

## LIGHT EMITTING DIODES (LED)

MITEY LITES™ Light Emitting Diodes are among the brightest diffused lens LEDs currently available. They are offered in a wide variety of colors and sizes and are ideal as replacement units for Strobe Flashers, Signals, etc. **NOTE: All LEDs MUST have a suitable value current limiting resistor wired in series with one of the power leads. A DC power source must be used, never AC!**

### SUPER BRIGHT

These LEDs offer up to 25 times the light output of general purpose LEDs with typical millicandella ratings of 36-100.

800-9301	...3mm Orange	2/2.95	800-9313	...5mm Yellow	2/2.95
800-9302	...3mm Red	2/2.95	800-9314	...5mm Green	2/2.95
800-9303	...3mm Yellow	2/2.95	800-9316	...5mm Bi-Color	ea. 2.95
800-9304	...3mm Green	2/2.95	800-9321	...2mm Orange	2/2.95
800-9306	...3mm Bi-Color	ea. 2.95	800-9322	...2mm Red	2/2.95
800-9311	...5mm Orange	2/2.95	800-9323	...2mm Yellow	2/2.95
800-9312	...5mm Red	2/2.95	800-9324	...2mm Green	2/2.95

### HYPER-BRITE™

These extreme intensity LEDs have outputs of 400 millicandellas or greater. They are all diffused lens design for wide angle viewing except the White which has only slight diffusion. All packages include resistors for 12-16 volt operation.

PLEASE ADD QUANTITY TO PART NUMBER WHEN ORDERING (Example: 800-7501-02)	PART NO.	PKG. 1 -01	PKG. 2 -02	PKG. 6 -06
<b>WHITE</b> -Special resin provides incandescent look	800-7501	\$ 3.95	\$ 6.95	\$ 12.95
<b>RED</b> - Great for Strobes, signals, traffic lights	800-7502	n/a	\$ 3.50	\$ 6.95
<b>ORANGE</b> - Brilliant color for strobes	800-7503	n/a	\$ 3.50	\$ 6.95
<b>PURE GREEN</b> - Intense deep blue-green	800-7504	n/a	\$ 6.95	\$ 12.95
<b>BLUE</b> - Great for Emergency Vehicles	800-7505	n/a	\$ 6.95	\$ 12.95
<b>YELLOW/AMBER</b> - Deep yellow for signals	800-7507	n/a	\$ 3.50	\$ 6.95

### CAUTION

Sub-Miniature Lamps and Light Emitting Diodes (LEDs) are fragile and must be handled with care to prevent damage and to avoid premature failure. Incandescent lamps **must** be operated at their rated voltage or less. Even a 10% high voltage applied to a lamp will reduce its life by 2/3. A 30% over voltage applied to a lamp will result in a life of only 4% of the normal. Thus, running one of our 1.5 volt lamps (which normally have a 500 hour life expectancy) at 2 volts will result in a life of about only **20 hours!** If you must power a lamp from a supply rated at a higher voltage than the lamp's, use a suitable rated voltage dropping resistor for **each** lamp. CIRCUITRON has selected resistors available for most lamp models.

LEDs must have a suitable value current limiting resistor wired in series with one lead. The value of the resistor will depend on the voltage of the power supply. Use the formula:

$$(VOLTS - 2) \div 0.015 = RESISTANCE \text{ in ohms}$$

Choose the closest standard value ½ watt resistor. Available from Radio Shack.

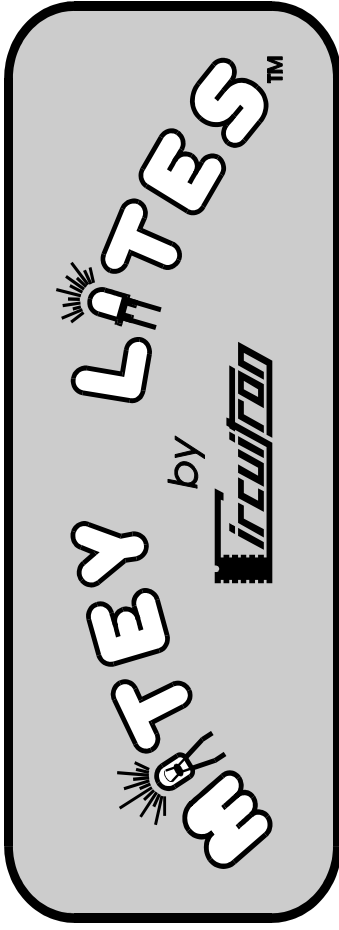
**TO ORDER DIRECT FROM CIRCUITRON:** Enclose a check or money order for the total amount of the order. Payment for foreign orders must be clearly marked US DOLLARS. Include \$7.00 for Shipping and Handling on domestic and Canadian orders. Overseas orders include \$10.00 for Shipping & Handling (excess refunded). **COD** orders accepted, include \$9.00 additional (Actual UPS charge). Illinois residents must include 7% State Sales Tax.

**ALL SPECIFICATIONS AND PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE**

## CIRCUITRON, INC.

211 RocBaar Drive  
Romeoville, IL 60446  
(815) 886-9010

09/01/09



CIRCUITRON is very pleased to present the extensive MITEY LITES™ line of incandescent lamps and Light Emitting Diodes. These items are custom manufactured to our stringent specifications and provide high quality, consistency, and great value. With the widest range of physical sizes, voltage and brightness ratings in the industry, the MITEY LITES™ line will easily fill ALL of your model lighting needs. All our incandescent lamps are designed to provide over 500 hours of operation at their specific rated voltage. Note the caution statement later in this flyer.

## Retail Prices effective 09/01/09

### SUB-MINIATURE LAMPS:

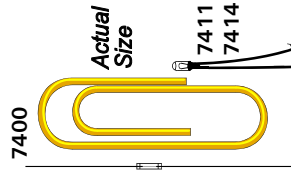
- 1) Sub-Micro, 0.75 mm Diameter, Axial Lead. 1.5 volt, 18 ma. w/ 1" bare wire leads. Use for marker lights, number boards, step lights, etc.
 

800-7400-02	pkg. 2	\$ 4.95
800-7400-06	pkg. 6	\$ 11.95
800-7400-12	pkg. 12	\$ 18.95
800-9400-12	pkg. 10	\$ 2.95
800-9400-16	pkg. 10	\$ 2.95
- 2) Standard Output, Long life Micro-lamp. 1.40 mm Diameter, Lens end w/ 8" black stranded wires. 1.5 volt, 13 ma.
 

800-7411-02	pkg. 2	\$ 5.95
800-7411-06	pkg. 6	\$ 12.95
800-7411-12	pkg. 12	\$ 16.95
800-7411-25	pkg. 25	\$ 28.95
800-9411-12	pkg. 10	\$ 2.95
800-9411-16	pkg. 10	\$ 2.95
- 3) Medium Output, Long life Micro-lamp, 1.40 mm Diameter, Lens End w/ 8" black wire leads. 1.5 volt, 30 ma. *Bright!*

800-7414-02	pkg. 2	\$ 6.50
800-7414-06	pkg. 6	\$ 13.95
800-7414-12	pkg. 12	\$ 18.95
800-9414-12	pkg. 6	\$ 2.95
800-9414-16	pkg. 6	\$ 2.95
- 4) High Output, Long Life Micro-Lamp. 1.40 mm Diameter, Lens End, w/ 8" black wire leads. 1.5 volts, 50 ma. *Very Bright!* Use for headlights, etc. The colored lamps are ideal for signals, signs, emergency flashers, etc.
 

800-7416-02	pkg. 2	\$ 6.50
800-7416-06	pkg. 6	\$ 13.95
800-7416-12	pkg. 12	\$ 18.95



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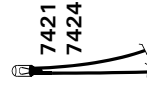
- 800-74161-02 Orange pkg. 2 \$ 6.95
- 800-74161-06 Orange pkg. 6 \$ 14.95
- 800-74162-02 Red pkg. 2 \$ 6.95
- 800-74162-06 Red pkg. 6 \$ 14.95
- 800-74163-02 Amber pkg. 2 \$ 6.95
- 800-74163-06 Amber pkg. 6 \$ 14.95
- 800-74164-02 Green pkg. 2 \$ 6.95
- 800-74164-06 Green pkg. 6 \$ 14.95
- 800-74165-02 Blue pkg. 2 \$ 6.95
- 800-74165-06 Blue pkg. 6 \$ 14.95
- 800-74167-02 Yellow pkg. 2 \$ 6.95
- 800-74167-06 Yellow pkg. 6 \$ 14.95
- 800-9416-12 Resistor for 12 volts pkg. 6 \$ 2.95
- 800-9416-16 Resistor for 16 volts pkg. 6 \$ 2.95



**Actual Size**

- 5) Very High Output, Long Life Micro-Lamp. 1.40 mm diameter, Lens end with 8" black leads. 3.0 volts, 26 ma. *Extra Bright!* Use for Headlights, Mars Lights or Ditch Lights, etc.
  - 800-7418-02 pkg. 2 \$ 6.95
  - 800-7418-06 pkg. 6 \$ 14.95
  - 800-7418-12 pkg. 12 \$ 19.95
  - 800-9418-12 Resistor for 12 volts pkg. 10 \$ 2.95
  - 800-9418-16 Resistor for 16 volts pkg. 10 \$ 2.95

- 6) Very High Output, Long Life Micro-Lamp. 1.70 mm diameter, Lens end with 8" black leads. 1.5 volts, 75 ma. *Extra Bright!* Use for Headlights, Mars Lights or Ditch Lights, etc.
  - 800-7421-02 pkg. 2 \$ 6.95
  - 800-7421-06 pkg. 6 \$ 14.95
  - 800-9421-12 Resistor for 12 volts pkg. 4 \$ 2.95
  - 800-9421-16 Resistor for 16 volts pkg. 4 \$ 2.95

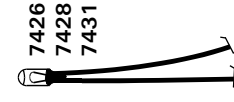


**Actual Size**

- 7) Extra High Output, Long Life Micro-Lamp. 1.70 mm diameter, Lens end with 8" black leads. 3.0 volts, 105 ma. *Extremely Bright!* Use for Headlights, Mars Lights or Ditch Lights, etc.
  - 800-7424-02 pkg. 2 \$ 6.95
  - 800-7424-06 pkg. 6 \$ 14.95
  - 800-9424-12 Resistor for 12 volts pkg. 4 \$ 2.95
  - 800-9424-16 Resistor for 16 volts pkg. 4 \$ 2.95

- 8) Very High Output, Long Life Micro-Lamp. 2.40 mm diameter, Lens end with 8" black leads. 1.5 volts, 90 ma. *Extra Bright!* Use for Headlights, Mars Lights or Ditch Lights, etc.
  - 800-7426-02 pkg. 2 \$ 6.95
  - 800-7426-06 pkg. 6 \$ 13.95
  - 800-9426-12 Resistor for 12 volts pkg. 4 \$ 2.95
  - 800-9426-16 Resistor for 16 volts pkg. 4 \$ 2.95

- 9) Brilliant Output, Long Life Micro-Lamp. 2.40 mm diameter, Lens end with 8" black leads. 3.0 volts, 120 ma. *Our Brightest Lamp with lead wires!* Use for Headlights, Mars Lights or Ditch Lights, etc.
  - 800-7428-02 pkg. 2 \$ 6.95
  - 800-7428-06 pkg. 6 \$ 13.95
  - 800-9428-12 Resistor for 12 volts pkg. 4 \$ 2.95
  - 800-9428-16 Resistor for 16 volts pkg. 4 \$ 2.95



**Actual Size**

- 10) Extra High Output, Long Life Micro-Lamp. 2.40 mm diameter, Lens end with 8" black leads. 12.0 volts, 50 ma. *Extremely Bright!* Use for Headlights, Mars/Ditch Lights, etc. with direct track power or command control.
  - 800-7431-02 pkg. 2 \$ 6.95
  - 800-7431-06 pkg. 6 \$ 13.95

- 11) General Purpose, Long Life Miniature Lamp. 3.0 mm diameter w/ 12" BLACK wire leads. 14 - 16 volts, 30 ma. Use for equipment and structure lighting.
  - 800-7440-06 pkg. 6 \$ 5.95
  - 800-7440-12 pkg. 12 \$ 8.95
  - 800-7440-25 pkg. 25 \$ 14.95



- 12) High Output version of 7440 (2.5 times brighter). 3.0 mm diameter w/ 12" BROWN wire leads. 14 - 16 volts, 60 ma. For equipment & structure lighting.
  - 800-7441-06 pkg. 6 \$ 6.95
  - 800-7441-12 pkg. 12 \$ 9.95
  - 800-7441-25 pkg. 25 \$ 16.95

- 13) Bi-Pin Style. 3.0 mm diameter with plug-in style, short, stiff leads. 5.0 volts, 60 ma. Ideal replacement for LGB™ in-car and locomotive lighting.
  - 800-7452-02 pkg. 2 \$ 4.95
  - 800-7452-06 pkg. 6 \$ 11.95
  - 800-7452-12 pkg. 12 \$ 16.95



- 14) Bi-Pin Style. 3.0 mm diameter with plug-in style, short, stiff leads. 18-22 volts, 45 ma. Ideal replacement for DCC in-car and locomotive lighting.
  - 800-7458-02 pkg. 2 \$ 4.95
  - 800-7458-06 pkg. 6 \$ 11.95
  - 800-7458-12 pkg. 12 \$ 16.95

**MISCELLANEOUS REPLACEMENT LAMPS:**

- 15) For ML-1 Mars Light. Dual filament. 4 mm diameter, Lens End. High intensity output. 3.0 volts, 100 ma. Three 8" lead wires.
  - 800-9340 each \$ 2.95
- 16) For FLA Amtrak Strobe. 2.4 mm diameter. 5.0 volts, 20 ma. 8" leads.
  - 800-9341 pkg. 2 \$ 5.95
- 17) For AW-1 Arc Welder. 1.4 mm diameter. 1.5 volts, 50 ma. 8" wire leads. One blue and one yellow lamp per package.
  - 800-9342 pkg. 2 \$ 4.95
- 18) For AW-2 Arc Welder. 2.4 mm diameter. 5.0 volts, 20 ma. 8" wire leads. One blue and one yellow lamp per package.
  - 800-9343 pkg. 2 \$ 4.95
- 19) Replacement Lamp Set for FIRELITES™ FF-1. 1.4 mm. 1.5 volt, 50 ma. Amber.
  - 800-74163-02 pkg. 2 \$ 4.95
- 20) Replacement Lamp Set for FIRELITES™ FF-2. 1.4 mm. 1.5 volt, 50 ma. Amber & Yellow.
  - 800-9344 1 each \$ 4.95
- 21) Replacement Lamp Set for FIRELITES™ FF-3. 2.4 mm. 5.0 volt, 20 ma.
  - 800-9345 Amber & Yellow, 1 each \$ 4.95
  - 800-93413-06 Amber, pkg. 6 \$ 11.95
  - 800-93417-06 Yellow, pkg. 6 \$ 11.95

**RELATIVE INTENSITY OF MITEY LITES:**

