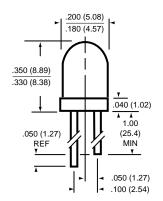
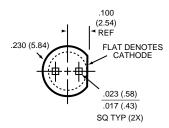


PACKAGE DIMENSIONS





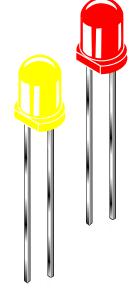
NOTES:

- 1. Dimensions for all drawings are in inches (mm).
- 2. Lead spacing is measured where the leads emerge from the package.
- 3. Protruded resin under the flange is 1.5 mm (0.059") max.

SUPER RED SUPER YELLOW HLMP-4700L HLMP-4719L

FEATURES

- Popular T-1 3/4 package with 100 mil. lead spacing
- Super high brightness at low current (2 mA)
- · Solid state reliability
- · Tinted and diffused
- CMOS and TTL compatible



DESCRIPTION

These T-1 3/4 super bright low current lamps have a moderate viewing angle of 35°. The HLMP-47XXL series is made with an AllnGaP LED, which delivers performance, reliability and brightness superior to that of standard products.

| ABSOLUTE MAXIMUM RATINGS (T _A = 25°C unless otherwise specified) | | | | |
|-----------------------------------------------------------------------------|------------------|---------------|------|--|
| Parameter | Symbol | Rating | Unit | |
| Operating Temperature | T _{OPR} | -55 to +100 | °C | |
| Storage Temperature | T _{STG} | -55 to +100 | °C | |
| Lead Soldering Time | T _{SOL} | 260 for 5 sec | °C | |
| Continuous Forward Current | I _F | 7.5 | mA | |
| Peak Forward Current | I _F | 150 | mA | |
| (f = 1.0 KHz, Duty Factor = 1/10) | | | | |
| Reverse Voltage | V _R | 5 | V | |
| Power Dissipation | P _D | 25 | mW | |



| SUPER RED | HLMP-4700L |
|--------------|------------|
| SUPER YELLOW | HLMP-4719L |

| Part Number | HLMP-4700L | HLMP-4719L | Condition |
|-------------------------------|------------|------------|-----------------------|
| Luminous Intensity (mcd) | | | I _F = 2 mA |
| Minimum | 5 | 6 | |
| Typical | 8 | 10 | |
| Forward Voltage (V) | | | I _F = 2 mA |
| Maximum | 2.4 | 2.4 | |
| Typical | 2.0 | 2.0 | |
| Wavelength (nm) | | | I _F = 2 mA |
| Peak | 640 | 590 | |
| Dominant | 631 | 589 | |
| Spectral Line Half Width (nm) | 20 | 15 | I _F = 2 mA |
| Viewing Angle (°) | 35 | 35 | $I_F = 2 \text{ mA}$ |

TYPICAL PERFORMANCE CURVES

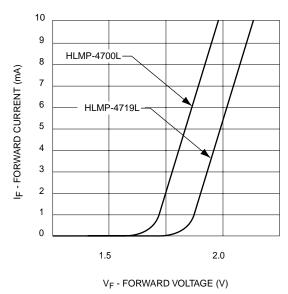


Fig. 1 Forward Current vs. Forward Voltage

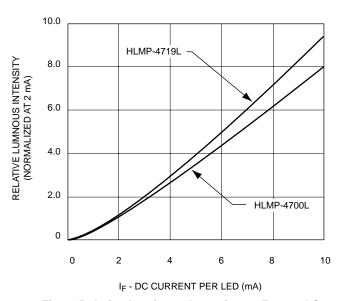


Fig. 2 Relative Luminous Intensity vs. Forward Current



SUPER RED HLMP-4700L SUPER YELLOW HLMP-4719L

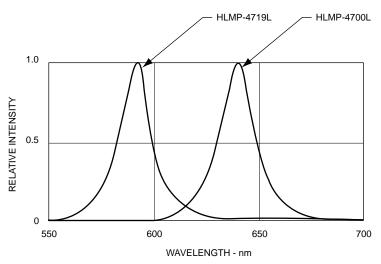


Fig. 3 Relative Intensity vs Peak Wavelength

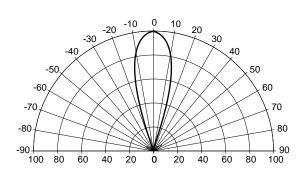


Fig. 4 Radiation Diagram



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- A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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