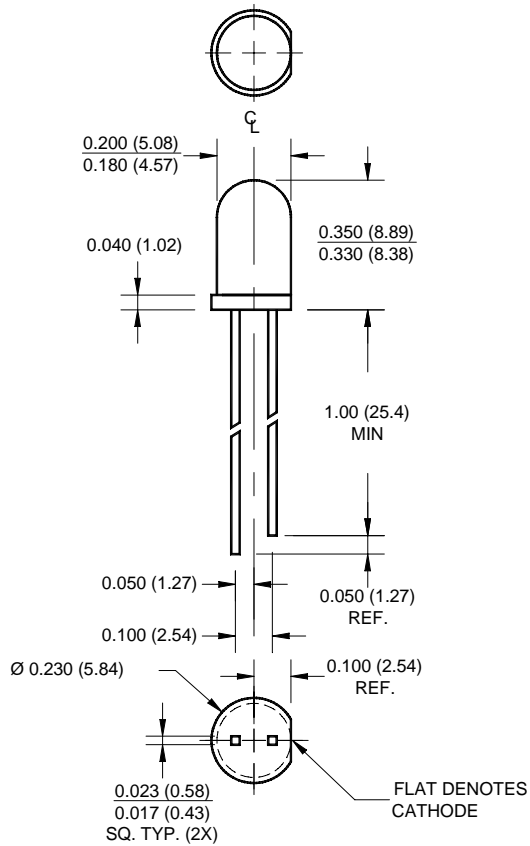


# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

## PACKAGE DIMENSIONS

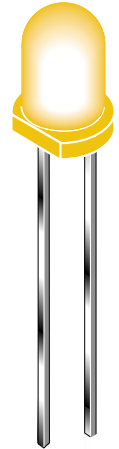


### NOTES:

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 ORANGE**  
**MV8741 MV8742**

**MV874X**



## FEATURES

- Popular T-1 3/4 package
- Super high brightness suitable for outdoor applications
- Solid state reliability
- Water clear optics
- Standard 100 mil. lead spacing

## DESCRIPTION

This T-1 3/4 super bright LED has a moderate viewing angle of 45° for concentrated light output. It is made with an AlInGaP LED that emits orange light at 620 nm. It is encapsulated in a water clear epoxy lens package.

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

Parameter	Symbol	Rating	Unit
Operating Temperature	$T_{OPR}$	-40 to +100	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-40 to +100	$^\circ\text{C}$
Lead Soldering Time	$T_{SOL}$	260 for 5 sec	$^\circ\text{C}$
Continuous Forward Current	$I_F$	40	mA
Peak Forward Current ( $f = 1.0 \text{ KHz}$ , Duty Factor = 1/10)	$I_F$	160	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	100	mW

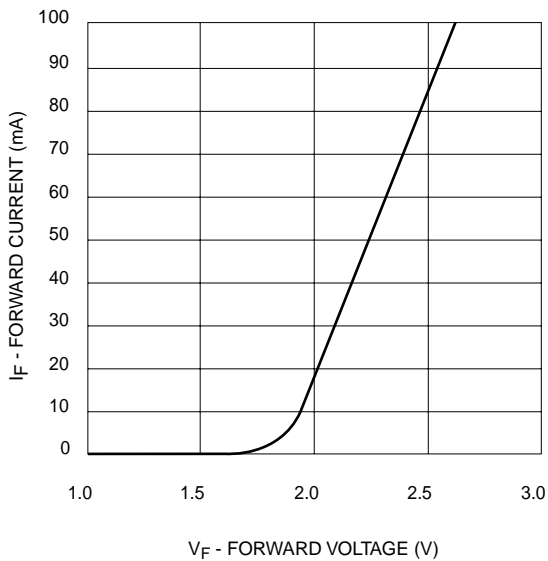
**SUPER ORANGE**  
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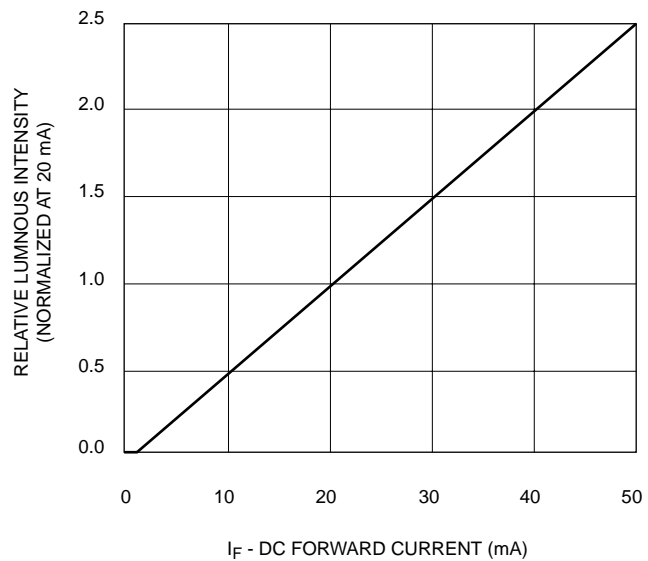
## ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>A</sub> =25°C)

Part Number	MV8741	MV8742	Condition
Luminous Intensity (mcd)			I <sub>F</sub> = 20 mA
Minimum	250	400	
Typical	370	600	
Forward Voltage (V)			I <sub>F</sub> = 20 mA
Maximum	2.8	2.8	
Typical	2.1	2.1	
Wavelength (nm)			I <sub>F</sub> = 20 mA
Peak		620	
Dominant		615	
Spectral Line Half Width (nm)		20	I <sub>F</sub> = 20 mA
Viewing Angle (°)		20	I <sub>F</sub> = 20 mA

## TYPICAL PERFORMANCE CURVES



**Fig. 1 Forward Current vs. Forward Voltage**

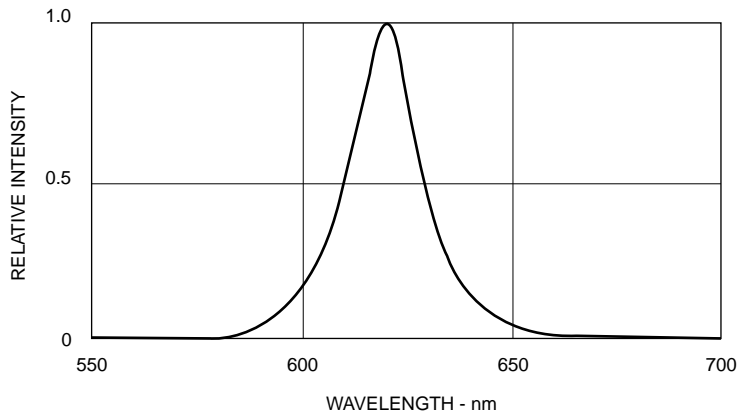


**Fig. 2 Relative Luminous Intensity vs. DC Forward Current**

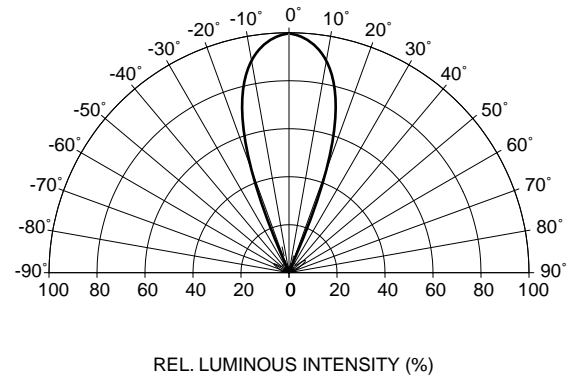
# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

**SUPER ORANGE**  
**MV8741 MV8742**

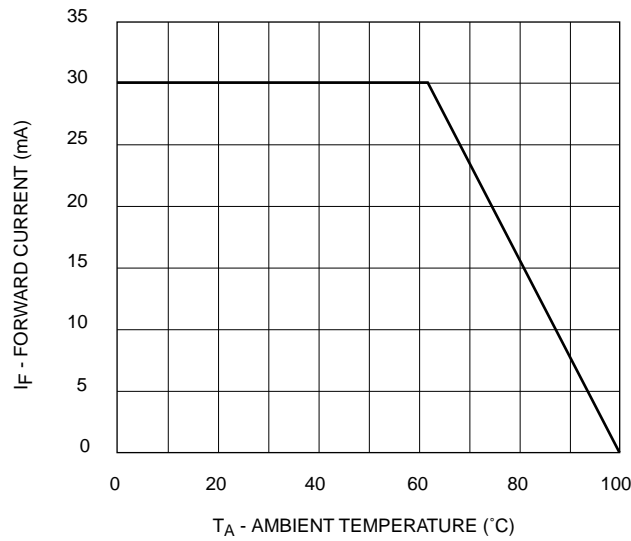
**MV874X**



**Fig. 3 Relative Intensity vs Peak Wavelength**



**Fig. 4 Radiation Diagram**



**Fig. 5 Current Derating Curve**

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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.