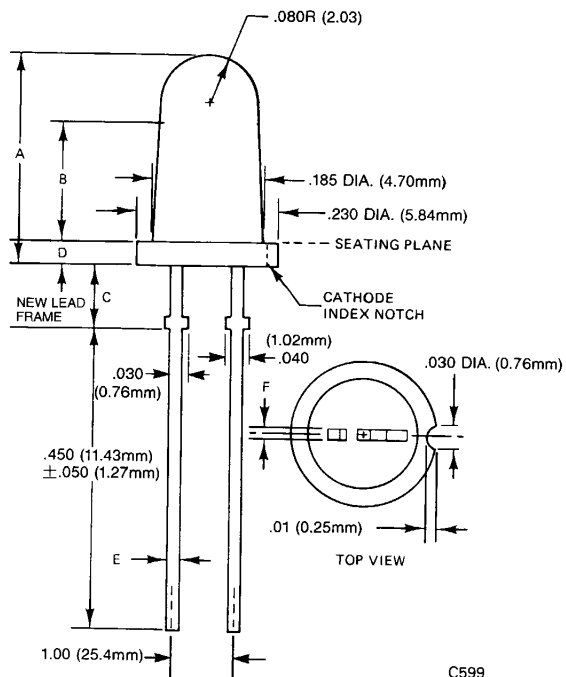




TAPERED PACKAGE T-1 $\frac{3}{4}$ SOLID STATE LAMPS

STANDARD RED MV502XA

PACKAGE DIMENSIONS



C599

DESCRIPTION

The MV502X Series of solid state indicators is made with gallium arsenide phosphide light emitting diodes. Encapsulation and lens is epoxy. Various lens effects are available for many indicator applications.

FEATURES

- Tapered barrel T-1 $\frac{3}{4}$
- High Intensity Red light source with various lens colors and effects
- T-1 $\frac{3}{4}$ with stand-off
- Versatile mounting on PC board or panel
- Snap in panel mounting clip available (See MP22 for clip detail)

PHYSICAL CHARACTERISTICS

| TYPE | A | B | C | D | E & F | SOURCE COLOR | LENS COLOR | LENS EFFECT | POP-IN MOUNTING | CIRCUIT BOARD MOUNTING |
|---------|------|------|------|------|-------|--------------|-------------------|-------------|-----------------|------------------------|
| MV5021A | .340 | .190 | .100 | .040 | .020 | Red | White Diffused | Soft | X | X |
| MV5022A | .340 | .190 | .100 | .040 | .020 | Red | Transparent Red | Point | X | X |
| MV5023A | .340 | .190 | .100 | .040 | .020 | Red | Red Diffused | Soft | X | X |
| MV5024A | .340 | .160 | .130 | .040 | .020 | Red | Red Diffused | Soft | X | X |
| MV5025A | .340 | .160 | .130 | .040 | .020 | Red | Red Diffused | Flooded | X | X |
| MV5026A | .340 | .160 | .130 | .040 | .020 | Red | Dark Red Diffused | Flooded | X | X |



TAPERED PACKAGE T-1 $\frac{3}{4}$ SOLID STATE LAMPS

ELECTRO-OPTICAL CHARACTERISTICS

(25°C Free Air Temperature Unless Otherwise Specified)

| PARAMETER | TEST CONDITIONS | UNITS | 5021A | 5022A | 5023A | 5024A | 5025A | 5026A |
|--------------------------|---------------------------------|---------|-------|-------|-------|-------|-------|-------|
| Luminous Intensity | min. $I_f=20$ mA | mcd | 0.5 | 0.6 | 0.4 | 0.9 | 0.1 | 0.1 |
| | typ. $I_f=20$ mA | mcd | 1.6 | 1.6 | 1.6 | 3.0 | 0.4 | 0.6 |
| Peak wavelength | $I_f=20$ mA | nm | 660 | 660 | 660 | 660 | 660 | 660 |
| Spectral line half width | $I_f=20$ mA | nm | 20 | 20 | 20 | 20 | 20 | 20 |
| Forward voltage V_f | typ. $I_f=20$ mA | V | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 | 1.65 |
| | max. $I_f=20$ mA | V | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Reverse current I_R | max. $V_R=5.0$ V | μ A | 100 | 100 | 100 | 100 | 100 | 100 |
| Reverse voltage V_R | min. $I_R=100$ μ A | V | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Capacitance | typ. $V=0$ | pF | 35 | 35 | 35 | 35 | 35 | 35 |
| Viewing angle | Between 50% Points | degrees | 90 | 90 | 90 | 60 | 180 | 90 |
| Rise time and fall time | 10%-90% 50 Ω system | nsec | 50 | 50 | 50 | 50 | 50 | 50 |
| | typ. 90%-10% 50 Ω system | nsec | 50 | 50 | 50 | 50 | 50 | 50 |

ABSOLUTE MAXIMUM RATINGS

| | |
|---|-----------------|
| Power dissipation at 25°C ambient | 180 mW |
| Derate linearly from 25°C | 2 mW/°C |
| Storage and operating temperatures | -55°C to +100°C |
| Lead soldering time at 260°C (See Note 1) | 5 sec. |
| Continuous forward current at 25°C | 100 mA |
| Peak forward current (1 μ sec pulse, 0.3% duty cycle) | 1.0 A |
| Reverse voltage | 5.0 V |

NOTES

1. The leads of the device were immersed in molten solder at 260°C to a point 1/16 inch (1.6 mm) from the body of the device per MIL-S-750, with a dwell time of 5 seconds.

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES

