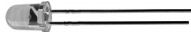


## RGB COLOR-CHANGING LED

5mm (T1-3/4) led cycles through, red - green - blue and combinations of those colors, yielding white, purple and other hues. Changes color every 3 or 4 seconds. Water-clear in off-state. Great for attention-getting displays, costumes or jewelry.

**CAT# LED-158** 75¢ each  
10 for 70¢ each • 100 for 50¢ each



## INFRARED EMITTER

T-1 3/4 (5mm). Clear lens

**CAT# ILED-8** 3 for \$1.00  
100 for 20¢ each • 1000 for 14¢ each



## SPECIAL – ULTRABRIGHT 5MM RED LED

Ultrabright red led with right-angle pre-formed leds. Slightly oval (4.5 x 5mm) flangeless package. Projects a slightly oval, bright red beam. Clear pink in off-state.

**CAT# LED-150** 10 for \$2.00 • 100 for 16¢ ea.  
500 for 12¢ each • 1000 for 9¢ each



## 4MM GREEN "TOMBSTONE" LED

4mm x 2mm rectangular LED with rounded face. Green diffused.

**CAT# LED-172** 10 for \$1.25  
100 for 9¢ each • 1000 for 6¢ each



## 2MM GREEN LED IN HOLDER

2mm (T-3/4) green LED in plastic holder. Holder is 6mm x 2.5mm x 5mm high and interlocks with other similar holders. 5mm lead spacing.

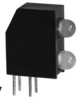
**CAT# LED-176** 10 for \$1.00  
100 for 8¢ each • 1000 for 4.5¢ each



## GREEN / YELLOW BI-LEVEL LED ASSEMBLY

Ledtronics #PCB-1212-064. 3mm (T-1) diffused LEDs. Plastic assembly is 4.32mm wide x 10.9mm high. Chamfered upper back. LEDs on 2mm centers. Cross to Dialight 553, DDP PCT125, Lumex SSF-LXH240. 4mm leads. Large quantity available. Special pricing.

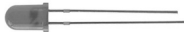
**CAT# LED-161** 10 for \$1.00  
100 for 8¢ each • 1000 for 5¢ each



## 12 VDC LEDs

Bright 5mm round LEDs with built-in resistors for 12Vdc, 12mA operation. No external resistor required. Works well on 4-12Vdc. Dimmer at lower voltages. 35 Degree viewing angle. Lenses are tinted the same color as the LED when lit. Spec sheets available on our web site.

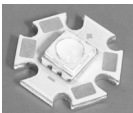
COLOR	CAT#	EACH	100	1000
RED	LED-12R	45¢	35¢	25¢
BLUE	LED-12B	55¢	45¢	35¢
WHITE	LED-12W	50¢	40¢	30¢
GREEN	LED-12G	50¢	40¢	30¢



## 1 WATT ULTRA-BRIGHT WHITE LED

Cree XLamp™ Extremely high-brightness LED capable of operating at 1 Watt and above. Long-life, solid-state, low-voltage and current light. Mounted on star-type aluminum disc which serves as a heatsink and provides solder spots to simplify connection. 100° viewing angle. Maximum forward voltage, 4Vdc. Max. current, 350/ 700mA. Note: These are new parts. Because of their sensitivity to misuse, we cannot guarantee them after voltage has been applied.

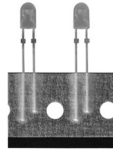
**CAT# LED-154** \$6.50 each



## HIGH-BRIGHTNESS OVAL LEDs

Blue oval LED high-brightness, 4 x 5.5mm. Aqua-blue diffused lens in off-state. Darker blue when lit. Ammo-pack strip packaging.

**CAT# LED-148** 2 for \$1.00  
100 for 40¢ each



## MOUNTING HARDWARE FOR 5MM T-1 3/4 LEDs

Black plastic clips allow snap-in mounting of standard size LEDs.

**2-PIECE HOLDER** Mounts in 6.3 mm hole.

**CAT# HLED-4** 10 for \$1.20  
100 for 9¢ • 1000 for 8¢ each



**2-PIECE** Creates a cartridge that press-fits in 8mm diameter hole.

**CAT# HLED-8** 2 for 90¢  
100 for 36¢ each • 1000 for 30¢ each



**CLIPLITE HOLDERS** Colored polycarbonate lens increases brightness and viewing angle with either diffused or non diffused LEDs. Mounts in 0.25" hole in panels of 0.06" to 0.125" thickness.

X= R (RED), G (GREEN), Y (YELLOW), C (CLEAR)  
**HLDCL-X** 3 for 90¢  
100 for 25¢ each • 1000 for 20¢ each



## CLIPS FOR T-1 (3MM) LEDs

**1-PIECE HOLDER** Mounts in 4.5 mm hole.

**CAT# HLED-5** 10 for \$1.00  
100 for 8¢ each • 1000 for 7¢ each



## LED STANDOFFS

### STANDOFF FOR 5MM LED

Black plastic standoff for 5mm dia., T 1 3/4, LED. For LEDs with or without flange. Standoff is 7mm diameter x 11.5mm high. LED sits inside of standoff, recessed 3mm. One plastic mounting pin. **CAT# HLED-10**  
10 for \$1.00 • 100 for 7¢ each



### MOUNT FOR TWO 5MM FLANGELESS LEDs

Black plastic mount for two 5mm (T1-3/4) flangeless leds. 13.0 x 6.2 x 6.0mm h. Four plastic mounting pins on 11.0 x 5.2mm centers. **CAT# HLED-9** 10 for \$1.00  
100 for 8¢ each • 1000 for 6¢ each



## RUBBER SPACERS

0.15" diameter rubber spacer for 3mm, T-1 LEDs. Leads can go through center holes, 1mm centers, or outer slots, 2mm centers.

0.15" SPACER **CAT# SLED-150**  
10 for 50¢ • 100 for 4¢ each  
1000 for 2.5¢ each



0.875" SPACER **CAT# SLED-875**  
5 for 50¢ • 100 for 8¢ each  
1000 4.5¢ each



## LED TESTER

Pocket-size tester. Checks functionality, color, brightness and uniformity of leaded LEDs. Test current ratings from 2-50ma. Socket strip has seven middle positions set at 10 mA allowing comparison of LEDs in those spaces. Requires 9 v battery (not included).

**CAT# LT-100** \$8.95 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  
1000 for 27¢ per ft

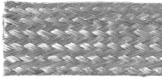
### RG-174 MINI CO-AX

BLACK. 50 ohm impedance. 26 ga. stranded center. Braided copper shield.

**CAT# RG-174** 10 ft. \$2.90  
50 ft. \$13.50 • 100 ft. \$25.00  
500 ft. \$115.00 • 1000 ft. \$195.00

## TUBULAR BRAID TINNED COPPER GROUND STRAP

Mil Spec QQB575B 30T875 tinned-copper braid woven in completely round configuration. Used as ground strap, shielding and protective covering.



**1/16"** Approx 0.07" wide x 0.03" thick when flattened.  
**CAT# TBG-116** 75¢ per ft.

**7/8"** Approx 0.88" wide x 0.05" thick when flattened.  
**CAT# TBG-78** \$2.00 per ft.

**1"** Approx 1" wide x 0.1" thick when flattened  
**CAT# TBG-1** \$2.50 per ft.

## FLAT RIBBON CABLE 0.05" PITCH

0.050" pitch between conductors. 28 AWG stranded conductors. For use with IDC, insulation displacement connectors. 300 Volt rating. UL, CSA

### GRAY OR BLUE INSULATION

with red marker stripe on one side. 3M 3365, Spectra Strip 191-2801-0xx, Alpha 3580/xx, Belden 9L280xx or equivalent.

Conductors	CAT #	10 feet	100 feet
16	RCBL-16	\$3.60	22.00
34	RCBL-34	\$4.30	30.00
50	RCBL-50	\$5.30	40.00

## RIBBON CABLE JUMPERS, 0.10"

Flexible ribbon cable. PC leads on 0.10" centers.



	CAT#	EACH	100
3" 10-conductor	RJ-310	50¢	30¢
2" 11-conductor	RJ-211	50¢	30¢

## CATEGORY 5E CABLE, 4 TW PAIRS

4 unshielded twisted pairs (UTP). AWG 24 solid conductors. 350 mHz. Western Electric Standard color coding. UL, CSA listed.

**CAT# CTE-5**  
50 feet for \$9.00  
100 feet for \$16.00  
1000 feet for \$110.00



## TELEPHONE STATION WIRE

### ROUND STATION WIRE

AWG 24, solid wire.



COND.	CAT #	50'	100'	500'	1000'
4	4C24	*special	\$10.00	\$45.00	\$85.00

\* **Special 4C24-50** 50' roll for \$4.50

6	6C24	\$6.50	\$9.50	\$43.00	\$80.00
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### 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	\$95.00
8	8CF	\$9.50	\$18.00	\$110.00

## NETWORKING PRODUCTS

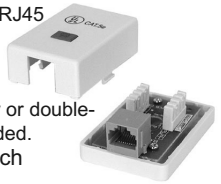
### CAT-5E ACCESSORIES

#### CAT-5E SURFACE-MOUNT JACK

UL certified surface mount RJ45 jack for CAT5E cables.

Includes EIA/TIA 568A/B wiring diagram. Quick and easy installation with screw or double-sided tape. Hardware included.

**CAT# MT-80** \$3.85 each  
10 for \$ 3.50 each



#### RJ-45 DATA COUPLER

Connects two CAT-5/6 cables. Straight-through connection.

**CAT# MT-88** \$2.50 each



#### RJ45 MODULAR T ADAPTOR

RJ45, 8-pin modular jacks.

**CAT# MT-115** \$1.50 each



#### CATEGORY 5E CABLES

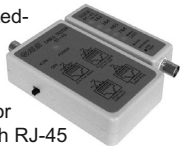
Standard, straight-through Ethernet patch cables. 4-pair, stranded copper terminated with 8-contact RJ45 modular plugs. Suitable for 350MHz high-speed data applications. All cables are CAT-5E. UL, ETL.



Length	CAT#	Ea	10	100
3'	CB-53	2.35	1.95	1.45
6'	CB-560	3.90	3.40	2.90
10'	CB-510	4.25	4.00	3.20
25'	CB-525	6.85	6.20	4.85
50'	CB-550	11.35	10.50	7.20
75'	CB-575	15.75	14.75	12.50
100'	CB-500	18.55	17.00	14.95

## LAN/PHONE CABLE TESTER

Instant diagnosis of 4-pair, twisted-pair and coaxial cables for continuity, opens, shorts, reversed, transposed and split pairs. Detachable remote unit for installed cabling. For cables with RJ-45 or coaxial BNC connectors. Requires 9 Volt battery.



**CAT# CT-28** \$12.00 each

### 3.23" COPPER ALLIGATOR CLIP

HH SMITH #357-103.  
Copper clip with brass screw.  
Black ABS insulated handle.

**CAT# ALG-357** \$1.25 each  
10 for \$1.10 each



### BATTERY CLIPS

Electrical test/charge clips.  
Screw terminal and crimp  
tab connection.



40mm **CAT# ALG-41** 50¢ ea. • 10 for \$4.00  
50mm **CAT# ALG-26** 65¢ ea. • 10 for \$5.00

### 25A TEST CLIPS, 2 PCS

3" spring-action clips for  
automotive and other  
heavy-duty applications.  
Screw and crimp connection.



**CAT# ALG-93**  
\$2.00 per pack

### 70MM BATTERY CLIPS

70mm spring clips with  
insulated handles. Electrical  
and charging applications.  
Crimp tabs. Set consists of  
one red and one black  
insulated clip.



**CAT# ALG-40** \$1.75 pair

## TEST EQUIPMENT AND ACCESSORIES

### 1MHZ POCKET FUNCTION GENERATOR

Velleman HPG1.  
A complete  
function genera-  
tor in pocket  
format! 3 wave-  
forms can be  
selected. Set the  
output voltage or frequency and select signal wave-  
form using the on the screen menu. A powerful  
sweep function is also included.

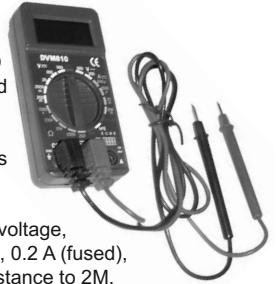


#### Features

- DDS type generator (Direct Digital Synthesis)
  - DAC resolution: 10 bits
  - frequency range: 1Hz to 1,000,000Hz ( $\pm 0.01\%$ )
  - freq. steps: 1Hz, 10Hz, 100Hz, 1kHz and 10kHz
  - waveforms: sine, square and triangle
  - sweep function with bi-direction option
  - output voltage: max. 8Vpp
  - real output level measurement: dBm / Vrms or Vpp readout ( $\pm 3\%$ )
  - typical sine wave distortion (THD):  $< 0.1\%$  @ 0dB / 600 ohms
  - square wave rise/fall time: typ. 0.2 $\mu$ s
  - output impedance: 50 ohms
  - multi-language menu (Eng / Fre / Dut / Ge / Es )
  - white LED backlight
  - charging power supply: 9Vdc/200mA
  - NiMH rechargeable battery pack (included)
  - dimensions: 2.9" x 4.5" x 1.14"
  - includes: getting started manual, BNC adapter, BNC male to RCA female, BNC male to 2x 4mm banana jacks, USB power supply adaptor
- CAT# HPG-1** \$149.95 each

### ECONOMY DIGITAL MULTIMETER

Economical and  
compact multimeter  
with a 3 1/2 digit LCD  
for measuring DC and  
AC voltages, DC  
currents, resistance,  
diodes and transistors  
(hFE). Features  
overload protection.



Ranges: DC and AC voltage,  
500 volts, DC current, 0.2 A (fused),  
10 A (not fused), resistance to 2M.  
Ideal for hobbyists, for use in the field and  
workshops. Test leads, instruction book included.  
3.70" x 1.81" x 1.03" high.

**CAT# DVM-810** \$7.95 each

### LCD MULTIMETER WITH BACKLIGHT

For features, accuracy  
and ruggedness, this  
is a great, inexpensive  
multimeter.



DC current (10 A),  
DC and AC voltage  
(600 V), resistance  
(2 M ohm), diode,  
transistor tester,  
audible continuity  
and hold button.

Protective rubber shell and test leads included.

**CAT # DVM-850BL** \$17.95 each

### 3 1/2 DIGIT LCD MULTI-METER

Velleman  
# DVM890

An incredible  
array of  
features at a  
great price. 20A  
DC current,  
1000 DC Volts.  
20A AC current,  
700 AC volts.



Resistance to 20 M. Capacitance from 2000pF to  
20uF. Frequency measurement to 20kHz.  
Temperature measurement: -58° F to 1832° F with  
K-type thermocouple. Low battery indication,  
overload protection and auto power off function.  
Protective rubber shell, test leads and  
thermocouple included.

**CAT# DVM-890** \$45.00 each

### DIGITAL CLAMP METER W/ TYPE K THERMOCOUPLE

3 1/2 digit LCD clamp meter with Type K  
thermocouple probe. Tests AC current to  
1000 Amps, AC voltage to 750V,  
DC voltage to 1000V and resistance to  
20K Ohm. Data Hold button. Includes  
padded carrying case, test probes,  
thermocouple probe and instructions.  
Powered by 9V battery (included).



**CAT# CLM-266** \$19.00 each

### CAPACITANCE METER

GME #C350. Portable capacitance  
meter with large LCD readout.  
9 capacitance ranges for values  
from 0.1pF to 20,000uF. Less than  
5 second sampling time. Includes  
alligator test leads, instructions and  
9 Volt battery.



**CAT # CP-350** \$45.00 each

## INEXPENSIVE MULTIMETER

A great little digital meter for school, home workshop or toolbox, with most of the ranges and features you need for everyday use. DC, AC Volts, DC Amps, Ohms, hFE, diode test, square wave, transistor checker, continuity buzzer. Test leads and 9V battery included. 4.95" x 2.75" x 0.90"  
**CAT# DVM-830** \$7.75 each



## TACHOMETER

Non-contact tachometer. Micro computer technology with laser beam gives accurate and fast, once per second, readings. Stores and 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



## SCOPE PROBE SET

Probe with BNC connector. Comes with ground lead, retractable hook tip, pin tip with IC lead cover and standard cover.  
 60 MHz **CAT # PR-60** \$19.50 ea.



## CONTINUITY TESTER

GB Instruments™ GCT-304A. Simple continuity tester for all kinds of circuits, switches and fuses. Pointy probe lights when continuity exists. Flexible 34" cable with alligator clip. Requires 2 AA batteries (not included).  
**CAT# CT-19** \$2.95 each



## LOW VOLTAGE TESTER

NuTone # RCDT900. Convenient test light for 5-30 Volts AC or DC. Marketed as a Door Chime Diagnostic Tool, consists of an enclosed light bulb with two test leads. Light glows, brightness varying with voltage, when power is present. Leads snap into back of unit for compact storage.  
**CAT# LVT-2** \$2.50 each



## AC OUTLET TESTER W/ GFCI TEST

GB Instruments "Sure Wire"™ #GRT-800. Plugs into grounded electrical receptacle and tests for unsafe ground and branch wiring. Red, yellow, green LEDs indicate wiring status. Push-button GFCI tester trips GFCI if functional.  
**CAT# GRT-800** \$6.95 each



## ULTRASONIC TRANSDUCER

Matsushita #0D24K2. 0.95" diameter x 0.38" metal case. 0.65" long pc leads on 0.4" centers.  
**CAT# XDR-24** \$1.25 each  
 10 for \$ 1.00 each



## THERMAL SWITCHES

### THERMAL FUSES

Miniature, heat-sensitive devices designed for over temperature protection of electrical appliances and equipment. Rated to 15A. UL, CSA.

CAT#	Cutoff Temp
TCF-152	152°C
TCF-194	194°C
TCF-216	216°C
TCF-228	228°C

All thermal fuses 2 for \$1.00

### THERMAL CIRCUIT PROTECTOR, 75C

Klixon - 7A M202. Bimetal disc calibrated to open at 75° C. 0.70" x 0.41" x 0.16." 1.75" leads. UL, CSA, KEMA.  
**CAT# THSW-75** \$1.00 each  
 10 for 85¢ each • 100 for 65¢ each



### THERMAL CIRCUIT PROTECTOR, 100C

Klixon - 7A M027A5. Bimetal disc calibrated to open at 100° C. 0.70" x 0.41" x 0.16." Crimp terminals. UL, CSA, KEMA.  
**CAT# THSW-100** \$1.00 each  
 10 for 85¢ each • 100 for 65¢ each



## RESETTABLE CIRCUIT PROTECTORS

### GENERAL PURPOSE CIRCUIT PROTECTOR, 0.65 - 1.3 AMP

Raychem "Polyswitch" # RXE-065S-1 Automatically reset when fault condition is cleared. Can be paralleled for higher ratings. Current: 0.65 Amps. Trip Current: 1.3 Amps. Max Voltage: 60 Volts. 0.33" diameter. UL, CSA.  
**CAT# RXE-065** 3 for \$1.00 • 100 for \$ 20.00  
 500 for \$85.00 • 1000 for \$150.00



### BATTERY PACK PROTECTOR

Raychem Polyswitch™ # LTP100S. 1 Amp, 24 Volt max. Hold: 1 Amp. Trip: 2.5 Amp. Resettable device provides overcurrent protection for rechargeable batteries. 0.9" long x 0.2" wide x 0.03" thick. UL, CSA, TUV.  
**CAT# CPX-100S** 4 for \$1.00 • 100 for 15¢ ea.  
 1000 for 10¢ each • 2000 for 8¢ each



## THERMISTORS

### NTC THERMISTOR, 10 OHM 6A

Ametherm # SL15-10006. Negative Temperature Coefficient (NTC) thermistor. 10 Ohms, 20%. 6A Max. steady-state current. Inrush current limiting device. 14mm diameter x 4mm. Leads on 8mm centers.  
**CAT# THM-15** 2 for \$1.00  
 100 for 40¢ each



### DUAL THERMISTOR PROBE

Veco #A396B 103S242. Two 500K thermistors molded into a plastic probe assembly, 0.30" diameter x 1" long. Four 9" leads, two for each thermistor. These assemblies are in good condition considering their 1975 date code.  
**CAT# THR-25** \$1.00 each

