBZ-324 $2.00 each

3-28 VDC PIEZO BUZZER
Continuous tone. 103 db sound pressure. 1.14” dia. x 0.93”ABS plastic housing. Can be bulkhead mounted with tabs on 1.31” mounting centers, or can be mounted through a panel hole of 0.7” diameter via threaded bushing and panel nut. 5” wire leads. Black housing.

CAT# PE-66 $2.65 each

PIERCING PIEZO ALERT ASSEMBLY
New assembly, probably from smoke detector or similar device. Operates on 9Vdc. Emits a steady, high-pitched tone. 70 x 50 x 23mm (2.7 x 2.0 x 0.85”). Includes 9V battery snap, transformer, piezo sounder & other components. Requires 9V battery (not included).

CAT # PE-66 $2.65 each

ELECTRO-MAGNETIC BEEPERS

1.5 - 3 VDC BEEPER
Tiny 9mm diameter, pc mount beeper. 5mm high. PC leads on 5mm center.

CAT# PE-71 90¢ each
10 for 80¢ each • 100 for 70¢ each

8-15 VDC BEEPER, PC MOUNT
MG Electronics # SBT-1212S 8-15Vdc mini beeper. Emits high-pitched continuous tone when energized. Max current 30mA @ 12Vdc. 85db/10cm. 2300 ± 300 Hz. 12mm diameter x 9.5mm. 6mm high PC pins with 7mm spacing.

CAT# SBZ-420 50¢ ea. • 100 for 35¢ ea.

12 VDC ALARM SIREN
Extremely loud 12 VDC car alarm siren. Distinctive siren pattern cycles through 6 different sounds every 30 seconds. Overall dimensions: 3.20” x 2.85 x 3.75” high including mounting bracket. Two 66” wire leads. 2.55” mounting centers on adjustable metal base.

CAT# ES-25 $5.85 each
10 for $5.65 each

3-24 VDC BUZZER
Continuous tone piezo beeper. High-pitched, medium-loud sound. Operates on 3-24 Vdc. 23mm dia. x 11mm (0.90” x 0.42”). Mounting ears with holds on 30mm (1.18”) centers. 108mm (4.25”) color-coded leads.

CAT # SBZ-324 $2.00 each

3-28 VDC PIEZO BUZZER
Continuous tone. 103 db sound pressure. 1.14” dia. x 0.93”ABS plastic housing. Can be bulkhead mounted with tabs on 1.31” mounting centers, or can be mounted through a panel hole of 0.7” diameter via threaded bushing and panel nut. 5” wire leads. Black housing.

CAT# PE-66 $2.65 each

PIEZO ELEMENTS

12MM DIAMETER
1” leads. CAT# PE-60
$1.00 each • 10 for 90¢ each

14MM PIEZO WAFER
Part# 64PE140660. 14mm diameter. Frequency: 6600 ± 500. No leads.

CAT# PE-62 3 for 99¢ • 100 for 20¢ each

27MM PIEZO ELEMENT W/ WIRE LEADS
27mm (1.06”) diameter piezo element with 3.5” leads.

CAT # PE-64 2 for $1.00
100 for 40¢ each

35MM PIEZO ELEMENT
2” pigtail leads. Note: the wire is quite small gauge AWG 26-28, and has a tendency to break at the solder joint. It is fairly easy to solder a new, larger piece of wire to the spot.

CAT# PE-63 3 for 99¢
100 for 20¢ each • 1000 for 15¢ each

3-28 VDC PIEZO BUZZER
Continuous tone. 103 db sound pressure. 1.14” dia. x 0.93”ABS plastic housing. Can be bulkhead mounted with tabs on 1.31” mounting centers, or can be mounted through a panel hole of 0.7” diameter via threaded bushing and panel nut. 5” wire leads. Black housing.

CAT# PE-66 $2.65 each

PIEZO AUDIO ALERTS

High pitched piezo alarm signals with built-in oscillator circuitry. Low power consumption. Used in alarms, smoke-detectors, games, cameras and telephones.

PASSIVE BUZZER MODULE
3-pin piezo beeper module produces high-pitched tone when energized. Requires an external signal to operate. Ideal for use with Arduino, RaspberryPi, Adafruit type microcontrollers. Board is 15 x 20mm. 11mm thickness.

CAT # SBZ-14 $1.35 each

ACTIVE BUZZER MODULE
3-pin piezo beeper module produces high-pitched tone when energized. Operates on low voltage, 3.5 - 5.5 Vdc. Built-in oscillator circuit produced sound. Ideal for use with Arduino, RaspberryPi, Adafruit type microcontrollers. Board is 15 x 20mm. 11mm thickness.

CAT # SBZ-15 $1.50 each

3-24 VDC BUZZER
Continuous tone piezo beeper. High-pitched, medium-loud sound. Operates on 3-24 Vdc. 23mm dia. x 11mm (0.90” x 0.42”). Mounting ears with holds on 30mm (1.18”) centers. 108mm (4.25”) color-coded leads.

CAT # SBZ-324 $2.00 each
ENCASED PIEZO ELEMENTS

Plastic encased piezo elements are more resonant and louder than non encased piezo elements. They require external signal to produce sound.

16.5MM DIA. X 4MM
East Electronics# TFM-23.
80dB 4kHz. 4" pigtail leads.
CAT# PE-59 75¢ each

22MM DIA. X 8MM PLASTIC CASE
Murata # PKM22EPP-40.
PC pins on 10mm centers. 4KHz.
CAT# PE-57 3 for $1.00
100 for 25¢ each • 1000 for 20¢ each

0.89" DIAMETER X 0.13"
Matsushita # WM-71A111M
1" wire leads.
CAT# PE-54 75¢ ea. 3 for 99¢

0.86" DIA. X 0.1"
Plastic housing with a ring of self-adhesive neoprene padding on the front face. 1.25" long leads.
CAT# PE-49 50¢ each • 10 for 35¢ each

MINI TONE TRANSDUCERS

Used in paging, warning signals, metal detectors and alarm clocks. Miniature magnetic transducers require external signal source to produce sound.

RDI # DMT-1206. 48 Ohm audio tone transducer. 0.47" dia. x 0.34" high.
PC pins on 0.25" centers.
CAT# PE-52 3 for 99¢
100 for $15.00 • 1000 for $125.00

DBX-01PN.
0.47" dia. x 0.36" high. 16Ω impedance. Requires external signal to produce a tone. PC pins on 0.25" spacers. 80 dB @ 10 cm. 2040 Hz. Operating voltage: 1.5V.
Current rating: 30 mA.
CAT# PE-61 3 for 99¢
100 for 15¢ each • 1000 for 12.5¢ each

Intervox # BRT1209L-03. 16 Ohm.
12mm diameter x 8.5mm high.
3.6Vdc (1.5 – 5Vdc), 70mA max current. 90 db @ 10 cm. 2048Hz. Two 3.5" leads.
CAT# PE-58 3 for 99¢
100 for 25¢ each • 1000 for 20¢ each

6-18 VDC MINI-TONE TRANSDUCER
MG Electronics# SBT-1612.
Max current 40mA @ 12Vdc. 85dB/10cm.
2048Hz. 115Ω ± 12Ω coil resistance.
200Ω coil impedance. 16mm diameter x 14mm.
7.5mm high PC pins with 6mm spacing.
CAT# PE-419 3 for 99¢

RUBBER BUMPERS / FEET

CLEAR BUMPERS / FEET
Self-adhesive polyurethane bumpers apply quickly and easily wherever protection is needed against scratches, slippage or noise.

0.8" diameter x 0.4" high clear feet with 0.35" dia.
recessed center. Sold in sheets of twenty-four pieces.

CAT# RF-32 1 sheet (24 pcs) for $4.50 per sheet
12 sheets (288 pcs) for $3.80 per sheet

Solid cylindrical clear bumper, 0.4" dia. x 0.25" high.
Sold in sheets of fifty pieces.

CAT# RF-33 1 sheet (50 pcs) $3.50 per sheet
10 sheets (500 pcs) $2.65 per sheet

0.86" DIA. RUBBER FEET, 4 PIECES
Shank presses or glues into 3/8" diameter hole.

CAT# RF-54 4 for 50¢

RUBBER FOOT, 0.80" DIA. X 0.72"
Black, hard rubber foot, 0.80" dia. x 0.72" high.
0.20" diameter hole for screw. Countersunk 0.38" diameter hole reinforced with metal washer.

CAT # RF-67 4 for $1.80

RUBBER FOOT, 1.1" DIA. X 0.62"
Black, hard rubber foot, 1.1" diameter at top, tapers to 0.75" at base, 0.62" high.
0.15" diameter hole for screw, Countersunk 0.42" diameter reinforced with metal washer.

CAT # RF-65 4 for $1.80

1.46" DIA. RUBBER FEET
Hard rubber equipment foot. Countersunk, metal reinforced hole for #8 screw. Black.

CAT# RF-615 4 for $2.00 • 100 for $40.00

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00

NEW ITEM

RUBBER FOOT, 1.5" DIA. X 0.6"
Black, hard rubber foot, 1.5" diameter x 0.6". 0.18" hole for screw. Countersunk 0.5" hole to accommodate washer (no washer included).

CAT # RF-66 4 for $2.00
PC MATERIALS

MAKE PC BOARDS IN MINUTES
From PHOTOCOPIER or LASER PRINTER

PRESS-N-PEEL by Techniks.
The easiest and quickest way to transfer pc board patterns to copper-clad board. Works great with CAD and PCB layouts as well as artwork from magazines and books.

No need for photochemicals or darkroom; use a photocopier or laser printer to transfer your design to the special PRESS-N-PEEL film. Then, simply iron the design onto a clean copper-clad board with a household iron. Peel off the film, and the board is ready for etching (etchant solution not included).

PRESS-N-PEEL consist of five 8 1/2” x 11” sheets of transfer film and complete instructions.

CAT# TEK-5 $11.95
2 packs (10 sheets) $17.50
5 packs (25 sheets) $37.50

COPPER CLAD BOARD
Single sided copper clad board. Glass fiber laminate. 6” x 4” x 1/16” thick.
CAT# CP-150 $3.00 each

DIRECT ETCH-RESIST PEN
Use to touch-up artwork or manually add a trace on copper pc boards. Lacquer ink resists etching. May also be used on clear films for positives. Black ink. Fine point.
CAT# ER-15 $3.15 each

LOW RESISTANCE CONDUCTIVE PAINT
Chip Quik conductive paint. Excellent for repairing and modifying printed circuit boards. Dries at room temperature. Apply by dot, line or brush. Cleans with water or isopropyl alcohol. Shelf life: >12 months.

5g syringe with plunger and two tips
CAT# CP-05 $15.95 each
10g syringe with plunger and two tips
CAT# CP-010 $21.95

CONDUCTIVE GLUE
An all-purpose, electrically conductive glue ideal for bonding all kinds of low-voltage connections. Makes a permanent bond without heat. Lead-free. 0.3 fl. oz. jar.
CAT# WG-1 $3.98 each

CAIG CLEANERS, CHEMICALS & COATINGS

CONDUCTIVE SILVER/CARBON COATING CAIKOTE 44™
1 oz. Repair membrane buttons and keypads and other carbon and silver based surfaces. EMI/ESD shielding. Use on rubber, epoxy, glass and plastic surfaces. No mixing required.
CAT# CK-44 $14.50 each

DEOXIT® CONNECTION CLEANER
A fast-acting deoxidizing solution that cleans, lubricates, protects and improves conductivity on metal connectors, contacts and surfaces. It is ideal for stationary and moving contact connectors. Stabilizes connections between similar and dissimilar metals.

1.6mL bottle with mini-brush applicator. DeoxIT® D-Series D100L-16BX.
CAT# D100L $6.95 each
5 oz. spray can. DeoxIT® D5
CAT# D5S-6 $18.95 each

DEOXIT® GOLD CONNECTION CLEANER
DeoxIT® G-Series G100L-16BX. Formulated to improve conductivity, lubricate and protect plated connectors and contacts for maximum performance & protection. It deoxidizes minor amounts of surface contamination, penetrates plated surfaces and molecularly bonds to the base metals - NO OTHER PRODUCT DOES THIS. 1.6mL bottle with mini-brush applicator.
CAT# G100L $7.95 each

SUREHOLD® PYTHON GLUE
A high strength adhesive used to bond tough projects including wood, ceramics, stone, metal, brick, foam, fiberglass and more. Fully cures 72 hours. 2 fl. oz.
CAT# SH-352 $4.25 each

SUREHOLD® PERMANENT STRENGTH THREADLOCKER
For locking studs & press fits. Resealable, 15-25 applications per tube. Net weight 0.14 oz (4g) total.
CAT# SH-375 $1.99 each

SPECIAL OFFER:
Two pack $7.98 each
Five pack $37.95 each

ADHESIVES

SUPER GLUE DOUBLE PACK
Bonds non-porous surfaces in seconds. Works on artificial nails, ceramics, crafts, china, jewelry, rubber, leather, wood, metal, many plastics and more. Two tube net weight 0.14 oz (4g) total.
CAT# SH-375 $1.99 each

SUREHOLD® PYTHON GLUE
An all-purpose, electrically conductive glue ideal for bonding all kinds of low-voltage connections. Makes a permanent bond without heat. Lead-free. 0.3 fl. oz. jar.
CAT# WG-1 $3.98 each
COPPER TAPE
Copper tape has a variety of uses from EMI and RFI shielding, soldering and electrical repairs, grounding and decorative crafts to snail and slug repellent. Conductive adhesive allows current flow from both sides. It is resistant to oxidation and discoloration, suitable for indoor and outdoor use.

1” wide x 33 feet long.
CAT # CT-112 $16.35 roll

2” wide x 33 feet long.
CAT # CT-233 $21.50 roll

ALUMINUM FOIL TAPE, 1.88” W/ ADHESIVE
48mm x 30 yard (1.88” wide x 90’) roll of aluminum foil tape. Ideal for an array of uses, including RF shielding, sealing hot and cold air ducts (excellent HVAC tape), duct insulation systems, sealing aluminum, stainless and plastic seams / joints, temporary repair of metal surfaces, copper pipe fixing, etc.

CAT # AT-230 $4.95 roll

COAX SEAL
A hand-moldable plastic material which quickly and effectively seals all types of coax fittings from moisture and corrosion. Stays flexible for years. Allows you to disconnect fittings and reseal them with the same material. Non-conductive. Adheres to vinyl & poly-vinyl insulation. 60” x 1/2” wide roll suitable for 9 fittings.

CAT# COS-1 $3.65 each

TAPE AND SEALERS

3/4” X 60’ ELECTRICAL TAPE
Vinyl electrical tape. 3/4 inch x 60 feet. Suitable for use at not more than 600V and not more than 80°C (176°F). UL.

BLA CK
CAT# PET-1
$1.50 each • 10 for $1.35 each

COLORS CAT# PET-XX (XX=color) $1.50 ea.
i.e. orange (OR), green (GN), brown (BR), blue (BL), grey (GY), red (RD), white (WT), yellow (YL)

SELF-FUSING RUBBER TAPE
Stretch and wrap self-fusing rubber tape for a moisture-light, insulating seal on electrical connections. High resistance to salt water, steam and oil. Can be removed easily without leaving any residue. 1” x 16.4’ roll. (0.8mm x 25mm x 5m).

CAT# SFT-5 $4.50 each

RED CLOTH TAPE, 1.88” X 4.36 YARD ROLL
For patching, bundling, repairing, and securing upholstery, plastic or canvas, auto and bike seats, hoses. Seals and wraps air ducts.

CAT # RCT-4 $1.75 roll

H OOK & LOOP SPECIAL!
Hook and loop strips with strong adhesive backing. For indoor/ outdoor use. Water resistant. Includes both hook and loop.

3” x 1” - Package of 10
CAT# HL-310
65¢ per pack
100 packs for 50¢ each
500 packs for 35¢ each
1000 packs for 25¢ each

4” x 1” - Package of 12
CAT# HL-412
85¢ per pack
100 packs for 65¢ each
500 packs for 45¢ each
1000 packs for 30¢ each

NYLON SPRING CLAMPS
Hold down your work-in-progress with these rugged nylon spring clamp. Swivel jaws stay parallel on materials of varying thickness.

3.75” long CAT# SCL-20 2 for $1.00
4.75” long CAT# SCL-40 $1.00 each
6.50” long CAT# SCL-60 $1.50 each

ELECTRO-MAGNETIC AIR COMPRESSOR, 5 CFM
Hailea ACO-009E. Electro-magnetic air pump. High volume, low pressure. The case is made of high-quality ZL 102 aluminum alloy. Designed for large or multiple aquariums.

• Flow ~2.5 L/sec. free flow
• Hose bib output for 10mm ID tubing.
• Hose bib input for 13mm ID tubing.
• Replaceable / washable filter.
• 120 Volt AC, 60 Hz
• Dimensions: 11.14” (L) x 2.78” (W) x 6.88” (H)

CAT # PMP-29 $39.95 each

FAST FRIENDLY SERVICE
POTENTIOMETERS

**POTS WITH 6MM DIA. SHAFT**

- 6mm x 10mm split knurled shaft
- 7mm threaded bushing
- Solder lugs

**LINEAR TAPER**

1K, 2K, 5K, 10K, 20K, 50K, 200K, 500K, 1M, 1.5M and 2M.
CAT# NLTP-XX (no mixing values)
XX=value in ohms, i.e. NLTP-200K
75¢ each • 10 for 65¢ each

**AUDIO TAPER**

1K, 10K, 50K, 100K, 500K and 1M.
CAT# NATP-XX (no mixing values)
XX=value in ohms, i.e. NATP-100K
2 for $1.50 • 10 for 65¢ each

**10K LINEAR PRECISION POT**

- Tokos/Cosmos RV Q24YN 15F B 103
- 1/4W carbon film pot designed for long-life
- 6mm D x 5mm L flatted shaft
- 9mm threaded bushing
- Solder-lug terminals
- Very smooth, precise rotation, 500,000 cycles
CAT# LPT-10K $2.00 each
10 for $1.75 each • 100 for $1.60 each

**20K LINEAR POT**

- 6 x 10mm split knurled shaft
- 7mm threaded bushing • PC pins
CAT# TPL-20K 50¢ each
10 for 45¢ each

**50K LINEAR W/ SWITCH**

- Alpha #B50K
- 6mm diameter split knurled shaft
- 7mm threaded bushing
- SPST switch off at full CCW direction
CAT# PTL-50K 85¢ each

**100K LINEAR TAPER**

- Two switches, rotary on/off and momentary push on/off
- Multiple detents • 6mm split knurled shaft
- 7mm threaded bushing • PC pins
CAT# PWS-104 85¢ ea. • 10 for 70¢ ea.

**200K LINEAR POT W/ SWITCH**

- 6 x 10mm split knurled shaft
- 8mm threaded bushing
- SPDT switch • Pc pins
CAT# LTP-200KS 60¢ each
10 for 50¢ each

**DUAL 100K MOTORIZED LINEAR POT**

- Powered by reversible 5Vdc gearhead motor
- Overall: 25D x 64mm including shaft
- 6mm knurl slotted shaft is 14mm long
- 8 PC pins on pot, single row
- Solder-loop terminals on motor
CAT# MPOT-100K $3.50 ea. • 10 for $3.00 ea.

**LINEAR POT W/ 1/4" DIA. SHAFT**

All of the following pots have 1/4" diameter shafts and 3/8" diameter (3/8-32) or 7mm threaded bushings, unless otherwise specified. Shafts may be full-round, half-round or knurled.

**10 OHM 5W WIREFOUND POT**

CTS #026TA20R100B1A3.
Solder-lugs.
CAT# PT-10 $2.50 each
100 for $2.25 each

**10K BOURNS POT, PRE-WIRED**

Bourns 82A1AC28BA0728
2W, single-turn cermet. New pot, prepared with three 6" wire leads.
CAT# PTW-10K $2.75 • 2.25 each
10 for $2.00 each

**2.5 MEG**

Bourns 3852A-242-255A
2W single-turn Cermet pot.
0.35" long shaft. Solder lugs.
CAT # LTP-255 $2.00 each

**50K OHM LINEAR TAPER POT**

- 50K-C taper. 4mm diameter x 14mm long slotted shaft.
6mm diameter threaded bushing.
CAT # POT-50KL

**10K OHM PRECISION MULTITURN POT**

- 3590S-2-103L. 10K Ohm, 10-turn linear potentiometer ±0.25%.
- 1/4" diameter x 1/2" long shaft. 3/8-32 threaded bushing.
- Solder turret terminals.
CAT # PP-10K $4.50 each

**200K LINEAR POT W/ SWITCH**

- 6 x 10mm split knurled shaft
- 8mm threaded bushing
- SPDT switch • Pc pins
CAT# LTP-200KS 60¢ each
10 for 50¢ each

**DUAL 100K MOTORIZED LINEAR POT**

- Powered by reversible 5Vdc gearhead motor
- Overall: 25D x 64mm including shaft
- 6mm knurl slotted shaft is 14mm long
- 8 PC pins on pot, single row
- Solder-loop terminals on motor
CAT# MPOT-100K $3.50 ea. • 10 for $3.00 ea.

**TAPER**

- 100K LINEAR TAPER POT

**10K AUDIO TAPER, 6MM SHAFT**

Stereo balance control. Two-channel mirror-reversed audio taper pot.
Not for volume or tone. 6mm flattened shaft. 7mm threaded bushing.
CAT # DPA-10K 65¢ each

**BALANCE CONTROL**

**NO HASSLE RETURN POLICY**
50% OFF ALL PRECISION MULTI-TURN TRIMMERS

**RECTANGULAR TRIMMER**
0.75” X 0.19” high. 3/4 watt. Comparable to Bourns 3006P, Beckman 89PR, Weston 830P, AB 94P. Avail. values: 2K, 2.2K, 5K, 10K, 100K, 500K
CAT# RXP-XXX 65¢ each
XXX=value in ohms, ie RXP-2.2K

**MULTITURN TRIMMERS**
1/4W cermet trimmers. 6 x 7 x 4mm. Triangle pc pin pattern.

<table>
<thead>
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<th>Top Adjust</th>
<th>Side Adjust</th>
<th>CAT#</th>
<th>EACH</th>
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<tbody>
<tr>
<td>500 Ω</td>
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<td>65¢ each</td>
<td>65¢ each</td>
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**MULTI-TURN TRIMMER POT**
Precision 20-turn trim pot. 3/8” square, top-adjust. Leads in straight line on 0.10” centers. Available values: 50K, 1MEG
CAT# MTPS-XXX 65¢ each
XXX=value in ohms, ie MTPS-1MEG

**1K OHM MULTI-TURN TRIMMER**
Vishay T93YB 1K 10% multiturn trimmer. 10 x 10 x 5mm. Triangle lead pattern, outer legs on 5mm centers.
CAT# MTP-1K 65¢ each
10 for 50¢ each

**SINGLE TURN TRIMMERS**

**10K ALLEN BRADLEY TRIMMER**
Allen Bradley Type E. 10K Ω, single-turn trimmer potentiometer. 10mm square. PC leads in triangular pattern, 5mm centers w/ wiper lead in middle.
CAT# TRP-10K 2 for $1.00

**1K VERTICAL ADJUST**
Piher RPT10LV0 1K 20%. 10mm diameter cermet trimmer. Outer PC pins on 5mm centers.
CAT# TPR-1K 5 for $1.00 • 100 for 15¢ ea.

**TOP ADJUST**
3/8” square x 3/16” high. 1/2 watt. Comparable to Bourns 3386P, Beckman 72PR and Spectrol 63P.

<table>
<thead>
<tr>
<th>Ohms</th>
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<th>EACH</th>
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<tbody>
<tr>
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<td>50K</td>
<td>STP-50K</td>
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</table>

**SINGLE TURN TRIMMER POTS**
7mm square trimmer. Two leads are on 5mm centers. Middle (wiper) lead is 5mm from the center of the other leads. Available values: 500, 5K, 10K, 20K, 100K, 150K, 500K
CAT# TPS-XXX (no mixing values)
XXX=value in ohms, ie TPS-10K
4 for $1.00 • 100 for 18¢ each

1 MEG Ω THUMBWHEEL TRIM POT
0.7” dia., old-style trim pot. PC leads on 0.4” centers. Center wiper terminal is on opposite side from other leads.
CAT# TPT-1M 10 for $1.00
100 for 6.5¢ each • 500 for 4¢ each

**SLIDE POTS**

**SLIDE POTS, 65MM TRAVEL**
Slide potentiometers with mounting holes on 80mm centers. Slide travel, 65mm. Single-element if not otherwise noted. “C-detent” indicates a center-detent.

<table>
<thead>
<tr>
<th>Res.</th>
<th>Taper</th>
<th>Desc</th>
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<td>Linear</td>
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<tr>
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<td>Linear</td>
<td>2-element</td>
<td>SLP-50KPC</td>
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<tr>
<td>50K</td>
<td>Linear</td>
<td>C-detent</td>
<td>SLP-50KS</td>
</tr>
</tbody>
</table>

2 for $1.00 • 100 for 35¢ each

**10K OHM PC MOUNT SLIDE POT**
10K Ohm, audio-taper slide potentiometer. Slider and element are unenclosed on 40 x 9mm board with 5 pc leads.
CAT# SP-10KA 2 for $1.00

**STANTON FADERS**

**STANTON # CT-301**
Dual 10K slide pot, 1.75” travel. Brushed aluminum face plate 3.55” x 0.78” with recessed mounting holes. Aluminum color slider. Mounting centers 3.20”
CAT# SF-301 $5.00 each

**STANTON # LFRM19**
Dual 50K, audio taper slide pot. Brushed aluminum face and knob. 5-pin header connector, 0.10” centers.
CAT# SF-19 $4.35 each

**STANTON # LF-303**
Dual 20K slide pot. Brushed aluminum face, 3.50” x 1.27” with recessed mounting holes in corners. Rubberized black slider.
CAT# SF-303 $5.00 each

**100K FADER**

#405DJM330-229 Dual 100K fader. 1.87” travel. Very smooth operation. 5-pin male connector with pins on 0.1” centers, possibly plugs into Stanton mixer board. Overall body size in 2.88” L x 0.78” W x 0.82” D (including connector). 0.80” high slider.
CAT# SLP-100KX2 $4.50 each
KNOBS

**KNOBS FOR 1/4” SHAFT**

33mm diameter x 12mm high off-white plastic knob for 1/4” flattened shaft. Metal insert.
CAT# KB-239
50¢ each • 10 for 45¢ each

Black plastic knob, 1.85” diameter x 0.9” high. For 0.25” 1/2 moon shaft. Shaft length needs to be 0.75” or longer. Originally designed for an Atari 2600 paddle controller.
CAT# KB-296 75¢ each

**KNOBS FOR 1/8” SHAFT**

Black plastic knob for 1/8” round shaft with raised face, serrated circumference and raised white pointer line down one side. 0.52” diameter x 0.60” high. Brass insert and set screw. Available with red (KNB-283R), green (KNB-283G), blue (KNB-283BL) or yellow (KNB-283Y) face.
CAT# KB-283, R, G, BL, Y $1.00 each

Alep # MKCB-500B-1/8-7 Black, machined aluminum control knob. 0.5" dia. x 0.32" high. Top portion of knob is rectangular, 0.49" x 0.22" x 0.44" high. A black pointer groove is etched into one side of knob. Two set screws.
CAT# KB-231 $1.50 each
25 for $1.35 each • 100 for $1.15 each

**KNOBS FOR 6MM KNURLED SHAFT**

With raised colored face, serrated circumference and raised white pointer line down one side. 0.50” diameter x 0.60” high. Brass insert and set screw. Available with blue (BL), black (BK), red (RD), green (GN) & yellow (YL) faces.

CAT# KB-267XX (XX=color i.e KNB-267BL) 75¢ each • 10 for 65¢ each

RUBBERIZED POINTER KNOB

White raised pointer line. 0.40” diameter top, 0.53” dia. skirt, 0.63” high.
CAT# KB-269 65¢ each
10 for 55¢ each

ALUMINUM POINTER KNOB

Black aluminum instrument knob for 6mm serrated shaft. White pointer line. Plastic insert is recessed about 0.3” so pot shaft needs to stand at least 0.6” out from panel. 15mm diameter x 17mm high.
CAT# KB-286 60¢ each
10 for 50¢ each

BLACK PLASTIC POINTER KNOBS

Raised face, serrated circumference and raised white pointer line. Brass insert with set screw.

19MM DIAMETER x 16.5MM HIGH
Red face CAT# KNB-281R
Black face CAT# KNB-281B
85¢ each • 10 for 75¢ each

25MM DIAMETER x 16.5MM HIGH
Red face CAT# KNB-282R
Black face CAT# KNB-282B
95¢ each • 10 for 85¢ each

Black plastic knob with side pointer and white pointer line on top. 4mm wide, chrome-like ring around top. Ribbed circumference. 18mm diameter x 21mm high.
CAT# KB-298 $1.00 each

**KNOBS FOR 6MM KNURLED SHAFT**

Black plastic knob with serrated circumference. Bronze face with pointer dot. 0.9” diameter at base, 0.8” diameter at top. 0.54” high. Shank, 0.38” long x 0.43” dia.

Note: Removed from equipment. Good condition, but shanks show signs of wear.
CAT# KB-260 35¢ each
10 for 30¢ each • 100 for 20¢ each

2.1" DIAMETER CLAMPING KNOB

• Ragan CR-30
• 6-lobe black
• ABS clamping knob
• 2.10" diameter x 0.86"*• 1/4-20 stud, 0.5" long, zinc-plated steel
CAT # SC-35 2 for $1.30

1/16" ALLEN WRENCH

Fits knobs with hex-head set screws.
CAT# AW-2
4 for $1.00 • 100 for $15.00

**THUMBSCREWS**

8-32 x 5/8 KNURLED THUMB SCREW

Stainless steel screw, 8-32 x 5/8”. 1/2” diameter knurled knob.
CAT# SC-58 4 for $1.00

8-32 X 1 1/4 KNURLED THUMB SCREW

Stainless steel screw, 8-32 x 1 1/4”. 1/2” diameter knurled knob.
CAT # SC-114 3 for 99¢
1/4 & 1/2 WATT RESISTORS
5% CARBON FILM

<table>
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<th>watts</th>
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DECADe BOXES

CAPACITANCE 100PF – 9.999µF
25V, X7R capacitors, non-polarized. Five pushbutton decade switches. Banana plug binding posts. 4.0” x 2.0” x 1.5”
CAT# CBX-2 $50.00 each

CAPACITANCE 0.1 – 9.999µF
Electrolytic capacitors, 20% tolerance. Six pushbutton decade switches. Banana plug binding posts. 4.0” x 2.5” x 2.0”
CAT# CBX-3 $80.00 each

RESISTANCE 1-9,999,999 Ohms
1/4W 1% resistors. Seven pushbutton decade switches. Banana plug binding posts. 4.0” x 2.5” x 2.0”
CAT# RBX-1 $57.50 each

10W RESISTIVE LOAD 1-999 Ohms
Three rotary decade switches. Banana plug binding posts. 6.0” x 3.5” x 2.5”
CAT# RBX-2 $120.00 each

POWER RESISTORS

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30 DETENT W/ SWITCH
Alps mechanical rotary encoder with momentary-on push switch. 30 detents. 6mm diameter aluminum shaft. 12mm square body. 7mm dia. x 10mm high plain bushing. PC pins. 2 terminals for switch. 3 terminals for encoder.
CAT# RE-30 $1.35 ea. • 50 for $1.15 ea.

20 DETENT
EC111. 6mm diameter flatted shaft. 7mm threaded bushing.
CAT # RE-66 $1.00 each
10 for 85¢ each

RESISTANCE     1-9,999,999 Ohms
1/4W 1% resistors. Seven pushbutton decade switches. Banana plug binding posts. 4.0” x 2.5” x 2.0”
CAT# CBX-3 $80.00 each

CAPACITANCE 0.1 – 9.999µF
Electrolytic capacitors, 20% tolerance. Six pushbutton decade switches. Banana plug binding posts. 4.0” x 2.5” x 2.0”
CAT# CBX-3 $80.00 each

RESISTANCE     1-9,999,999 Ohms
1/4W 1% resistors. Seven pushbutton decade switches. Banana plug binding posts. 4.0” x 2.5” x 2.0”
CAT# RBX-1 $57.50 each

10W RESISTIVE LOAD 1-999 Ohms
Three rotary decade switches. Banana plug binding posts. 6.0” x 3.5” x 2.5”
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CAT# RE-30 $1.35 ea. • 50 for $1.15 ea.

20 DETENT
EC111. 6mm diameter flatted shaft. 7mm threaded bushing.
CAT # RE-66 $1.00 each
10 for 85¢ each

ROTARY ENCODERS

30 DETENT W/ SWITCH
Alps mechanical rotary encoder with momentary-on push switch. 30 detents. 6mm diameter aluminum shaft. 12mm square body. 7mm dia. x 10mm high plain bushing. PC pins. 2 terminals for switch. 3 terminals for encoder.
CAT# RE-30 $1.35 ea. • 50 for $1.15 ea.

20 DETENT
EC111. 6mm diameter flatted shaft. 7mm threaded bushing.
CAT # RE-66 $1.00 each
10 for 85¢ each

26.7 OHM 10 WATT DALE RESISTOR
Dale NH-10. 26.7Ω, 1%, 10 Watt precision aluminum power resistor. 0.75” x 0.42” x 0.38”. Solder-loop terminals. Attach to heatsink for rated power.
CAT # 26.7-10 65¢ each
10 for 50¢ each

MOST ORDERS SHIPPED WITHIN 24-48 HOURS
73
# CAPACITORS

## RADIAL ELECTROLYTIC

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<td>.45</td>
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</table>

Use CAT# µF R V i.e. 10uF@35V = CAT# 10R35

* indicates 105°C

Use CAT# µF R V - C i.e. 10uf @ 35V = 10R35-C

## SNAP-IN CAPACITORS

<table>
<thead>
<tr>
<th>PC leads. 10mm spacing.</th>
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<tbody>
<tr>
<td>47 UF 250 V</td>
</tr>
<tr>
<td>25mm x 22mm diameter. 105°C.</td>
</tr>
<tr>
<td>CAT# EC-47250</td>
</tr>
<tr>
<td>35¢ each</td>
</tr>
<tr>
<td>100 for 20¢ each</td>
</tr>
<tr>
<td>150 MFD 350 V</td>
</tr>
<tr>
<td>31mm x 26mm diameter. 105°C.</td>
</tr>
<tr>
<td>CAT# EC-1535</td>
</tr>
<tr>
<td>$1.55 each</td>
</tr>
<tr>
<td>10 for $1.35 each</td>
</tr>
<tr>
<td>330 UF 200 V</td>
</tr>
<tr>
<td>25mm high x 25mm diameter. 85°C.</td>
</tr>
<tr>
<td>CAT# EC-3320</td>
</tr>
<tr>
<td>65¢ each</td>
</tr>
<tr>
<td>10 for 60¢ each • 100 for 50¢ each</td>
</tr>
<tr>
<td>330 UF 250 V</td>
</tr>
<tr>
<td>Teapo LX 85°C. 22mm dia.x 46mm high.</td>
</tr>
<tr>
<td>CAT# EC-3325</td>
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<tr>
<td>75¢ each • 10 for 65¢ each</td>
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## MEMORY BACK-UP “SUPERCAPS”

High-capacitance capacitors. Slowly release charge to provide back-up power in temporary shut-down situations.

| 0.47 FARAD 5.5V           |
| Elna DB-5R5D474.          |
| 20mm diameter x 7.5mm. PC leads on 5mm centers. |
| CAT# CBC-23               |
| $1.00 each                |

| 1 FARAD 2.5V               |
| 8mm dia. x 10.5mm long. Crimped radial leads on 5mm centers. |
| CAT# CBC-22               |
| 3 for 99¢ • 100 for 25¢ each |

| 1 FARAD, 5.5 V             |
| 20mm dia. x 7mm high. 5mm lead spacing. |
| CAT# CBC-25               |
| $2.00 ea. • 10 for $1.80 ea. |

## PHOTOFLASH CAPACITOR

| 150 UF 330 V Rubycon. 0.64" diameter x 1.17". |
| CAT# PPC-150               |
| 2 for $1.00 • 100 for 35¢ each |

## 6.8 µF 25V MOLDED TANTALUM

| Kemet #T340C685M035AS       |
| 7 x 4 x 10mm. 5mm lead spacing. |
| CAT# RMT-685               |
| 2 for $1.00 • 100 for 35¢ each |

## MOTOR CAPACITOR

| 11UF 170 VAC               |
| Tecate #M72533. -25ºC/+85ºC. 25mm dia. x 60mm long. 4" pigtail leads. UL. |
| CAT# MPC-11                |
| $1.35 each                |
10 µF 10V AXIAL TANTALUM

<table>
<thead>
<tr>
<th>CAT#</th>
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AXIAL CERAMIC CAPS

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<tr>
<td>150pf</td>
<td>100V</td>
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<td>820pf</td>
<td>100V</td>
<td>SA-821</td>
</tr>
<tr>
<td>0.01µF</td>
<td>50V</td>
<td>SA-103</td>
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<td>0.015µF</td>
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<td>SA-153</td>
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<td>0.1µF</td>
<td>25V</td>
<td>MCB-104</td>
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<td>50V</td>
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RADIAL MYLAR CAPACITORS

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<td>68µF</td>
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<td>.0068</td>
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<td>RMC-1682</td>
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<td>MFC-273</td>
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<td>.0299</td>
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<td>RMC-315</td>
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<td>100V</td>
<td>RMC-333</td>
<td>.15</td>
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<tr>
<td>.039</td>
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<tr>
<td>.1</td>
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MYLAR AXIAL CAPACITORS

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<td>AMC-272</td>
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<td>.0042</td>
<td>100V</td>
<td>AMC-422</td>
<td>.10</td>
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<tr>
<td>.0068</td>
<td>200V</td>
<td>AMC-10</td>
<td>.10</td>
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<tr>
<td>.01</td>
<td>63V</td>
<td>AMC-93</td>
<td>.10</td>
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<td>.082</td>
<td>100V</td>
<td>AMC-25</td>
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<td>100V</td>
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METALLIZED POLYESTER FILM CAPACITORS

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<td>R.01µF</td>
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<td>0.1µF</td>
<td>400V</td>
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<td>0.1µF</td>
<td>630V</td>
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<td>250V</td>
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<tr>
<td>1µF</td>
<td>250V</td>
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100 VOLT RADIAl POLYESTER

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<td>472</td>
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<td>.047</td>
<td>473</td>
<td>RMC-473</td>
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<td>.068</td>
<td>683</td>
<td>RMC-683</td>
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<td>.082</td>
<td>823</td>
<td>RMC-823</td>
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<td>.22</td>
<td>225V</td>
<td>RMC-224</td>
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<td>.47</td>
<td>474</td>
<td>RMC-474</td>
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NO HASSLE RETURN POLICY
**REMOTE CONTROLS**

**1-CHANNEL**

Keychain RF remote controls for 12Vdc applications but can be adapted for home use with the addition of a 12Vdc relay. Black-box receiver is 2.5” x 1.8” x 0.97”. Includes two keychain transmitters with batteries (VR22/CN22/CN23A) and hook-up diagram.

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<th>Amp</th>
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<tr>
<td>6</td>
<td>RC-10</td>
<td>$18.75 each</td>
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<tr>
<td>15</td>
<td>RC-11</td>
<td>$21.75 each</td>
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**4-CHANNEL**

Each channel operates 12Vdc 6A max. load and can be used in either “Latch” or “Momentary” modes. 4-output receiver is 3.25” x 2.57” x 1.22”. Key fob transmitter includes 12Vdc (27A) battery. CAT# RC-14 $39.95 each

**RF TRANSMITTER / RECEIVER MODULES**

433 MHz RF transmitter and receiver. Use to send audio or data signals, or use as a remote control on/off switch. With a few extra parts you can use these modules in a variety of applications. Right-angle headers (0.1” spacing) plug into solderless or solderable breadboards, for convenient experimentation. Operates on 5Vdc power. Transmitter is 19mm square, receiver is 14 x 30mm. CAT # RC-16 $3.00 set

**WIRELESS REMOTE CONTROL SWITCH**

This indoor/outdoor wireless control switch is great for switching lights and appliances with the push of a button. Also useful for home security and light control. Comes with one remote control and one switch outlet. Led light indicates the device on. 3-prong grounded plug and outlet. 16/3AWG 4” cord. Rated 13A resistive, 13A general purpose, 1000W Tungsten. Includes 12V alkaline battery. RF signal operates up to 80’. UL listed.

CAT # RC-15 $19.95 each

**VARIABLE CAPACITORS**

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<th>Value</th>
<th>UF</th>
<th>Price</th>
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<tbody>
<tr>
<td>3.5-20 pF</td>
<td>5mm dia. ceramic variable cap.</td>
<td>Surface mount pads on 7mm centers. CAT# TCP-320 65¢ each 10 for 60¢ each 100 for 50¢ each</td>
</tr>
<tr>
<td>3.5-14 pF</td>
<td>TUSONIX 0538-044 B</td>
<td>3.5-14 Miniature ceramic trimmer capacitor. 9.5mm diameter x 8mm high. PC pins. CAT# TCP-44 $1.50 each</td>
</tr>
<tr>
<td>2.5-23 pF</td>
<td>JOHANSON 9308/95-03</td>
<td>Miniature ceramic trimmer capacitor. 7.5mm diameter x 7mm high. PC pins. CAT# TCP-930 $1.50 each</td>
</tr>
<tr>
<td>1.4-9.2 pF</td>
<td>E.F. Johnson #189-503-5</td>
<td>PC mount air variable capacitor. 1.4 - 9.2 pF @ 325 Vdc. 8 plates, 0.010&quot; air gap. 11.3mm square, 13mm high. CAT# TCP-189 $3.00 each 10 for $2.75 each</td>
</tr>
</tbody>
</table>
**POWERFUL NEODYMIUM RARE EARTH MAGNETS**

Nickel-plated neodymium (NdFeB) magnets have ratings into the 45MGOe range far exceeding the Samarium Cobalt in the 32MGOe range and Alnico or Ceramics in the 8MGOe range.

**CAUTION!** Because of the high strength of Neodymium magnets, and to prevent injury to people or equipment, care must be taken when handling these around other magnets or metal objects.

<table>
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<tr>
<th>SQUARE</th>
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<tbody>
<tr>
<td>CAT# MAG-82</td>
<td>5 for 75¢ each</td>
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<td>100 for $1.20 each</td>
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<table>
<thead>
<tr>
<th>BAR</th>
<th>5 x 10.2 x 2.7mm</th>
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<tbody>
<tr>
<td>CAT# MAG-74</td>
<td>2 for $1.00 each</td>
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<tr>
<td>100 for 35¢ each</td>
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<table>
<thead>
<tr>
<th>DISC</th>
<th>6 x 1.5mm</th>
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<tbody>
<tr>
<td>CAT# MAG-157</td>
<td>8 for $1.00 each</td>
</tr>
<tr>
<td>100 for $10.00 each</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BAR</th>
<th>25 x 15 x 2mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT# MAG-144</td>
<td>$1.25 each</td>
</tr>
<tr>
<td>10 for $1.00 each</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BAR</th>
<th>50 x 14.5 x 5.3mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT# MAG-132</td>
<td>$3.95 each</td>
</tr>
<tr>
<td>10 for $3.65 each</td>
<td></td>
</tr>
</tbody>
</table>

BAR

Our largest, most powerful magnet. 55mm x 17mm x 5.3mm.


**CAT# MAG-158** | $4.50 each |

**IRREGULARLY SHAPED**

28mm (longest dimension) x 16mm x 4.5mm thick

**CAT# MAG-148** | 70¢ each |
| 10 for 65¢ each |
| 100 for 50¢ each |

**TINY NEODYMIUM MAGNET**

Ugly but cheap! Strong little neodymium, rare-earth cylindrical magnet. 0.2” diameter x 0.2” long (5 x 5mm).

Nickel plating is irregular or non-existent on some of the magnets. Large quantity available.

**CAT# MAG-161** | 5 for $1.00 each |
| 100 for 10¢ each |
| 500 for 7¢ each |
| 1000 for 6¢ each |

**CYLINDER** 6.35mm dia. x 5.1mm long

**CAT# MAG-76** | 60¢ each |
| 100 for 45¢ each |

**CYLINDER** 0.25” dia. x 0.54” long

**CAT# MAG-160** | 50¢ each |
| 50 for 40¢ each |
| 100 for 35¢ each |

**BLACK SPHERES AND EGGS**

Polished black metallic magnets with fairly strong attraction. Fun for experimentation or metallic sculpture. Throw two in the air together to create a buzzing sound.

<table>
<thead>
<tr>
<th>SPHERES</th>
<th>Diameter</th>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.55” (14mm)</td>
<td>MAG-251</td>
<td>50¢ each</td>
<td></td>
</tr>
<tr>
<td>0.76” (19mm)</td>
<td>MAG-252</td>
<td>$1.20 each</td>
<td></td>
</tr>
<tr>
<td>0.95” (24.5mm)</td>
<td>MAG-162</td>
<td>$1.75 each</td>
<td></td>
</tr>
</tbody>
</table>

**SNAKE EGGS**

1.33” long x 0.49” (largest) diameter.

**CAT# MAG-253** | 60¢ each |
| 2.36” long x 0.68” (largest) diameter.

**CAT# MAG-164** | $1.25 each |
# PROJECT ENCLOSURES

## MINI-ABS CASES
Black or gray ABS plastic with inter-locking lid. Integral standoffs for pc board mounting. Lid held in place with self-tapping #4 screws (included).

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>1-9 Price</th>
<th>10+ Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.97&quot; x 1.38&quot; x 0.59&quot;</td>
<td>1551-FBK</td>
<td>$1.90 each</td>
<td></td>
</tr>
<tr>
<td>1.97&quot; x 1.38&quot; x 0.8&quot;</td>
<td>1551-GGY</td>
<td>$1.90 each</td>
<td></td>
</tr>
<tr>
<td>2.36&quot; x 1.38&quot; x 0.8&quot;</td>
<td>1551-HGY</td>
<td>$2.25 each</td>
<td></td>
</tr>
<tr>
<td>3.15&quot; x 1.57&quot; x 0.8&quot;</td>
<td>1551-KGY</td>
<td>$2.35 each</td>
<td></td>
</tr>
<tr>
<td>3.9&quot; x 2.0&quot; x 0.8&quot;</td>
<td>1591-ASBK</td>
<td>$3.75 each</td>
<td>$3.50 each</td>
</tr>
<tr>
<td>4.4&quot; x 2.4&quot; x 1.1&quot;</td>
<td>1591-BSBK</td>
<td>$4.40 each</td>
<td>$4.20 each</td>
</tr>
<tr>
<td>4.7&quot; x 2.6&quot; x 1.4&quot;</td>
<td>1591-CSBK</td>
<td>$4.80 each</td>
<td>$4.60 each</td>
</tr>
</tbody>
</table>

## GENERAL PURPOSE CASES
Black ABS cases with countersunk lid secured with self-tapping screws. Slots for mounting pc boards.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>Each Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3&quot; x 2.2&quot; x 0.8&quot;</td>
<td>1591-MSBK</td>
<td>$3.78 each</td>
</tr>
<tr>
<td>3.9&quot; x 2.0&quot; x 0.8&quot;</td>
<td>1591-ASBK</td>
<td>$3.75 each</td>
</tr>
<tr>
<td>4.4&quot; x 2.4&quot; x 1.1&quot;</td>
<td>1591-BSBK</td>
<td>$4.40 each</td>
</tr>
<tr>
<td>4.7&quot; x 2.6&quot; x 1.4&quot;</td>
<td>1591-CSBK</td>
<td>$4.80 each</td>
</tr>
</tbody>
</table>

## INSTRUMENT CASES
Gray ABS plastic. Two piece tongue and groove construction. 0.064" brushed aluminum front and rear panels. Integral pc standoffs. Front and rear vertical pc board guides.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>Each Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1&quot; x 3.65&quot; x 1.36&quot;</td>
<td>1598-ASGY</td>
<td>$9.22 each</td>
</tr>
<tr>
<td>5.26&quot; x 5.3&quot; x 2&quot;</td>
<td>1598-BSGY</td>
<td>$10.32 each</td>
</tr>
</tbody>
</table>

## CASES w/ BATTERY COMPARTMENTS
Black ABS plastic cases with removable front panels and panel for battery compartment. Integral pc board standoffs. Includes self-tapping screws. 9V batteries won’t fit in CAT#s 1593-SBK & TBK.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>Each Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6&quot; x 3.54&quot; x 1.1&quot;</td>
<td>1593-PBK</td>
<td>$4.58 each</td>
</tr>
<tr>
<td>2.6&quot; x 4.4&quot; x 1.1&quot;</td>
<td>1593-QBK</td>
<td>$5.16 each</td>
</tr>
<tr>
<td>2.6&quot; x 3.6&quot; x 0.83&quot;</td>
<td>1593-SBK</td>
<td>$4.28 each</td>
</tr>
<tr>
<td>2.6&quot; x 4.35&quot; x 0.83&quot;</td>
<td>1593-TBK</td>
<td>$4.86 each</td>
</tr>
<tr>
<td>2.6&quot; x 5.45&quot; x 1.1&quot;</td>
<td>1593-YBK</td>
<td>$5.96 each</td>
</tr>
</tbody>
</table>

## DIECAST ALUMINUM ENCLOSURES
Aluminum enclosure with countersunk lid that machine screws into drilled and tapped holes. Lap joint construction provides protection from dust and water.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>Each Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.99&quot; x 1.99&quot; x 1.23&quot;</td>
<td>1590-LB</td>
<td>$7.25 each</td>
</tr>
<tr>
<td>3.64&quot; x 1.52&quot; x 1.23&quot;</td>
<td>1590-A</td>
<td>$7.05 each</td>
</tr>
<tr>
<td>4.39&quot; x 2.34&quot; x 1.23&quot;</td>
<td>1590-B</td>
<td>$8.40 each</td>
</tr>
<tr>
<td>5.76&quot; x 4.79&quot; x 1.55&quot;</td>
<td>1590-XX</td>
<td>$11.20 each</td>
</tr>
</tbody>
</table>

## ECONOMY PROJECT BOXES
ABS plastic project enclosure. Inter-locking lid secured with self-tapping screws. Interior slots for PC boards. Includes hardware. Boxes are black, except CAT#s with “G” are grey.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>Each Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.51&quot; x 1.73&quot; x 1.25&quot;</td>
<td>MB-131</td>
<td>$3.00 each</td>
</tr>
<tr>
<td>2.53&quot; x 1.75&quot; x 1.37&quot;</td>
<td>MB-133</td>
<td>$2.65 each</td>
</tr>
<tr>
<td>2.96&quot; x 1.94&quot; x 1.05&quot;</td>
<td>MB-163</td>
<td>$3.00 each</td>
</tr>
<tr>
<td>3.95&quot; x 3.02&quot; x 1.60&quot;</td>
<td>MB-173</td>
<td>$3.00 each</td>
</tr>
<tr>
<td>4&quot; x 3&quot; x 1.6&quot;</td>
<td>MB-173G</td>
<td>$3.00 each</td>
</tr>
<tr>
<td>3.97&quot; x 2.12&quot; x 1.72&quot;</td>
<td>MB-132</td>
<td>$3.00 each</td>
</tr>
<tr>
<td>4.33&quot; x 2.24&quot; x 0.83&quot;</td>
<td>MB-420</td>
<td>$3.70 each</td>
</tr>
<tr>
<td>5.3&quot; x 3&quot; x 1.9&quot;</td>
<td>MB-113</td>
<td>$4.85 each</td>
</tr>
<tr>
<td>5.30&quot; x 3&quot; x 1.9&quot;</td>
<td>MB-113G</td>
<td>$4.50 each</td>
</tr>
</tbody>
</table>

## PROJECT BOXES W/ MOUNTING FLANGES
High-impact ABS plastic utility boxes. Black textured finish. Interlocking lid held in place with screws. Interior card guides for 1.6mm thick PC board. Mounting flange has counter-sunk screw holes and adds 1" to 1.25" to overall length of box.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>Each Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.25&quot; x 2.10&quot; x 1.20&quot;</td>
<td>MBF-20</td>
<td>$2.75 each</td>
</tr>
<tr>
<td>5.12&quot; x 2.68&quot; x 1.72&quot;</td>
<td>MBF-22</td>
<td>$3.50 each</td>
</tr>
<tr>
<td>6.18&quot; x 3.78&quot; x 2.10&quot;</td>
<td>MBF-24</td>
<td>$5.45 each</td>
</tr>
</tbody>
</table>

## ALUMINUM BOXES W/ MOUNTING FLANGES

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>Each Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.01&quot; x 3.24&quot; x 2.05&quot;</td>
<td>1590-P1F</td>
<td>$27.82 each</td>
</tr>
<tr>
<td>7.55&quot; x 4.39&quot; x 2.48&quot;</td>
<td>1590-R1F</td>
<td>$40.24 each</td>
</tr>
<tr>
<td>7.38&quot; x 4.70&quot; x 2.05&quot;</td>
<td>1590-DF</td>
<td>$33.62 each</td>
</tr>
</tbody>
</table>
PROJECT BOXES WITH 9V BATTERY COMPARTMENTS
ABS plastic enclosures with 9V battery compartment with removable access panel. Interlocking lid secured with self-tapping screws. Interior slot for pc board.

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7&quot; x 1.7&quot; x 1.2&quot;</td>
<td>MB-221</td>
<td>$3.95 each</td>
</tr>
<tr>
<td>3.3&quot; x 2.1&quot; x 1.4&quot;</td>
<td>MB-251</td>
<td>$6.75 each</td>
</tr>
<tr>
<td>4.2&quot; x 2.7&quot; x 1.6&quot;</td>
<td>MB-271</td>
<td>$9.15 each</td>
</tr>
</tbody>
</table>

METAL ENCLOSURE, HOLES ON ONE SIDE, 6" X 3.5" X 1"
Nice-looking, very solid metal enclosure with matte-black crinkle finish. 6" x 3.5" x 1". Four 7/16" diameter holes in one side. Four holes in bottom for press-fit, rubber feet (not included). Top and bottom of box snaps together very tightly, so screws are not necessary.

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 80mm</td>
<td>SB-300</td>
<td>$4.00 each</td>
</tr>
<tr>
<td>100 x 80mm</td>
<td>SB-400</td>
<td>$5.00 each</td>
</tr>
<tr>
<td>800 point</td>
<td>SB-800</td>
<td>$6.50 each</td>
</tr>
</tbody>
</table>

SURFACE-MOUNT ENCLOSURE
• Serpac WM072-I
• Outside: 6.88" x 4.88" x 1.60", 7.87" across flanges
• Interior: 6.43" x 4.43" x 1.60"
• Black ABS plastic box and lid
• Circuit board mounting bosses
• Self-tapping screws
• Includes PS17 gasket for IP67, NEMA 4X

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 80mm</td>
<td>MB-742</td>
<td>$7.75 each</td>
</tr>
</tbody>
</table>

SNAP-TOGETHER BOXES
Two or three piece black ABS enclosures.

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1&quot; x 1.61&quot; x 0.89&quot;</td>
<td>MB-96</td>
<td>$2.35 ea. • 10 for $2.00 ea.</td>
</tr>
<tr>
<td>3.56&quot; x 1.50&quot; x 1.20&quot;</td>
<td>MB-97</td>
<td>$1.95 ea. • 10 for $1.70 ea.</td>
</tr>
</tbody>
</table>

SOLDERABLE BREADBOARDS
Perf board with mounting holes designed to fit our project enclosures TB-1, 2, 3 & 4. Boards have holes on 0.1" matrix to fit most standard components. Copper solder rings on one side.

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2&quot; x 1 3/4&quot;</td>
<td>PC-1</td>
<td>$7.50 each</td>
</tr>
<tr>
<td>1 7/8&quot; x 2 1/4&quot;</td>
<td>PC-2</td>
<td>$1.00 each</td>
</tr>
<tr>
<td>2 1/2&quot; x 3 3/4&quot;</td>
<td>PC-3</td>
<td>$1.50 each</td>
</tr>
<tr>
<td>3&quot; x 4 1/4&quot;</td>
<td>PC-4</td>
<td>$2.00 each</td>
</tr>
</tbody>
</table>

ENCLOSURES WITH ALUMINUM COVERS
Heavy-duty 3/32" molded plastic boxes with brushed aluminum covers. Built in stand-offs for PC or perf boards. Includes screws. Solderable perf boards Our CAT#s PC-1, 2, 3, 4 (right) fit these cases.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CAT#</th>
<th>1-9</th>
<th>10+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7&quot; x 1.7&quot; x 1.2&quot;</td>
<td>TB-1</td>
<td>1.90</td>
<td>1.75</td>
</tr>
<tr>
<td>3.3&quot; x 2.1&quot; x 1.4&quot;</td>
<td>TB-2</td>
<td>2.50</td>
<td>2.30</td>
</tr>
<tr>
<td>4.2&quot; x 2.7&quot; x 1.6&quot;</td>
<td>TB-3</td>
<td>2.95</td>
<td>2.75</td>
</tr>
<tr>
<td>5.3&quot; x 3.3&quot; x 1.6&quot;</td>
<td>TB-4</td>
<td>3.75</td>
<td>3.50</td>
</tr>
</tbody>
</table>

SINGLE HOLE PADS
<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 80mm</td>
<td>SB-25</td>
<td>$3.00 each</td>
</tr>
<tr>
<td>100 x 80mm</td>
<td>SB-3T</td>
<td>$4.00 each</td>
</tr>
</tbody>
</table>

TWO HOLE PADS
<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 80mm</td>
<td>SB-2H1</td>
<td>$3.25 each</td>
</tr>
</tbody>
</table>

SOLID LINE PATTERN
<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 80mm</td>
<td>SB-5050</td>
<td>$4.00 each</td>
</tr>
<tr>
<td>100 x 160mm</td>
<td>SB-3T</td>
<td>$4.50 each</td>
</tr>
</tbody>
</table>

SOLDERABLE PERF BOARD WITH SOLDER PADS AND BUSS STRIPS
Multilayer epoxy boards. Holes on 0.1" centers for SIP and DIP components.

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 80mm</td>
<td>SB-300</td>
<td>$4.00 each</td>
</tr>
<tr>
<td>80 x 100mm</td>
<td>SB-48</td>
<td>$6.60 each</td>
</tr>
</tbody>
</table>

SNAP-TO-GATHER BOXES
Two or three piece black ABS enclosures.

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1&quot; x 1.61&quot; x 0.89&quot;</td>
<td>MB-96</td>
<td>$2.35 ea. • 10 for $2.00 ea.</td>
</tr>
<tr>
<td>3.56&quot; x 1.50&quot; x 1.20&quot;</td>
<td>MB-97</td>
<td>$1.95 ea. • 10 for $1.70 ea.</td>
</tr>
</tbody>
</table>

ORDER TOLL FREE 1-800-826-5432 79
## BREADBOARD POWER SUPPLY

Module plugs into our solderless breadboards and provides 5V and/or 3V to the rails as well as other useful functions. Works with our breadboard, CAT# PB-400 (sold separately). 32 x 54 x 25mm (1.26" x 2.08" x 0.86").

**CAT# MB-PS** $4.75 each

## BREADBOARD ACCESSORIES

Terminated with machine pins for insertion into breadboards and sockets.

### ALLIGATOR CLIP JUMPERS

6-piece set.

**CAT# TL-14** $6.95 per set

### MINI-GRABBER JUMPERS

2-piece set. Red and black mini-grabbers.

**CAT# TL-15** $5.95 per set

### BATTERY BOXES FOR BREADBOARDING

Completely enclosed with slide-off cover. Integrated On-Off switch. 6" leads with machined male pins for use with solderless breadboards.

Holds three AAA batteries for 4.5Vdc power. 2.49" x 1.45" x 0.62".

**CAT# BH-33A** $3.65 each

Holds three AA batteries for 4.5Vdc power. 2.69" x 1.90" x 0.72".

**CAT# BH-AA3** $4.50 each

Holds four AAA batteries for 6Vdc power. 2.44" x 1.90" x 0.62".

**CAT# BH-43A** $4.20 each

### JUMPER WIRE SETS

Pre-formed jumper wires for use with solderless breadboards. 14 color-coded lengths. AWG 22 solid wire. Unbreakable clear plastic storage case.

**140 PIECE ASSORTMENT** 10 of each size

**CAT# JW-140** $3.75 each

**350 PIECE ASSORTMENT** 25 of each size

**CAT# JW-350** $13.50 each

### 24" ALLIGATOR TEST LEADS, RED / BLACK PAIR

Better-than-average quality test leads. 18AWG stranded copper wire. 2" alligator clips with insulators and strain reliefs. Pair of 24" leads, red and black.

**CAT# ALG-201** $3.00 pair

---

### SNAPPABLE BREADBOARD

Solderable, double-sided breadboard that can be used as a single proto board or snapped into four smaller boards for tiny projects. 2-hole strips and 4-hole strip areas. Four power rails. Centerline pads. High-quality FR4 glass epoxy PCB. Lead-free. Anti-tarnish coating. 0.042" holes drilled on 0.1" centers. Size: 2.5" x 3.8" (63.5 x 96.5mm).

**CAT# SBB-4** $5.50 each

### SOLDIERLESS BREADBOARDS

Design and change circuits quickly & cleanly. Bread-boards accommodate all sizes of dips and discrete components with lead diameters up to 0.032". Interconnect with solid hook-up wire (#22 AWG recommended). Wires & components can be used and re-used many times without damage to board or components.

- **170 Contacts.** 1.80" x 1.40" x 0.375" high.
  - **CAT# PB-170** $2.50 each
  - 10 for $2.00 each
- **400 contacts. 300 contacts on main board & 50 contacts on each of two power distribution strips. Distribution strips are removable. White.**
  - **CAT# PB-400** $4.00 ea. • 10 / $3.75 ea.
  - Same specs as PB-400 above, but made of clear plastic.
- **840 contacts.** Dual row of buss terminals on each side of terminal strip. Double-sided adhesive tape backing. Holes for screw mounting. 2.2" x 6.5" x 0.38" high.
  - **CAT# PB-840** $8.25 each
- **1680 contacts.** 2 terminal strips.
  - 4 buss strips. 3 binding posts mounted on an aluminum back plate. 5.92" x 3.75" x 0.43" high.
  - **CAT# PB-1680** $18.25 each
- **3260 contacts.** 4 terminal strips.
  - 7 buss strips. 4 binding posts mounted on an aluminum back plate 7 7/8" x 8 3/4" x 3/8" high.
  - **CAT# PB-3260** $36.00 each

---

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### TUBE POWER SUPPLY

Module plugs into our solderless breadboards and provides 5V and/or 3V to the rails as well as other useful functions. Works with our breadboard, CAT# PB-400 (sold separately). 32 x 54 x 25mm (1.26" x 2.08" x 0.86").

**CAT# MB-PS** $4.75 each

## BREADBOARD ACCESSORIES

Terminated with machine pins for insertion into breadboards and sockets.

### ALLIGATOR CLIP JUMPERS

6-piece set.

**CAT# TL-14** $6.95 per set

### MINI-GRABBER JUMPERS

2-piece set. Red and black mini-grabbers.

**CAT# TL-15** $5.95 per set

## BATTERY BOXES FOR BREADBOARDING

Completely enclosed with slide-off cover. Integrated On-Off switch. 6" leads with machined male pins for use with solderless breadboards.

Holds three AAA batteries for 4.5Vdc power. 2.49" x 1.45" x 0.62".

**CAT# BH-33A** $3.65 each

Holds three AA batteries for 4.5Vdc power. 2.69" x 1.90" x 0.72".

**CAT# BH-AA3** $4.50 each

Holds four AAA batteries for 6Vdc power. 2.44" x 1.90" x 0.62".

**CAT# BH-43A** $4.20 each

## JUMPER WIRE SETS

Pre-formed jumper wires for use with solderless breadboards. 14 color-coded lengths. AWG 22 solid wire. Unbreakable clear plastic storage case.

**140 PIECE ASSORTMENT** 10 of each size

**CAT# JW-140** $3.75 each

**350 PIECE ASSORTMENT** 25 of each size

**CAT# JW-350** $13.50 each

### 24” ALLIGATOR TEST LEADS, RED / BLACK PAIR

Better-than-average quality test leads. 18AWG stranded copper wire. 2” alligator clips with insulators and strain reliefs. Pair of 24” leads, red and black.

**CAT# ALG-201** $3.00 pair

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**TEST CABLES & CLIPS**

**MULTIMETER TEST LEADS**
Comfort grip probes with protective cap. Needle tip test probe, for easy access of hard to reach test points. Durable PVC insulated test leads with right-angle molded direct to the wire for superior pull strength. Compatible with most multimeters that accept shrouded banana plugs.
CAT# TL-127 $9.95 / pair

**TWEEZER TEST LEADS**
A must for testing small, in-circuit components. Shrouded banana plugs fit most test meters. Tweezer marked with + and - symbols. 5.9" long tweezer probe. Overall length of leads, 24".
CAT # TL-126 $6.95 each

**ECONOMY TEST LEADS**
Red and black test probes with banana plugs.
CAT# TL-100 $2.80 per set
10 for $2.55 per set

**TEST LEADS WITH PIN PLUGS**
Set of red and black test leads with pin plugs. 22" long cables.
CAT# TL-112 $1.85 set

**TEST LEAD: BNC TO ALLIGATOR CLIPS**
7" Mueller test cable. BNC male plug to red and black alligator clips.
CAT# TL-105 $6.95 each

**MINI-HOOK JUMPERS & PROBES**
Mini-hooks are great for connection to parts in high-density areas. They give a firm, insulated connection.

**SET OF TWO 1 1/2" MINI HOOK JUMPERS**
Two 18" long mini-hook patch cords. One black, one red, with 1.5" long mini-hooks on each end.
CAT# MTC-2 $4.00 each

**MINI-GRABBER TEST CLIPS, BLACK/RED**
1.65" mini-hooks. Mini-hooks provide a firm, insulated connection to small terminals and wires in high-density areas.
CAT# MTC-7 $1.80 per pair

**CLIP JUMPERS**

**MINI JUMPERS**
10 TEST LEADS 1" CLIPS 2 each of 5 colors.
CAT# MTL-10 $3.50 per set

**REGULAR JUMPERS**
5 TEST LEADS 2" CLIPS
CAT# HDTL-5 $3.15 each

**TEST LEADS WITH SPRING-TYPE TEST CLIPS**
10 jumpers, 5 colors, 32" long. 1.75" clips with stronger jaws.
CAT# HDTL-10 $5.40 each

**ALLIGATOR CLIPS**

**2" ALLIGATOR CLIP**
Solid, spring-action clip with screw. 5mm cable access hole can connect to banana plug test lead.
CAT# ALG-M 5 for $1.25
100 for 21¢ each  • 1000 for 18¢ each

**INSULATED ALLIGATOR CLIPS**
Small, medium and large alligator clips with rubber boot. Sold in pairs, one red and one black.
1.07" alligator clips CAT# ALG-10 65¢ per pair  • 100 for 50¢ per pair
1.4" alligator clips CAT# ALG-15 75¢ per pair  • 100 for 60¢ per pair
1.75" alligator clips CAT# ALG-20 85¢ per pair  • 100 for 70¢ per pair

**INSULATION-PIERCING TEST CLIPS**
JS Popper, Inc. #JP-8681 Famous "Bed-of-Nails" test clip designed for use with smaller gauge wires. Angled nose. 2.6" long. Includes rubber boots. These are new clips, removed from unused test leads. Includes two clips with one red and one black boot.
CAT# ALG-34 $6.50 $5.00 pair

**ORDER TOLL FREE 1-800-826-5432**
TEST EQUIPMENT AND ACCESSORIES

POCKET-SIZE AUTO-RANGE MULTIMETER
Pro'sKit# MT-1506.
Auto-range, true RMS multimeter. 3-1/2 digit LCD readout. Built-in test leads.
- DCV: 400mV / 4 / 40 / 400V / 600V
- ACV: 400mV / 4 / 40 / 400V /600V
- Resistance: 400Ω 4kΩ / 40kΩ / 400kΩ / 4MΩ / 40MΩ
- Frequency: 100 / 1000Hz / 10k / 100k / 1MHz / 10MHz
- Capacitance: 4nF / 40nF / 400nF / 4μF / 40μF / 200μF
- Continuity with beeper
- Diode test: Range: 0 ~ 1.5V Resolution: 1mV
- Power: 2 x AAA batteries (not included)
- Size: 4.9" x 3.1" x 0.8"
CAT# DMM-1506 $29.95 each

COMPACT 3-1/2 DIGIT MULTIMETER
Pro'sKit # 1210.
- Back-lit LCD display. User friendly interface is ideal for students, DIY market.
- DCV: 200mV / 2V / 20V / 200V / 500V
- ACV: 200 / 500V
- DCA: 200μA / 2mA / 20mA / 200mA / 10A
- Resistance: 200Ω / 2kΩ / 20kΩ / 200kΩ / 2MΩ
- Extra functions: Continuity with beeper, diode test, transistor test, low battery indication
- Power: 9V battery (not included)
- Size: 5.7 x 2.8 x 1.3 in.
CAT# DMM-1210 $25.75 each

3 1/2 DIGITAL MULTIMETER
Pro's Kit # MT-1233D
Palm-size, 3-1/2 digit multimeter with lots of features including Backlight, Data-hold, Low-battery indicator and Overload protection. Ideal for students, home use, DIYers.
- DCV: 200mV/2000mV/20/200V/500V
- ACV: 200/500V
- DCA: 200μA / 2mA / 20mA / 200mA / 10A
- Resistance: 200Ω / 2kΩ / 20kΩ / 200kΩ / 2MΩ
- Temperature: -40~150°C ±(1.0%+3d), 150-1000°C ±(1.5%+15d)
- Continuity test with beeper
- Diode Test
- Power: 1.5V AAA x 2 (not included)
- Size: 5.12" x 2.83" x 1.10"
CAT# DMM-1233 $19.00 each

ANALOG MULTIMETER
3.5" wide analog meter. Scales for AC, DC Volts, DC mA and resistance.
Includes test probes, one 9V and two AA batteries. Fuse and diode protection. DC 20K Ohm/VAC 9K Ohm/V.
CAT# AMT-360 $13.95 each

CAPACITANCE / INDUCTANCE / RESISTANCE METER
GME # LCR200
Portable inductance, capacitance and resistance meter. Large four-digit LCD display, Auto zero adjustment. Over-range indicator.
Inductance ranges: 2mH, 20mH, 200mH, 2H, 20H.
Capacitance ranges: 2nF, 20nF, 200nF, 2μF, 20μF, 200μF, 1000μF. Resistance ranges: 200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ.
Includes test leads, instructions and 9 Volt battery.
CAT# DMM-1506 $58.00 each

BATTERY TESTER
SE BT20. Test AAA, AA, C, D, 9V and button cell batteries. Features easy-to-read, color-coded meter. Separate scale for button cells. 4-3/8" x 2-3/8".
CAT# BC-22 $5.95 each

6-12 VOLT CIRCUIT TESTER
Allows you to check for shorts, grounds and open circuits on all 6 and 12 volt systems. Equipped metal probe and alligator clip on 23" lead wire. Test bulb illuminates inside non-conductive handle.
CAT# LVT-3 $4.95 each

LASER DIGITAL TACHOMETER
This non-contact tachometer detects light reflected off an object and reads out RPM value. Micro computer technology with laser beam gives accurate & fast, once per second, readings. Stores & recalls the last, maximum and minimum RPM readings. Readings remain in memory until the next measurement. 2.5 to 99,999 RPM range. Large 5-digit LCD display. CE certified. Operates on 4 AA cells, included. Storage case included.
CAT# TCH-4 $47.75 each
TOOLS

PRECISION WIRE STRIPPERS

For wire sizes 30-20 AWG
CAT # WS-301 $6.50 each

For wire size 20-10 AWG
CAT # WS-302 $6.50 each

CUT-N-STRIP TOOL
Self-adjusting wire stripper and flush cutter. Patented stripper self-adjusts to wire sizes 26-14 AWG. Catch, hold and strip wire in one quick motion.
CAT# WS-503 $14.75 each

WIRE STRIPPER / CUTTER
Stripper adjusts from 24 to 12 ga wire. Spring-loaded to open after each usage. Plastic grips.
CAT# WS-150 $7.20 each

5" FLUSH CUTTER
Trim leads on PC boards. Thin cutting edge for hard to reach areas. Insulated handle. Spring return.
CAT # FC-14 $7.25 each

WIRE CUTTER AND CRIMP TOOL
Heavy-duty wire cutter and crimper for use with insulated crimp terminals. Cuts and crimps 10-22 AWG wire. 9-1/2” overall length.
CAT # CT-05 $15.99 each

6-PIECE PRECISION SCREWDRIVER SET
• Pro'sKit #SD-2301
• Made of high gradechrome-molybdenum vanadium steel
• Dual color, rubberized non-slip handle
• Flat blade: 3.0 x 75mm, 5 x 75mm, 6 x 100mm
• Phillips: #0x75mm, #1 x 75mm, #2 x 75mm
CAT# PSS-66 $16.75 each

3-PIECE ANTI-STATIC ALIGNMENT TOOL SET
Pro's Kit # 800-130 Conductive nylon for protection of sensitive components and isolation from voltage. Duplex trimmer and square/hex tool.
CAT# AT-3 $5.85 each

HEMOSTATS
Hemostats are great for clamping onto small components while soldering or desoldering. Stainless steel.

5” STRAIGHT TIP
CAT# HM-1 $1.65 each

5” CURVED TIP
CAT# HM-2 $1.65 each

PUNCH DOWN TOOL, 110/88 TYPE
Mechanical punch down tool for seating and/or cutting connections in terminal blocks. Adjustable impact. Internal blade storage. 6-3/4” overall length.
CAT # DL-110 $12.00 each

ECONOMY CRIMP TOOL
For insulated and uninsulated solderless terminals, butt connectors and end caps. Also crimps D-sub and other connector pins.
CAT# CT-1 $8.75 each

HOT-MELT GLUE GUN
40W hot-melt glue gun. Ideal for occasional quick repairs & assembly. Uses standard 7/16” (11mm) diameter glue sticks, like our CAT#s HMG-5 and HMG-6 below. Includes two 4” long sticks. UL listed.
CAT# GN-1 $8.75 each

10" LONG, 7/16” DIA. GLUE STICKS
Color CAT# EACH 10
black HMG-5 $1.00 85¢
translucent HMG-6 $1.00 85¢

5 PIECE TWEEZER SET
Five piece assortment of 4 1/2” long stainless steel tweezers. Includes two fine-point tweezers, curved-tip fine-point tweezers, spade-tip and flat-tip tweezers. Includes storage pouch.
CAT # TW-5 $5.00 each

RATCHETING CRIMPER FOR INSULATED TERMINALS
Professional quality. Featuring an adjustable crimping compression mechanism and an up/down ratchet lock. High carbon steel jaws, handles with a black oxide finish and ABS grip sleeves make this tool easy and comfortable to use.

For wire terminals 10 to 22-gauge wire
CAT# CT-51 $34.95 each

For flag terminals 14 to 22-gauge wire
CAT# CT-67 $36.50 each
**SOLDERING IRONS AND ACCESSORIES**

**VARIABLE TEMPERATURE 16-30 WATT SOLDERING IRON**

Xytronic Model 258. Professional soldering iron with temperature control on handle. Temperature can be adjusted from 250-450°C (500-800°F), 16-30 Watts. LED hi/low temperature indicator. Includes long-lasting, chrome plated, iron-clad, pretinned tip (PL404). 3-conductor grounded power cord. UL.

CAT# IR-258 $24.50 each

**SOLDERING TIPS FOR XYTRONIC IRON ABOVE**

1.6 MM PENCIL TIP CAT# PL-404 $8.00 ea.
5 MM CHISEL TIP CAT# PL-410 $8.00 ea.
0.8 MM PENCIL TIP CAT# PL-401 $8.00 ea.
3.2 MM CHISEL CAT# PL-405 $8.00 ea.

**30/60W DUAL WATTAGE SOLDERING IRON**

Eclipse 902-513

This soldering iron features a soft-grip ergonomic handle. The high-quality chisel tip is built for a long lifespan of use. The three position switch on the handle makes it easy to switch between off, 30W, and 60W settings. Suitable for lead-free soldering for RoHS

CAT# IR-513 $23.95 each

Replacement chisel style tip for CAT# IR-513 soldering iron, above.

CAT# PL-535 $3.20 each

**25W SOLDERING IRON**

Eclipse 902-329

Craft and hobby iron with stand. Replaceable pencil tip. 120Vac. cULus.

CAT# IR-329 $12.50 each

Replacement tip pencil style for CAT# IR-329 soldering iron, above.

CAT# PL-329 $1.85 each

**HOBBY SOLDERING IRONS**

Pencil-style soldering irons ideal for students, craft and hobby repairs, occasional use.

30 Watt CAT# IR-330 $8.95 each
60 Watt CAT# IR-60 $9.95 each

**12 VDC SOLDERING IRON**

Nyle® NL-001. 30W soldering iron. Great for a quick repair when AC power isn’t nearby. Equipped with a XT60 power plug used on many battery packs.

CAT# IR-112 $11.95 each

**60 WATT SOLDERING STATION**

Xytronic LF-389D. 60 watt electronically temperature controlled soldering station. Can be easily adjusted in temperature (150°C - 480°C). Digital read out. Includes Soldering iron with pre-loaded standard tip, iron holder, power cord and manual

CAT# IR-389 $79.95 each

Extra Tips for IR-389 solder station

CAT# PL-601 CONICAL 0.8mm $8.10 ea.
CAT# PL-602 SEMI-CHISEL, 0.8mm $8.10 ea.
CAT# PL-603 CONICAL, 0.4mm $8.10 ea.
CAT# PL-604 CHISEL, 1.6mm $8.10 ea.
CAT# PL-605 SEMI-CHISEL, 3.2mm $8.10 ea.

**BATTERY OPERATED SOLDERING IRON**

Battery operated soldering iron is compact, portable and cordless. Easy to bring along with you on any job. Safety slide switch allows for auto power off when cap is attached. Reaches operating temperature in 15-20 seconds. Heats up to 840°F (450°C) while maintaining a soldering temperature of at least 600°F (300°C). Requires 3 type AA batteries (not included).

CAT# BSI-1 $20.95 each

**WIRELESS SOLDERING IRON, RECHARGEABLE**

Eclipse SI-B166

• Consumption: Max. 8W
• Temperature: Max. 500°C
• Operation Time: Approx. 1.5h
• Battery: 3.6V, 2200mAh
• Indictor: Red - Charging, Green - Full charged, Blue - In use
• Accessories included: 18650 Li-ion battery, Micro-USB charging cord
• Overall Dimensions: 7.5" x 1.0" x 1.1"

CAT# BSI-2 $49.99 each

Replacement Solder Tip for CAT# BSI-2 wireless soldering iron, above.

CAT# PL-166 $3.50 each

**ROsin-CORE Solder**

Sn63/Pb37

Water soluble, no-clean flux. Rosin Flux Core.

<table>
<thead>
<tr>
<th>Roll</th>
<th>Dia.</th>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 oz</td>
<td>0.5mm</td>
<td>SMD-4</td>
<td>$5.85</td>
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<tr>
<td>2 oz</td>
<td>0.5mm</td>
<td>SMD-5</td>
<td>$8.95</td>
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<tr>
<td>4 oz</td>
<td>0.8mm</td>
<td>SOL-4637</td>
<td>$12.95</td>
</tr>
</tbody>
</table>

Sn60/Pb40

Tube Dispenser

7" 1mm diameter

CAT# TS-110 $2.35 ea. • 10 for $21.5 ea.
### Soldering Accessories

#### Solder Stand
Spring steel soldering iron holder. Includes replaceable pad for cleaning iron tip.  
**CAT# 50B-205**  
$5.00 each

#### Solder Sponges
Yellow sponge for removal of solder residue. 2” x 1.4” x 0.07” thick. Soak before using.  
**CAT # SPN-2**  
2 for $1.00

#### Helping Hand with Magnifier
Allow both hands freedom to work. Magnifying lens makes work easy to see.  
**CAT# HELPH-M**  
$7.50 each

#### Soldering Tip Cleaner with Metal Stand
An effective method for cleaning solder iron tips quickly, without heat loss.  
- Made of low abrasive brass shavings  
- No water necessary  
- Durable iron holder with anti-slip pad  
- Size: 3.27” diameter x 1.17” high  
**CAT# TC-460**  
$9.00 each

Replacement tip cleaner element  
**CAT# TC-459**  
$3.00 each

#### Deoxit® Tip Tinner
For cleaning and protection of soldering iron tips. Prevents oxidation of tips. 14.2 grams.  
**CAT# TPC-14**  
$8.95 each

#### Desoldering Pumps
Desoldering pumps with high vacuum force especially made for clearing circuit boards in re-work jobs.  
- Pro'sKit DP-366D. ABS.  
  **CAT# SSR-3**  
  $4.85 each  
- Pro'sKit DP-366J. Polycarbonate.  
  **CAT# SSR-4**  
  $6.15 each

### De-Soldering Wicks
For easy removal of parts from P.C. boards. 5 feet per spool.  
- 1.5mm wide  
  **CAT# SWK**  
  $3.00 per spool
- 2mm wide  
  **CAT# SWK-2**  
- 2.8mm wide  
  **CAT# SWK-28**

### Rosin Soldering Flux
Low-residue and no-spill. ROHS compliant. 56 gram jar.  
- **CAT# SP-802**  
  $9.00 each  
- No-Clean  
  **CAT# SP-44**  
  $9.95 each

### ChipQuik® SMD Solder / Desolder Supplies

#### Tack Flux in Six 2CC Squeeze Tubes
The same flux used in many of the other ChipQuik products. The squeeze tube has a neat applicator tip and a tight cap.  
**CAT# SMD-3**  
$14.95 each

#### 63/37 Solder Paste
Solder paste, no clean, 63Sn/37Pb in 5cc syringe. 15g. With plunger and tip.  
**CAT# SMD-6**  
$15.75 each

#### Flux Pens, 10ML
Ideal for all rework, solder and desolder applications. For leaded and lead-free applications. 10ml pens with tip. Flux Type: No-clean liquid flux ChipQuik® CQ4LF. Flux classification: INM0. VOC free.  
**CAT# LFP-4**  
$7.95 each

#### 63/37 Solder Paste, 50G Jar
ChipQuik® SMD291AX50T3  
Alloy: Sn63/Pb37. Flux Type: Synthetic No-Clean. Flux Classification: REL0.  
- Metal Content: 90.25% metal by weight.  
- Particle Size: T3 (25-45 microns).  
- Melting Point: 183C (361F)  
**CAT# SMD-291**  
$19.50 each

### Manufacturers
We Purchase  
Excess Inventories.  
**CALL, WRITE, E-MAIL**  
or **FAX your list.**
**WIRE - CABLE - CO-AX**

### HOOK-UP WIRE

Solid and stranded hook-up wire, PVC insulation.
Colors available: Black (BK), Red (RD), White (WT), Green (GN), Yellow (YL), Blue (BL), Brown (BR), Orange (OR), Purple (PR), Gray (GY).

Available in 25’ and 100’ rolls.

<table>
<thead>
<tr>
<th>CAT# X X X X</th>
<th>25 or 100 S</th>
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</thead>
<tbody>
<tr>
<td>AWG color</td>
<td>length</td>
</tr>
<tr>
<td>i.e. for 24GA Black, 100’ stranded CAT# 24BK-100</td>
<td></td>
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<tr>
<td>i.e. for 24GA Red, 25’ solid CAT# 24RD-25S</td>
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#### 25 FOOT ROLLS, STRANDED

<table>
<thead>
<tr>
<th>AWG</th>
<th>CAT# 26xx-25</th>
<th>$2.32 per roll</th>
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<tr>
<td>24</td>
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<td>$2.50 per roll</td>
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<tr>
<td>22</td>
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<td>$2.78 per roll</td>
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<tr>
<td>20</td>
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<td>$3.52 per roll</td>
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<td>18</td>
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#### 100 FOOT ROLLS, STRANDED

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<th>AWG</th>
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<td>22</td>
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<td>$7.44 per roll</td>
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<td>$9.94 per roll</td>
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<td>18</td>
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<td>$12.92 per roll</td>
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16 and 14 AWG available in White (WT), Red (RD), Black (BK), Yellow (YL), Green (GN)

<table>
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#### 25 FOOT ROLLS, SOLID

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<td>$4.42 per roll</td>
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#### 100 FOOT ROLLS, SOLID

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<td>18</td>
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<td>$12.54 per roll</td>
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</table>

### RED / BLACK AUTOMOTIVE ZIP CORD

Automotive grade “GPT” zip cord with red and black conductors. 80°C, flame-retardant PVC insulation. Stranded conductors. Flexible insulation. 10 ft minimum order.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>AWG</th>
<th>10’</th>
<th>100’</th>
<th>500’</th>
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<td>WRB-24</td>
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<td>.13</td>
<td>.11</td>
<td>.09</td>
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<tr>
<td>WRB-22</td>
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<td>.25</td>
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<td>WRB-14</td>
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<td>.65</td>
<td>.55</td>
<td>.46</td>
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<tr>
<td>WRB-12</td>
<td>12</td>
<td>1.07</td>
<td>.91</td>
<td>.75</td>
</tr>
</tbody>
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### MAGNET WIRE

Solid copper wire with a very thin insulating layer. Used in applications such as winding electric motor coils, speakers and transformers. Also used in the construction of electromagnets and inductors.

#### 1/4 LB ROLL

<table>
<thead>
<tr>
<th>AWG</th>
<th>LENGTH</th>
<th>CAT#</th>
<th>PRICE</th>
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#### BUSS WIRE

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<tr>
<td>16</td>
<td>1000’</td>
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ZIP CORD - 2-CONDUCTOR
18 GAUGE, SPT-1, UL/CSA ZIP CORD
Black, 250' roll.
CAT# 18B-250 $59.00 per roll
CLEAR SPEAKER WIRE
Polarity marking one side.
AWG CAT# FT. 250 FT.
16 CSW-16 .19 .12
14 CSW-14 .23 .15
12 CSW-12 .28 .18
10 ft. minimum order.
18 Gauge clear speaker wire --- 40 ft. roll
CAT# 18C-40 $6.00 roll

TELEPHONE WIRE
FLAT TELEPHONE WIRE
AWG 28, stranded wire.
For use with crimp-on RJ11, RJ12 and RJ45 modular connectors. Color-coded.
COND. CAT# 50' 100' 1000'
4 4CF 5.00 9.50 65.00
6 6CF 5.10 9.75 69.00
8 8CF 9.50 18.00 110.00
SPECIAL, 4-CONDUCTOR ROUND TELEPHONE STATION WIRE, 50'
Beige jacket. 24 AWG solid, color-coded conductors. Special price on 50' pre-packaged roll.
CAT# 4C24-50 $3.95 each

CO-AXIAL CABLE
RG-6/U, 75 OHM
18 ga solid center. Black. Double shield, 100% foil shield, 60% aluminum braid.
CAT# RG-6U 50 feet for $10.00
250 feet for $37.50 (15¢ per ft.)
1000 feet for $120.00 (12¢ per ft.)
RG-58/U COAX CABLE, 50 OHM
BLACK. 20 gauge solid center, 80% copper braid shield, 50 ohm impedance.
CAT# RG-58U 50 feet for $17.50
100 for 34¢ per ft. • 500 for 29¢ per ft
RG-174 MINI CO-AX
BLACK. 50 ohm impedance.
26 ga. stranded center. Braided copper shield.
CAT# RG-174 10 ft. $3.20 • 100 ft. $28.00
500 ft. $130.00 • 1000 ft. $228.00

MICROPHONE CABLE
2 CONDUCTOR SHIELDED
22 ga. stranded conductor. Braided copper shield. Flexible black PVC outer jacket. 0.23" nominal O.D.
CAT# MC-2 10 feet $4.50
100 feet $32.00 • 300 feet $90.00
2, 4 AND 5-CONDUCTOR JACKETED CABLE
Stranded. Unshielded. PVC jacket. Suitable for audio or control applications.
CAT#s 2C16UV and 2C14UV are audio-quality, high-strand-count. OFC (oxygen-free) cable with a specially formulated sun-resistant PVC jacket suitable for indoor or outdoor use in or above the ground. 10’ minimum.

4-CONDUCTOR
AWG CAT# 10 feet 100 feet 500 feet
16 2C16 .37 .33 .31
16 2C16UV .40 .37 .34
14 2C14 .45 .42 .38
14 2C14UV .45 .42 .38

5-CONDUCTOR
AWG CAT# 10 feet 250 feet 500 feet
18 4C16 .48 .41
14 4C14 .52 .49

FLAT RIBBON CABLE, 0.05” PITCH
0.050” pitch between conductors. 28 AWG stranded conductors. For use with IDC, insulation displacement connectors. 300V rating. UL, CSA.
GRAY OR BLUE INSULATION
3M 3365, Spectra Strip 191-2801-0xx, Alpha 3580/xx, Belden 9L280 xx or equivalent.

SPECIALIZED CABLES
SHIELDED MULTI-CONDUCTOR CABLES
100% FOIL SHIELD WITH DRAIN
For data communication, computer hook ups, audio and instrumentation. Stranded color coded conductors. Gray vinyl jacket.
CAT# COND. GAUGE O.D. 10' 100' 500'
2CS22 2 22 .135" 2.40 22.00 95.00
3CS22 3 22 .150" 3.00 26.00 125.00
4CS22 4 22 .170 3.60 31.00 145.00
5CS22 5 22 .200" 4.00 36.00 155.00
10CS22 10 22 .264" 6.50 58.00 250.00

NO HASSLE RETURN POLICY
87
## WIRE CONNECTORS

### INSULATED CRIMP TERMINALS

#### 1/4” QUICK DISCONNECT MALE

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#### 1/4” QUICK DISCONNECT FEMALE

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#### 1/4” FULLY INSULATED MALE

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#### 3/16” QUICK CONNECT MALE

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#### FULLY INSULATED MALE BULLET CONNECTORS

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#### FULLY INSULATED FEMALE BULLET CONNECTORS

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E-MAIL US - allcorp@allcorp.com
### RING TERMINALS

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<td>7.60</td>
<td>13.85</td>
<td>60.00</td>
<td>106.00</td>
</tr>
<tr>
<td>8310</td>
<td>12-10</td>
<td>YELLOW</td>
<td></td>
<td>7.50</td>
<td>13.50</td>
<td>60.00</td>
<td>105.00</td>
</tr>
<tr>
<td>83516</td>
<td>12-10</td>
<td>YELLOW</td>
<td>5/16</td>
<td>7.50</td>
<td>14.00</td>
<td>65.00</td>
<td>120.00</td>
</tr>
<tr>
<td>52263</td>
<td>8-0/4</td>
<td>RED</td>
<td></td>
<td>10</td>
<td>10/$3.00</td>
<td>25.00</td>
<td>150.00</td>
</tr>
</tbody>
</table>

### 3-WAY RING TERMINALS

<table>
<thead>
<tr>
<th>CAT#</th>
<th>WIRE SIZE</th>
<th>COLOR</th>
<th>STUD SIZE</th>
<th>10</th>
<th>100</th>
<th>500</th>
</tr>
</thead>
<tbody>
<tr>
<td>3100</td>
<td>22-18</td>
<td>RED</td>
<td></td>
<td>2.38</td>
<td>21.80</td>
<td>98.50</td>
</tr>
<tr>
<td>3200</td>
<td>16-14</td>
<td>BLUE</td>
<td></td>
<td>2.73</td>
<td>24.90</td>
<td>113.00</td>
</tr>
<tr>
<td>3300</td>
<td>12-10</td>
<td>YELLOW</td>
<td></td>
<td>3.78</td>
<td>34.50</td>
<td>155.00</td>
</tr>
</tbody>
</table>

### 4-WAY RING TERMINALS

### INSULATED HOOK TERMINALS

### BUTT CONNECTORS

### END CAPS

### NON-INSULATED CRIMP TERMINALS

### NON-INSULATED SPADE TERMINAL

### NON-INSULATED RING TERMINAL

### NON-INSULATED BUTT CONNECTOR

### NON-INSULATED 1/4” QUICK CONNECT MALE

### NON-INSULATED 1/4” QUICK CONNECT FEMALE

ORDER TOLL FREE 1-800-826-5432
### BUTT CONNECTORS WITH HEATSHRINK INSULATION

Crimp connector with adhesive-lined high density PE insulation shrinks and bonds when heated in order to provide a tight water-resistant seal.

<table>
<thead>
<tr>
<th>GAUGE</th>
<th>COLOR</th>
<th>CAT#</th>
<th>5</th>
<th>100</th>
<th>500</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-22</td>
<td>Clear</td>
<td>5000-HS</td>
<td>2.20</td>
<td>39.00</td>
<td>340.00</td>
<td></td>
</tr>
<tr>
<td>22-18</td>
<td>Red</td>
<td>5100-HS</td>
<td>1.75</td>
<td>31.00</td>
<td>270.00</td>
<td></td>
</tr>
<tr>
<td>16-14</td>
<td>Blue</td>
<td>5200-HS</td>
<td>2.10</td>
<td>37.00</td>
<td>310.00</td>
<td></td>
</tr>
<tr>
<td>12-10</td>
<td>Yellow</td>
<td>5300-HS</td>
<td>3.00</td>
<td>54.00</td>
<td>470.00</td>
<td></td>
</tr>
</tbody>
</table>

### WIRING NUTS

<table>
<thead>
<tr>
<th>SIZE</th>
<th>COLOR</th>
<th>CAT#</th>
<th>5</th>
<th>100</th>
<th>500</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>7100</td>
<td>Grey</td>
<td>WN-1</td>
<td>2.00</td>
<td>3.50</td>
<td>15.00</td>
<td>25.00</td>
</tr>
<tr>
<td>7200</td>
<td>Red</td>
<td>WN-2</td>
<td>3.00</td>
<td>5.50</td>
<td>25.00</td>
<td>45.00</td>
</tr>
<tr>
<td>7300</td>
<td>Blue</td>
<td>WN-3</td>
<td>3.75</td>
<td>7.00</td>
<td>32.50</td>
<td>60.00</td>
</tr>
<tr>
<td>950</td>
<td>Yellow</td>
<td>WN-4</td>
<td>3.75</td>
<td>7.00</td>
<td>32.50</td>
<td>60.00</td>
</tr>
<tr>
<td>951</td>
<td>Red</td>
<td>WN-5</td>
<td>5.00</td>
<td>9.50</td>
<td>40.00</td>
<td>75.00</td>
</tr>
</tbody>
</table>

### QUICK SPLICES

<table>
<thead>
<tr>
<th>CAT#</th>
<th>WIRE SIZE</th>
<th>COLOR</th>
<th>5</th>
<th>100</th>
<th>500</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>7100</td>
<td>18-28 ga. wire</td>
<td>Grey</td>
<td>2.00</td>
<td>3.50</td>
<td>15.00</td>
<td>25.00</td>
</tr>
<tr>
<td>7200</td>
<td>16-24 ga. wire</td>
<td>Blue</td>
<td>3.00</td>
<td>5.50</td>
<td>25.00</td>
<td>45.00</td>
</tr>
<tr>
<td>7300</td>
<td>12-10 ga. wire</td>
<td>Orange</td>
<td>3.75</td>
<td>7.00</td>
<td>32.50</td>
<td>60.00</td>
</tr>
<tr>
<td>950</td>
<td>9-12 ga. wire</td>
<td>Yellow</td>
<td>3.75</td>
<td>7.00</td>
<td>32.50</td>
<td>60.00</td>
</tr>
</tbody>
</table>

### QUICK TAPS

Tap into an existing wire using pliers to squeeze connector in place.
Connect to a standard male push-on terminal (not included).

### RUBBER GROMMETS

Protects wire, cable and hoses passing through metal plates and panels

<table>
<thead>
<tr>
<th>Bore Diameter</th>
<th>Overall Diameter</th>
<th>Panel Hole Size</th>
<th>Max. Panel Thickness</th>
<th>Overall Thickness</th>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16”</td>
<td>1/2”</td>
<td>5/16”</td>
<td>1/16”</td>
<td>1/4”</td>
<td>GMT-10</td>
<td>5 for 1.20</td>
</tr>
<tr>
<td>1/4”</td>
<td>5/8”</td>
<td>7/16”</td>
<td>1/16”</td>
<td>3/16”</td>
<td>GMT-20</td>
<td>5 for 1.20</td>
</tr>
<tr>
<td>5/16”</td>
<td>13/16”</td>
<td>9/16”</td>
<td>1/16”</td>
<td>5/16”</td>
<td>GMT-30</td>
<td>5 for 1.20</td>
</tr>
<tr>
<td>3/8”</td>
<td>3/8”</td>
<td>1”</td>
<td>1/16”</td>
<td>1/4”</td>
<td>GMT-40</td>
<td>5 for 1.00</td>
</tr>
<tr>
<td>7/16”</td>
<td>5/16”</td>
<td>11/16”</td>
<td>1/16”</td>
<td>5/16”</td>
<td>GMT-50</td>
<td>4 for 2.20</td>
</tr>
<tr>
<td>1/2”</td>
<td>1 1/16”</td>
<td>13/16”</td>
<td>1/16”</td>
<td>5/16”</td>
<td>GMT-60</td>
<td>4 for 2.80</td>
</tr>
</tbody>
</table>

### TELECOM CONNECTORS

For 19-26 AWG wire. Put wires in place & push button with pliers or crimping tool. Filled with silicone gel to insulate and improve conductance.

#### 2-WIRE BUTT

SPLICE - YELLOW

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>UYC</td>
<td>10 for $2.30</td>
</tr>
<tr>
<td></td>
<td>50 for $9.00 • 100 for $14.00</td>
</tr>
</tbody>
</table>

#### 3 -WIRE BUTT

SPLICE - RED

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>URC</td>
<td>10 for $2.50</td>
</tr>
<tr>
<td></td>
<td>50 for $10.00 • 100 for $16.00</td>
</tr>
</tbody>
</table>

### TAP CONNECTOR

Allows user to tap directly into an existing wire without cutting.

<table>
<thead>
<tr>
<th>CAT#</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBC</td>
<td>10 for $2.50</td>
</tr>
<tr>
<td></td>
<td>50 for $10.00 • 100 for $16.00</td>
</tr>
</tbody>
</table>

### NYLON SPACERS, NON-THREADED

For 19-26 AWG wire. Put wires in place & push button with pliers or crimping tool. Filled with silicone gel to insulate and improve conductance.

<table>
<thead>
<tr>
<th>Length</th>
<th>Dia.</th>
<th>Hole</th>
<th>CAT #</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.40&quot;</td>
<td>0.25&quot;</td>
<td>#8</td>
<td>SP-42</td>
<td>.80</td>
</tr>
<tr>
<td>0.50&quot;</td>
<td>0.25&quot;</td>
<td>#8</td>
<td>SP-58</td>
<td>.90</td>
</tr>
<tr>
<td>0.6&quot;</td>
<td>0.13&quot;</td>
<td>18awg</td>
<td>SPC-5</td>
<td>.40</td>
</tr>
<tr>
<td>0.62&quot;</td>
<td>0.25&quot;</td>
<td>#8</td>
<td>SP-66</td>
<td>.95</td>
</tr>
</tbody>
</table>

### MANUFACTURERS

We Purchase Excess Inventories.
CALL, WRITE, E-MAIL or FAX your list.
CABLE TIES

<table>
<thead>
<tr>
<th>CAT#</th>
<th>LENGTH</th>
<th>MIN. TENSIL STRENGTH</th>
<th>COLOR</th>
<th>MAX. Bndl DIA. 10</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-400</td>
<td>4&quot;</td>
<td>18 lbs</td>
<td>neutral</td>
<td>15/16&quot; .30</td>
<td>$2.50</td>
<td>$15.00</td>
</tr>
<tr>
<td>TR-400B</td>
<td>4&quot;</td>
<td>18 lbs</td>
<td>black</td>
<td>15/16&quot; .35</td>
<td>$3.00</td>
<td>$17.50</td>
</tr>
<tr>
<td>TR-600</td>
<td>6&quot;</td>
<td>30 lbs</td>
<td>neutral</td>
<td>1 1/2&quot; .50</td>
<td>$4.00</td>
<td>$30.00</td>
</tr>
<tr>
<td>TR-600B</td>
<td>6&quot;</td>
<td>30 lbs</td>
<td>black</td>
<td>1 1/2&quot; .50</td>
<td>$4.00</td>
<td>$30.00</td>
</tr>
<tr>
<td>TR-800</td>
<td>8&quot;</td>
<td>50 lbs</td>
<td>neutral</td>
<td>1 3/4&quot; .60</td>
<td>$5.00</td>
<td>$40.00</td>
</tr>
<tr>
<td>TR-800B</td>
<td>8&quot;</td>
<td>50 lbs</td>
<td>black</td>
<td>1 3/4&quot; .70</td>
<td>$6.00</td>
<td>$50.00</td>
</tr>
<tr>
<td>TR-1100</td>
<td>11&quot;</td>
<td>50 lbs</td>
<td>neutral</td>
<td>3&quot; .80</td>
<td>$7.00</td>
<td>$60.00</td>
</tr>
<tr>
<td>TR-1100B</td>
<td>11&quot;</td>
<td>50 lbs</td>
<td>black</td>
<td>3&quot; .80</td>
<td>$7.00</td>
<td>$60.00</td>
</tr>
<tr>
<td>TR-1500</td>
<td>15&quot;</td>
<td>50 lbs</td>
<td>neutral</td>
<td>1 3/4&quot; .60</td>
<td>$8.00</td>
<td>$70.00</td>
</tr>
<tr>
<td>TR-1500B</td>
<td>15&quot;</td>
<td>50 lbs</td>
<td>black</td>
<td>1 3/4&quot; .70</td>
<td>$9.00</td>
<td>$80.00</td>
</tr>
</tbody>
</table>

4" CABLE TIES, 100 PIECE BAG
White (natural) nylon cable ties. 4" length, 7/8" bundle diameter. 18lb tensile strength. Great for fastening and bundling wires. Fast-easy installation.

CAT# TR-400W $1.50 bag

ADHESIVE-BACKED TIE MOUNTS

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Color</th>
<th>CAT#</th>
<th>10</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot; square</td>
<td>10 - 40 lbs ties</td>
<td>Neutral</td>
<td>TM-1</td>
<td>$1.20</td>
<td>$9.50</td>
<td>$85.00</td>
</tr>
<tr>
<td>3/4&quot; square</td>
<td>10 - 40 lbs ties</td>
<td>Black</td>
<td>TM-1B</td>
<td>$1.20</td>
<td>$9.50</td>
<td>$85.00</td>
</tr>
<tr>
<td>1&quot; square</td>
<td>18 - 50 lbs ties</td>
<td>Neutral</td>
<td>TM-2</td>
<td>$1.40</td>
<td>$11.00</td>
<td>$105.00</td>
</tr>
<tr>
<td>1&quot; square</td>
<td>18 - 50 lbs ties</td>
<td>Black</td>
<td>TM-2B</td>
<td>$1.40</td>
<td>$11.00</td>
<td>$105.00</td>
</tr>
</tbody>
</table>

8” CABLE TIE WITH MOUNTING HOLE
8" white (natural)
Nylon cable tie.
5mm wide.
50lb strength.
With mounting hole.

CAT# TRH-8 10 for $1.00
100 for 8¢ each • 1000 for 7¢ each

NYLON TWIST-LOCKS
Easy to use. Twist to lock or open.

<table>
<thead>
<tr>
<th>Dia.</th>
<th>CAT#</th>
<th>10</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.18&quot;</td>
<td>TL-18</td>
<td>.70</td>
<td>3.70</td>
<td>34.00</td>
</tr>
<tr>
<td>0.41&quot;</td>
<td>TL-41</td>
<td>.90</td>
<td>4.50</td>
<td>36.00</td>
</tr>
<tr>
<td>0.55&quot;</td>
<td>TL-55</td>
<td>1.20</td>
<td>6.20</td>
<td>55.00</td>
</tr>
<tr>
<td>0.87&quot;</td>
<td>TL-87</td>
<td>1.90</td>
<td>9.60</td>
<td>79.00</td>
</tr>
</tbody>
</table>

NYLON CABLE CLAMPS, #10 STUD
Available in white and black. Black = (B)
i.e. add a B to the end of the catalog number for black.

<table>
<thead>
<tr>
<th>Dia.</th>
<th>CAT#</th>
<th>10</th>
<th>100</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>NCL-34(B)</td>
<td>.27</td>
<td>.14</td>
<td>.11</td>
</tr>
<tr>
<td>9/16&quot;</td>
<td>NCL-916(B)</td>
<td>.23</td>
<td>.12</td>
<td>.09</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>NCL-12(B)</td>
<td>.23</td>
<td>.12</td>
<td>.09</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>NCL-38(B)</td>
<td>.22</td>
<td>.11</td>
<td>.09</td>
</tr>
<tr>
<td>5/16&quot;</td>
<td>NCL-516(B)</td>
<td>.10</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>NCL-14(B)</td>
<td>.10</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>3/16&quot;</td>
<td>NCL-316(B)</td>
<td>.08</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>1/8&quot;</td>
<td>NCL-18(B)</td>
<td>.08</td>
<td>.05</td>
<td>.04</td>
</tr>
</tbody>
</table>

WIRE MANAGEMENT DEVICES

HOOK & LOOP "WRAPPERS"
Black hook & loop straps for bundling and fastening of cables, tools, fishing poles, sporting goods. 12.5" x 0.5"

CAT# WR-1 $1.00 each
10 for 85¢ each

SPLIT LOOM TUBING
Dress up auto and home installations with split-loom tubing. Allows exit or entry of wires at any point.

<table>
<thead>
<tr>
<th>DIA.</th>
<th>COLOR</th>
<th>CAT#</th>
<th>PER FT</th>
<th>100 FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>black</td>
<td>SLT-14</td>
<td>15¢</td>
<td>$13.00</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>black</td>
<td>SLT-38</td>
<td>18¢</td>
<td>$15.00</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>black</td>
<td>SLT-12</td>
<td>19¢</td>
<td>$17.00</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>black</td>
<td>SLT-58</td>
<td>25¢</td>
<td>$18.00</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>black</td>
<td>SLT-34</td>
<td>29¢</td>
<td>$18.00</td>
</tr>
<tr>
<td>1&quot;</td>
<td>black</td>
<td>SLT-1</td>
<td>39¢</td>
<td>$20.00</td>
</tr>
</tbody>
</table>

Minimum order 10’ of one size.

SPIRAL WRAP
33 Ft (10 Meters) of heavy duty 7/8” I.D. black spiral wrap tubing and a wire-guide tool to wrap the tubing around already connected cables.

CAT# WMK-1 $9.95 each
3 for $8.50 each
HEAT SHRINKABLE TUBING & ACCESSORIES

4' LENGTH OF HEATSHRINK TUBING
Polyolefin heat shrinkable tubing shrinks to 50% of its original diameter when heated. It forms a tight mechanical bond even over irregularly shaped materials. Size listed is expanded (pre-shrunk) diameter.

<table>
<thead>
<tr>
<th>Dia.</th>
<th>Color</th>
<th>CAT#</th>
<th>Per 4'</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/64&quot;</td>
<td>BLACK</td>
<td>HUG-364B</td>
<td>$1.15</td>
</tr>
<tr>
<td></td>
<td>RED</td>
<td>HUG-364R</td>
<td>$1.15</td>
</tr>
<tr>
<td></td>
<td>WHITE</td>
<td>HUG-364W</td>
<td>$1.15</td>
</tr>
<tr>
<td></td>
<td>CLEAR</td>
<td>HUG-364C</td>
<td>$1.15</td>
</tr>
<tr>
<td>1/16&quot;</td>
<td>BLACK</td>
<td>HUG-116B</td>
<td>$1.20</td>
</tr>
<tr>
<td></td>
<td>RED</td>
<td>HUG-116R</td>
<td>$1.20</td>
</tr>
<tr>
<td></td>
<td>WHITE</td>
<td>HUG-116W</td>
<td>$1.20</td>
</tr>
<tr>
<td></td>
<td>CLEAR</td>
<td>HUG-116C</td>
<td>$1.20</td>
</tr>
<tr>
<td>3/32&quot;</td>
<td>BLACK</td>
<td>HUG-332B</td>
<td>$1.25</td>
</tr>
<tr>
<td></td>
<td>RED</td>
<td>HUG-332R</td>
<td>$1.25</td>
</tr>
<tr>
<td></td>
<td>WHITE</td>
<td>HUG-332W</td>
<td>$1.25</td>
</tr>
<tr>
<td></td>
<td>CLEAR</td>
<td>HUG-332C</td>
<td>$1.25</td>
</tr>
<tr>
<td>1/8&quot;</td>
<td>BLACK</td>
<td>HUG-18B</td>
<td>$1.35</td>
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<td>WHITE</td>
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100' ROLL OF HEATSHRINK TUBING

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<tr>
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<td>1/8&quot;</td>
<td>HSS-18(X)</td>
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<tr>
<td>1/2&quot;</td>
<td>HSS-12(X)</td>
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X=color. Available colors are Black (B), White (W), Red (R), & Clear (C). * HSS-364B is only in black. i.e. 1/16" red = CAT# HSS-116R

DUAL WALL HEAT SHRINK TUBING
Medium insulated polyolefin tubing, 3:1 shrink ratio. The inner tubing wall is a modified polyimide adhesive that melts & flows, encapsulating and sealing components contained within the tube. Flexible and flame retardant - provides excellent protection from fluids, moisture & corrosion. 4' length.

<table>
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<tr>
<th>Dia.</th>
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<td>DWH-1R</td>
<td>$9.28</td>
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HEATSHRINK TUBING ASSORTMENTS IN UNBREAKABLE CLEAR PLASTIC BOXES

Have the right piece of heatshrink tubing when you need it. 4' lengths of 6 different diameters: 1/16" - 56 pcs, 3/32" - 35 pcs, 1/8" - 28 pcs, 3/16" - 18 pcs, 1/4" - 9 pcs, 3/8" - 8 pcs.

ASSORTED COLORS, 154 PIECES:
- black, red, clear, yellow, green, blue, white
- CAT# HS-4900 $10.95 per kit

BLACK ONLY, 154 PIECES:
- CAT# HS-4901 $10.95 per kit

DUAL WALL HEATSHRINK TUBING KIT
Dual-wall, adhesive-lined heatshrink tubing assortment. 4" black polyolefin with adhesive lining. Shrinks to half its original diameter when heated, creating a moisture-resistant, tight, flexible protective seal. Contents: 1/8" 12 pcs 1/4" 10 pcs 3/8" 3 pcs 1" 2 pcs
- CAT# HS-4903 $15.95 per kit

STEINEL HEAT GUN
UltraHEAT™ #SV800 Dual temperature heat gun provides flameless heat for applying heat shrink tubing, curing epoxy, loosening adhesives, heating liquids, thawing frozen pipes, stripping paint and many other applications. Dual temperature, 600°F and 800°F. 1300 Watts. Impact resistant housing. Long-lasting heating element. UL listed.
- CAT# HG-800 $52.00 each

18 AWG TEFNON TUBING

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<tr>
<td>4&quot;</td>
<td>HUG-41B</td>
<td>$4.15</td>
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**METERS**

**DIGITAL PANEL METERS**

**DUAL DIGITAL LED PANEL METERS**

Volts and Amps on the same compact digital meter. Built-in shunt. Bright 0.28" red LEDs. Snap-mounts into 46 x 27mm (1.80" x 1.05") rectangular cut-out. Black bezel, 47.5 x 28.5mm.

**3.3–30 VDC AND 0-5A SCALES**

3-wire, common ground, connection. Can monitor its own voltage.

CAT# PM-233 $10.50 each

**0-100VDC AND 0-5A SCALES**

3-wire connection. Can be used like CAT# PM-233 to monitor its own voltage (3.3-30 Vdc) or, in 1.1" x 1.8" panel cut-out.

CAT# PM-117 $8.75 each

**60-500 VAC DIGITAL PANEL METER**

3-digit AC panel meter. Bright 0.57" high LED digits. 1.875" x 1.15" black bezel. Snap-mounts in 1.8" x 1.1" panel cut-out. Detachable connector w/ 5" leads.

CAT# PM-123 $8.35 each

**3.3-30 VDC DIGITAL PANEL METERS**

3-digit DC panel meter. Bright 0.57" high LED digits. 1.875" x 1.15" black bezel. Snap-mounts in 1.1" x 1.8" panel cut-out. Detachable connector w/ 5" leads.

Red CAT# PM-123 $8.35 each

Green CAT# PM-123G $8.35 each

Blue CAT# PM-123B $8.35 each

**0-100V DC VOLTMETER**

3-digit LED voltmeter for 0-100VDC range. 0.28" digits on a 0.89" x 0.39" display. Available with red or blue digits on black background. Three wire operation. Red-black for power; yellow-black for voltage being monitored. Will monitor its own voltage. Mounting ears with holes on 1.03" centers. Working current: 20mA. Operating voltage: 4-40 VDC. Measurement rate: 200mS /Times.

Red digits CAT# PM-126 $3.95 each

Blue digits CAT# PM-126B $3.95 each

**TIME - TEMPERATURE - VOLTAGE METER**

3 in 1 module -- clock, thermometer, voltmeter, using the DS3231 chip. Can display any one or cycle through all three. Power supply voltage: DC5.0 ～ 30V. Temperature range: -40 to 85°C, resolution 0.1°C. Voltmeter range: DC5 ～ 30V. Dimensions: 40 x 13mm. Requires connector we suggest our CAT# CON-240. Requires power supply, any 5-30 Vdc 300 mA.

CAT# DCLK-1 $7.95 each

**PM89 SERIES PANEL METERS**

3.15" x 2.5" x 2" depth. 2.5% accuracy. Large clear scale, black lettering on white background.

**DC MICROAMMETERS**

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**DC MILLIAMMETERS**

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**DC AMMETERS**

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**DC VOLTMETERS**

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<tr>
<td>PMA-300V</td>
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**SHUNTS**

For use with AC Ammeters where external shunts are required. Adjusted for 50 mV drop.

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- Shop ON-LINE www.allelectronics.com

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We will e-mail you when we ship your order if you enter your e-mail address on our order form. Packages under 4 pounds may ship UPS.

**Shipping Charges - U.S.A.** - Continental United States (not including Alaska or Hawaii) must include a $8.00 shipping and handling fee. This will cover shipping via U.P.S. (GROUND) or U.S. mail whichever is less (our choice). Shipments requiring special handling for residential delivery, P.O. Box delivery, lift gates or advance notification may incur extra charges. Alaska, Hawaii, Puerto Rico, and the U.S. Territories must include full shipping with the order (a $8.00 minimum shipping charge applies per order). Please check with your local post office regarding charges.

**Shipping Charges - INTERNATIONAL**

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**Delivery** - Except during busy holiday and rush periods, all orders are processed and shipped within two working days of receipt. If an item is out of stock, but expected within a few days, we will hold the order until the item arrives. If you do not want your order held for out of stock items, please let us know. Delivery via U.P.S. is usually made within 7 working days.

**PLEASE NOTE!** We are not responsible for printing errors. Quantities are limited. Prices are subject to change without notice. Some pictures may vary from the actual item. Store prices may vary from catalog prices. Quantity pricing is subject to freight considerations.

Order Toll Free 1-800-826-5432
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**CREDIT CARD ORDERS**

- Visa
- Mastercard
- American Express
- Discover

**SUB TOTAL**

- California Only - Sales tax for your county
- Less REFUND Slips: [ ]

**TOTAL**

- Shipping & Handling: [ ]
  - 48 Continental States $15.00
  - Orders over $75.00 Free Shipping
  - Others see instructions

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