

Bright•White™ LED

- Advanced Technology**
- Creates Pure, Bright White Light without Having to Mix Red, Green and Blue LEDs Together
 - Semiconductor Based

Leading Edge LED Optoelectronic Performance

- High Luminous Intensity
- High Efficiency
- Excellent Direct Viewing Properties

Exceptional Reliability

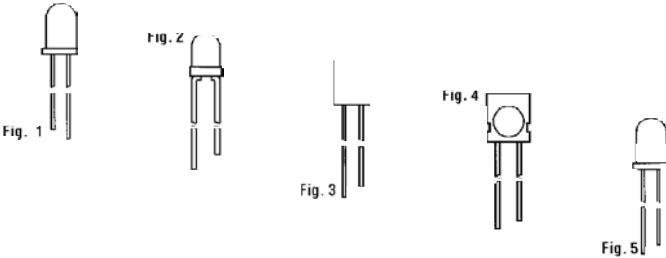
- Stringent Process Controls Assure Quality
- Extensive Qualification Testing to Meet Strictest Requirements
- Designed with Silver Plated Leads to Assure Excellent Solderability

Absolute Maximum Ratings

Power Dissipation: 100 mW. Operating Temperature: -20°C to +85°C. Storage Temperature: -30°C to +100°C. Peak Forward Current: 80 mA. Reverse Voltage (IR=100 µA): 5.0 V. Continuous Forward Current: 25 mA.

| Stock No. | Mfr.'s Type | Emitted Color | Lens Color | Luminous Intensity | | Forward Voltage | | View Angle | EACH |
|-----------|-------------|---------------|----------------------|--------------------|----|-----------------|------|------------|------|
| | | | | Typ. MCD | mA | Typ. | Max | | |
| 749-2040 | CMD204UWC | White | Water Clear | 1000 | 20 | 3.70 | 3.85 | 20° | 3.40 |
| 749-3330 | CMD333UWC | White | Water Clear | 2300 | 20 | 3.75 | 3.85 | 22° | 4.28 |
| 749-3331 | CMD333UWW | White | Water Clear Diffused | 2300 | 20 | 3.75 | 3.85 | 22° | 3.45 |

LED Lamps



Lamps use low power for IC compatibility, cool operation and long life expectancy. Shock-proof, solid lens, epoxy construction. Intense light sources available — up to 3000 mcd guaranteed luminosity. Leads are silver plated, eliminating soldering problems. Viewing angles (the angle between points where the light intensity falls to 50% of peak value) are available to 180. Order Panelmount grommets separately at bottom of page.

T-1 Lamps

| Stock No. | Mfr.'s Type | Fig. | Emitted Color | Lens Type/Color* | View Angle | Typical mcd/mA | EACH |
|-----------|-------------|------|---------------|------------------|------------|----------------|------|
| | | | | | | | 1-9 |
| 749-9838 | CMD5074C | 1 | Red | N.D.Red | 70 | 2.5/20 | .34 |
| 749-9839 | CMD5075C | 1 | Red | Diff.Red | 90 | 1.5/20 | .37 |
| 749-9840 | CMD5374C | 1 | Yellow | Diff.Yel | 90 | 9.0/20 | .28 |
| 749-9841 | CMD5474C | 1 | H.E.Grn | Diff.Gr | 90 | 9.0/20 | .40 |
| 749-9842 | CMD5774C | 1 | H.E.Red | Diff.Red | 90 | 9.0/20 | .38 |
| 679-4303 | 4303F1 | 1 | Red | Diff. | 90 | 6.0/10 | .20 |
| 679-4305 | 4303F3 | 1 | Amber | Diff. | 60 | 4.0/10 | .27 |
| 679-9999 | 4303F5 | 1 | Green | Diff. | 90 | 12.0/20 | .20 |
| 679-4306 | 4303F7 | 1 | Yellow | Diff. | 60 | 20.0/20 | .20 |

T-100 Lamps

| | | | | | | | |
|----------|----------|---|---------|----------|----|--------|-----|
| 749-1340 | CMD54643 | 2 | H.E.Gr | Diff.Gr | 90 | 5.0/20 | .22 |
| 749-9862 | CMD57640 | 2 | H.E.Red | Diff.Red | 90 | 2.0/10 | .18 |

Rectangular Lamps

| | | | | | | | |
|----------|-----------|---|---------|----------|-----|--------|-----|
| 749-9956 | CMD54123 | 3 | H.E.Gr | Diff.Gr | 100 | 4.0/20 | .19 |
| 749-9957 | CMD57123 | 3 | H.E.Red | Diff.Red | 100 | 4.0/20 | .41 |
| 749-9962 | HLMP0300 | 3 | H.E.Red | Diff.Red | 100 | 2.5/20 | .31 |
| 749-9963 | HLMP0301 | 3 | H.E.Red | Diff.Red | 100 | 5.0/20 | .50 |
| 749-0765 | HLMP0503 | 3 | H.E.Gr | Diff.Gr | 100 | 3.0/20 | .41 |
| 749-9964 | CMD53124A | 4 | Yellow | Diff.Yel | 100 | 6.0/20 | .28 |
| 749-9965 | CMD54124A | 4 | H.E.Gr | Diff.Gr | 100 | 6.0/20 | .29 |
| 749-9966 | CMD57124A | 4 | H.E.Red | Diff.Red | 100 | 6.0/20 | .32 |

T-1 1/4 Lamps

| | | | | | | | |
|----------|------------|---|---------|----------|-----|----------|-----|
| 749-9819 | CMD5752 | 5 | H.E.Red | N.D.Red | 28 | 100.0/20 | .43 |
| 749-9889 | CMD5053 | 1 | Red | Diff.Red | 80 | 0.5/20 | .45 |
| 749-9891 | CMD5055 | 1 | Red | Diff.Red | 150 | 0.1/20 | .45 |
| 749-9899 | CMD5153 | 1 | H.E.Red | Diff.Amb | 65 | 15.0/20 | .31 |
| 749-9892 | CMD5353 | 1 | Yellow | Diff.Yel | 65 | 15.0/20 | .33 |
| 749-9894 | CMD5453 | 1 | H.E.Gr | Diff.Gr | 75 | 20.0/20 | .33 |
| 749-9941 | CMD5753 | 1 | H.E.Red | Diff.Red | 65 | 10.0/20 | .42 |
| 749-9887 | CMD5754A | 1 | H.E.Red | Diff.Red | 24 | 25.0/20 | .20 |
| 749-9897 | CMD64531 | 5 | H.E.Gr | Diff.Gr | 75 | 20.0/20 | .60 |
| 749-9805 | FLV110 | 5 | Red | Diff.Red | 70 | 3.0/20 | .22 |
| 749-9943 | HLMP3300 | 5 | H.E.Red | Diff.Red | 65 | 3.5/10 | .27 |
| 749-9944 | HLMP3301 | 5 | H.E.Red | Diff.Red | 65 | 7.0/10 | .23 |
| 749-9806 | HLMP4700 | 5 | H.E.Red | Diff.Red | 35 | 2.0/2 | .27 |
| 749-9876 | CMD5054A-1 | 5 | Red | Diff.Red | 24 | 1.0/10 | .19 |
| 749-9814 | CMD5452 | 5 | H.E.Gr | N.D.Gr | 35 | 25.0/20 | .15 |
| 679-9981 | 4304H1 | 5 | Red | Diff. | 65 | 30.0/20 | .15 |
| 679-3001 | 4304H5 | 5 | Green | Diff. | 75 | 30.0/20 | .15 |
| 679-7753 | 4304H7 | 5 | Yellow | Diff. | 65 | 25.0/20 | .27 |

*Diff. = Diffused; N.D. = Non-Diffused; P.T. = Pale Tint.

Relampable Indicator Lights and Sockets

Relampable Incandescent Indicator Light, 1 1/4" Diameter Mounting Hole

Ordered separately. **Select:** 1) T-2 telephone slide base lamp, page 539 fig. 17; 2) Choice of 2 sockets below; 3) Lens, choose dome or flat.

Sockets

Features: Mounting: Supplied with polyester hex nut. **Body:** Black polyester. **Terminals:** Nickel plated brass.

| Stock No. | Mfr.'s Type | Bezel | EACH | |
|-----------|-------------|--------------------------|------|-------|
| | | | 1-49 | 50-99 |
| 679-7761 | 2802* | Black | 2.02 | 1.82 |
| 679-7762 | 2803† | Polished Stainless Steel | 2.15 | 1.94 |

*With flat lens. †With dome lens.

Lens

| Lens Color | Dome Lens | | Flat Lens | | EACH | |
|------------|-----------|-------------|-----------|-------------|------|-------|
| | Stock No. | Mfr.'s Type | Stock No. | Mfr.'s Type | 1-49 | 50-99 |
| Red | 679-7763 | 2811 | 679-0215 | 2851 | .45 | .41 |
| Clear | 679-0200 | 2812 | 679-0220 | 2852 | .45 | .41 |
| Amber | 679-7765 | 2813 | 679-0225 | 2853 | .45 | .41 |
| White | 679-0205 | 2814 | 679-0230 | 2854 | .45 | .41 |
| Green | 679-9815 | 2815 | 679-0235 | 2855 | .45 | .41 |
| Blue | 679-0005 | 2816 | 679-0240 | 2856 | .45 | .41 |
| Yellow | 679-0210 | 2817 | 679-0245 | 2857 | .45 | .41 |

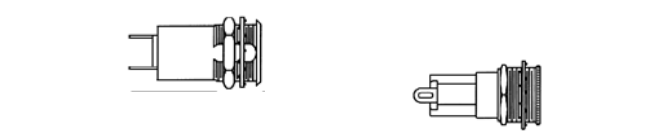


900 Series Instrument Lights

Ideal for panel, switch, meter and legend plate applications where localized light is required. Type 900-200 has fixed hood, solder lug terminals, and mounts hole 0.688" diameter to 0.406" panel thickness. Rated 120 volts, 3 watts. Accepts T-3 1/4 miniature bayonet lamp. Type 900-006 has rotatable hood, screw terminals and mounts hole 1" diameter to 0.500" panel thickness. Rated 250 volts, 1 amp, 75 watts. Accepts S-6 or C-7 candelabra screw base lamp. Order lamps separately.

749-0645. 900-200. Fixed Hood, Solder Lug Terminals EACH 17.61

5100, 5200 Series Relampable Indicators



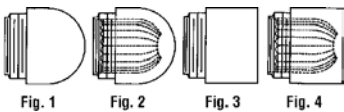
Select from 5100 series standard and 5200 series deluxe indicators from table below. Standard indicators must be assembled. Order lamps (T-2 and T-3 1/4 min. bayonet based, incandescent and neon) and lenses separately below. UL recognized, CSA certified.

| Stock No. | Mfr.'s Type | Max. Volts | Max. Amps | Terminals | EACH |
|-----------|-------------|------------|-----------|---------------------------|------|
| | | | | | 1-9 |
| 749-0599 | 5100-822 | 120 | 0.170 | Solder Lugs | 3.87 |
| 749-9909 | 5100-823 | 120 | 0.170 | Screw Lugs | 3.79 |
| 749-0598 | 5100-824 | 120 | 0.170 | Quick Connect 0.250" Lugs | 3.90 |

5200 Series Standard T-3 1/4 Indicators

| | | | | | |
|----------|-----------|-----|-------|-------------|------|
| 749-0565 | 5200-222 | 120 | 0.170 | Solder Lugs | 6.64 |
| 749-0575 | 5200-232* | 125 | 1.800 | Solder Lugs | 9.19 |
| 749-0585 | 5200-242* | 250 | 1.800 | Solder Lugs | 9.38 |

*Supplied with built-in integral resistor for use with based Neon lamp.



5100, 5200 Series Polycarbonate Lenses

Use only transparent or fluted lens with neon lamps, ordered separately above. Specify color choice when ordering. Replace X in stock number with following color code — 1=Amber, 3=Clear, 4=Green, 5=Red, 6=White, 7=Yellow.

| Stock No. | Mfr.'s Type | Fig. | Colors Available | EACH |
|-----------|-------------|------|------------------|------|
| | | | | 1-9 |
| 749-020X | 25P-306 | 1 | R, A, G, C | 1.25 |
| 749-004X | 25P-307 | 1 | R, Y, G, W | .68 |
| 749-006X | 25P-326 | 2 | R, A, G, C | 1.25 |
| 749-007X | 25P-606 | 3 | R, A, G, C | .73 |
| 749-008X | 25P-607 | 3 | R, Y, G, W | .73 |
| 749-065X | 25P-626 | 4 | R, A, G, C | .80 |

Mounting Accessories

CMP Series Panel-Mounting Grommets

Two-piece grommets easily mount CMD Series lamps on any panel up to 0.125" (3.18) thickness. CMP22 for tapered side T-1 1/4 LEDs and CMP52 for straight sided T-1 1/4 LEDs require drilling to mount.

| | | |
|--|------|-----|
| 749-0426. CMP22. Fig 1. T-1 1/4. 1-9..... | EACH | .23 |
| 749-0427. CMP52. Fig. 1. T-1 1/4. 1-9..... | EACH | .18 |
| 749-9975. CMP65. Fig. 2. Rectangular. 1-9..... | EACH | .16 |
| 749-9970. CMP100. Fig. 3. T-100. 1-9..... | EACH | .41 |