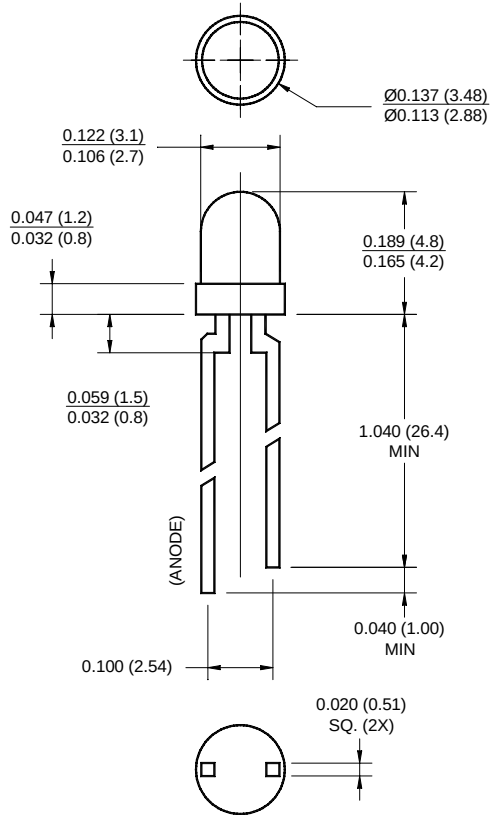


SUPER BRIGHT AlInGaP T-100 (3 mm)

LOW CURRENT LED LAMP - Tinted & Diffused

PACKAGE DIMENSIONS



NOTES:

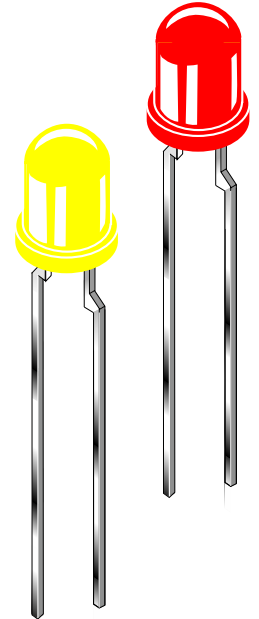
1. Dimensions for all drawings are in inches (mm).
2. Lead spacing is measured where the leads emerge from the package.
3. Protruded resin under the flange is 1.5 mm (0.059") max.

SUPER RED
SUPER YELLOW

HLMP-1700L
HLMP-1719L

FEATURES

- Popular T-100 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-100 super bright low current lamps have a moderate viewing angle of 50°. The HLMP-17XXL series is made with an AlInGaP LED, which delivers performance, reliability and brightness superior to that of standard products.

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T_{OPR}	-55 to +100	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +100	$^\circ\text{C}$
Lead Soldering Time	T_{SOL}	260 for 5 sec	$^\circ\text{C}$
Continuous Forward Current	I_F	7.5	mA
Peak Forward Current ($f = 1.0 \text{ KHz}$, Duty Factor = 1/10)	I_F	150	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	25	mW

SUPER BRIGHT AlInGaP T-100 (3 mm)

LOW CURRENT LED LAMP - Tinted & Diffused

SUPER RED
SUPER YELLOW

HLMP-1700L
HLMP-1719L

ELECTRICAL / OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

Part Number	HLMP-1700L	HLMP-1719L	Condition
Luminous Intensity (mcd)			$I_F = 2 \text{ mA}$
Minimum	5	6	
Typical	7.5	9.5	
Forward Voltage (V)			$I_F = 2 \text{ mA}$
Maximum	2.4	2.4	
Typical	2.0	2.0	
Wavelength (nm)			$I_F = 2 \text{ mA}$
Peak	640	590	
Dominant	631	589	
Spectral Line Half Width (nm)	20	15	$I_F = 2 \text{ mA}$
Viewing Angle ($^\circ$)	50	50	$I_F = 2 \text{ mA}$

TYPICAL PERFORMANCE CURVES

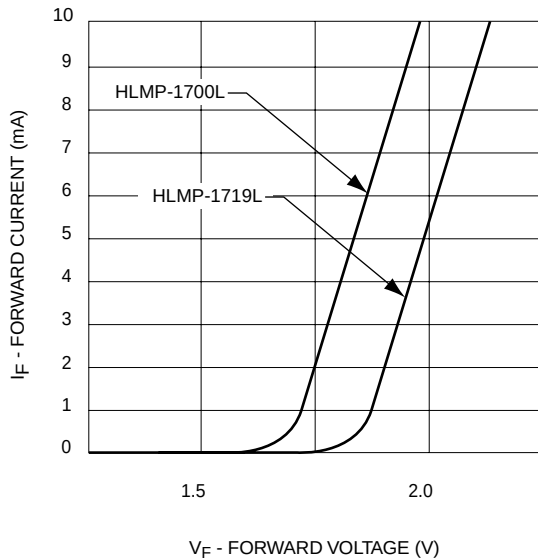


Fig. 1 Forward Current vs. Forward Voltage

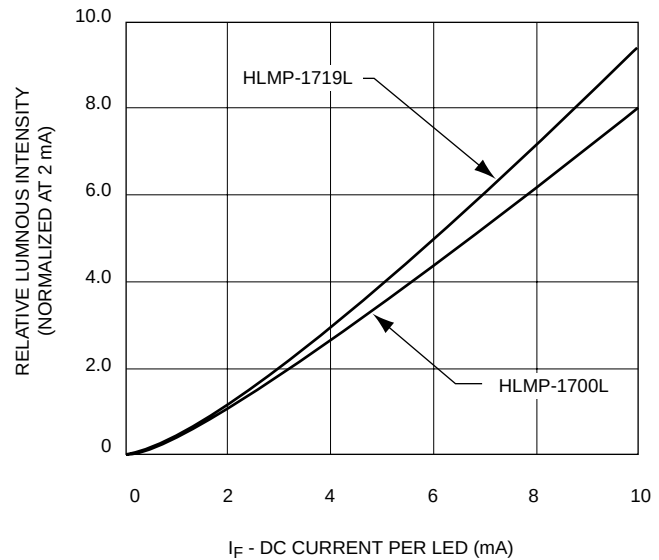


Fig. 2 Relative Luminous Intensity vs. Forward Current

SUPER BRIGHT AlInGaP T-100 (3 mm)

LOW CURRENT LED LAMP - Tinted & Diffused

SUPER RED
SUPER YELLOW

HLMP-1700L
HLMP-1719L

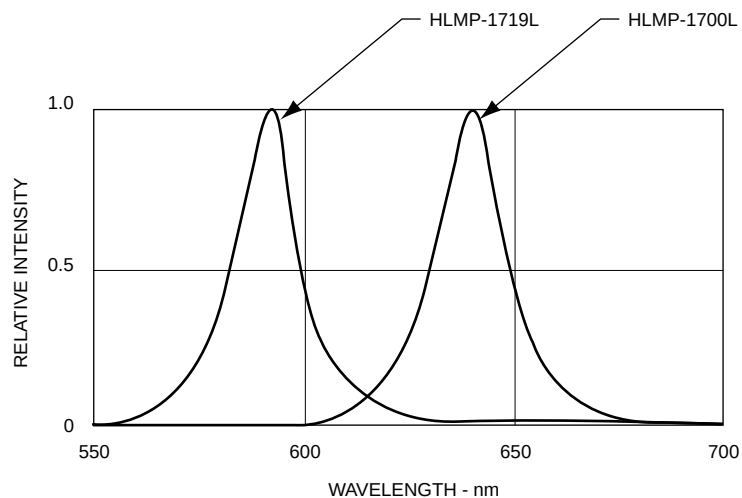


Fig. 3 Relative Intensity vs Peak Wavelength

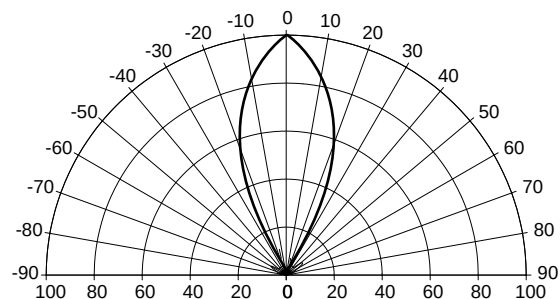


Fig. 4 Radiation Diagram