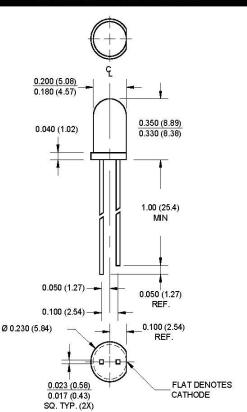


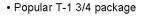
# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

## PACKAGE DIMENSIONS



SUPER ORANGE MV8731 MV8732 MV8733 MV873X

#### **FEATURES**



- Super high brightness suitable for outdoor applications
- · Solid state reliability
- · Water clear optics
- · Standard 100 mil. lead spacing



### 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.

#### **DESCRIPTION**

This T-1 3/4 super bright LED has a moderate viewing angle of  $30^\circ$  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.

Parameter	Symbol	Rating	Unit
Operating Temperature	T <sub>OPR</sub>	-40 to +100	°C
Storage Temperature	T <sub>STG</sub>	-40 to +100	°C
Lead Soldering Time	T <sub>SOL</sub>	260 for 5 sec	°C
Continuous Forward Current	l <sub>F</sub>	40	mA
Peak Forward Current	15	160	mA
(f = 1.0 KHz, Duty Factor = 1/10)	F	100	
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	100	mW



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Part Number	MV8731	MV8732	MV8733	Condition
Luminous Intensity (mcd)				$I_F = 20 \text{ mA}$
Minimum	400	630	1000	
Typical	600	940	1500	
Forward Voltage (V)				I <sub>F</sub> = 20 mA
Maximum	2.8	2.8	2.8	
Typical	2.1	2.1	2.1	
Peak 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

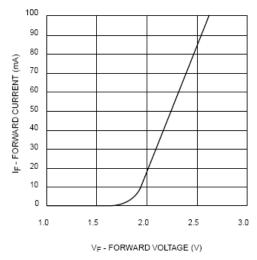


Fig. 1 Forward Current vs. Forward Voltage

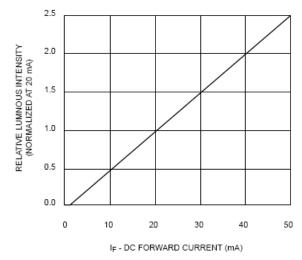


Fig. 2 Relative Luminous Intensity vs. DC Forward Current



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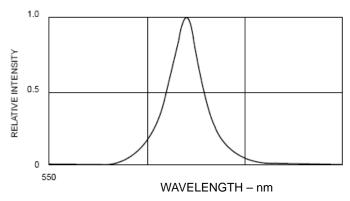
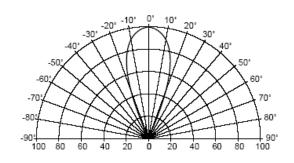


Fig. 3 Relative Intensity vs Peak Wavelength



EL. LUMINOUS INTENSITY (%) Fig. 4 Radiation Diagram

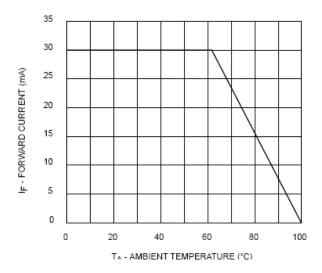


Fig. 5 Current Derating Curve



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