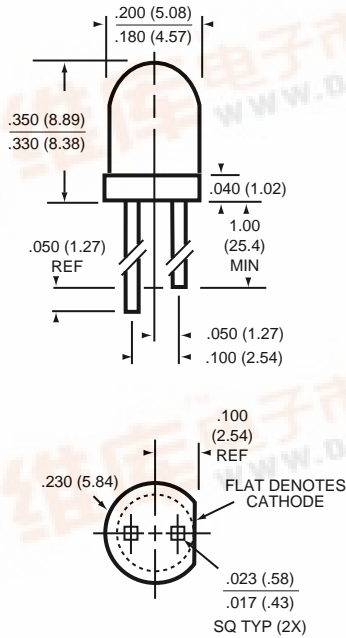


# SUPER BRIGHT AlInGaP T-1 3/4 (5 mm)

## LOW CURRENT LED LAMP - Tinted & Diffused

### PACKAGE DIMENSIONS



#### NOTES:

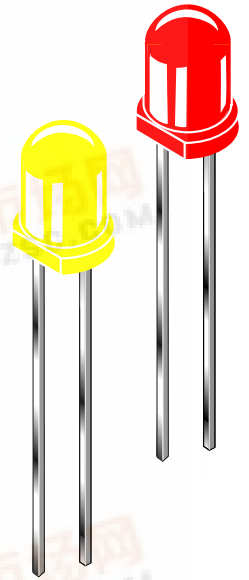
1. Dimensions for all drawings are in inches (mm).
2. Lead spacing is measured where the leads emerge from the package.
3. Protruded resin under the flange is 1.5 mm (0.059") max.

**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-47XXXL series is made with an AlInGaP LED, which delivers performance, reliability and brightness superior to that of standard products.

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T <sub>OPR</sub>	-55 to +100	°C
Storage Temperature	T <sub>STG</sub>	-55 to +100	°C
Lead Soldering Time	T <sub>SOL</sub>	260 for 5 sec	°C
Continuous Forward Current	I <sub>F</sub>	7.5	mA
Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10)	I <sub>F</sub>	150	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	25	mW



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**SUPER RED**  
**SUPER YELLOW**

**HLMP-4700L**  
**HLMP-4719L**

## ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>A</sub> =25°C)

Part Number	HLMP-4700L	HLMP-4719L	Condition
Luminous Intensity (mcd)			I <sub>F</sub> = 2 mA
Minimum	5	6	
Typical	8	10	
Forward Voltage (V)			I <sub>F</sub> = 2 mA
Maximum	2.4	2.4	
Typical	2.0	2.0	
Wavelength (nm)			I <sub>F</sub> = 2 mA
Peak	640	590	
Dominant	631	589	
Spectral Line Half Width (nm)	20	15	I <sub>F</sub> = 2 mA
Viewing Angle (°)	35	35	I <sub>F</sub> = 2 mA

## TYPICAL PERFORMANCE CURVES

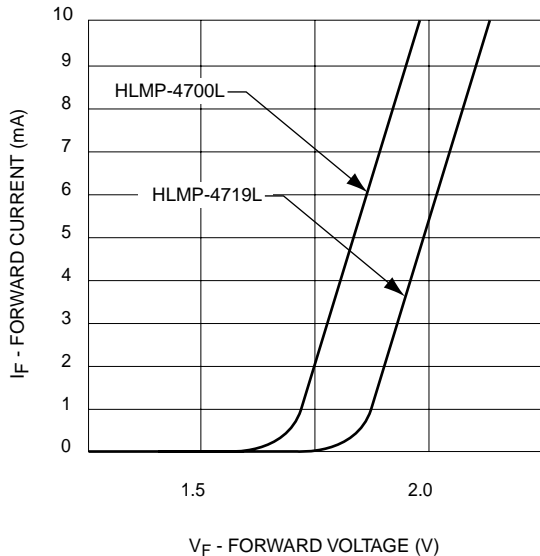


Fig. 1 Forward Current vs. Forward Voltage

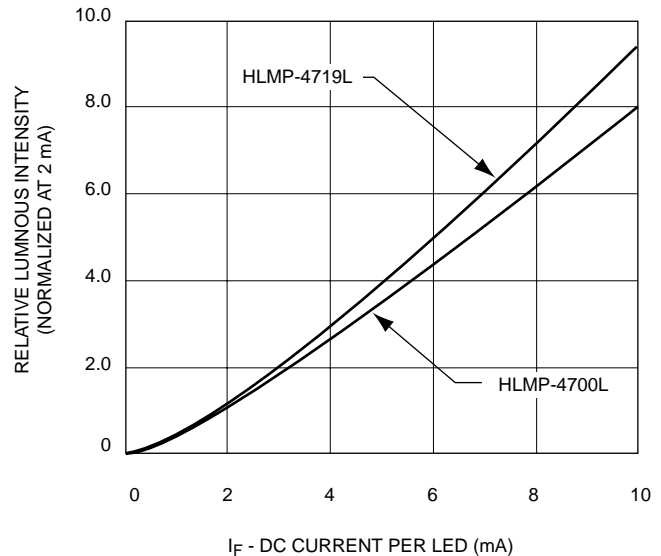


Fig. 2 Relative Luminous Intensity vs. Forward Current



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SUPER RED  
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HLMP-4700L  
HLMP-4719L

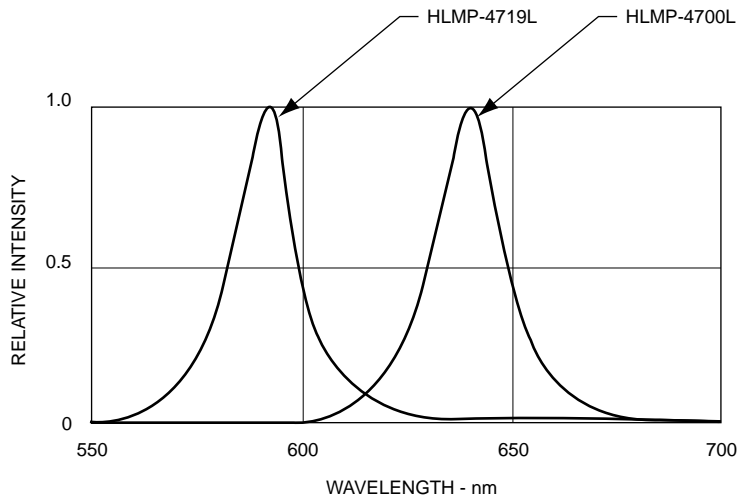


Fig. 3 Relative Intensity vs Peak Wavelength

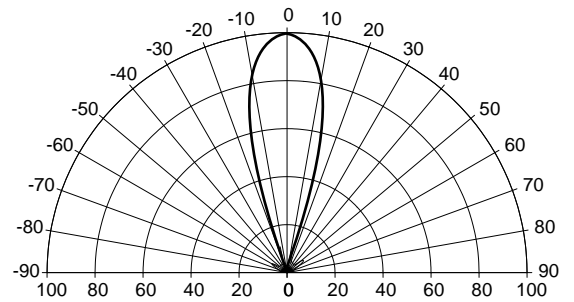


Fig. 4 Radiation Diagram



# **SUPER BRIGHT AlInGaP T-1 3/4 (5 mm) LOW CURRENT LED LAMP - Tinted & Diffused**

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2. 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.