

# **PACKAGE DIMENSIONS** 0.200 (5.08) 0.180 (4.57) 0.350 (8.89) 0.040 (1.02) 0.330 (8.38) 1.00 (25.4) MIN 0.050 (1.27) -0.050 (1.27) RFF 0.100 (2.54) -0.100 (2.54) Ø 0.230 (5.84) FLAT DENOTES 0.023 (0.58) 0.017 (0.43) SQ. TYP. (2X) CATHODE

**SUPER ORANGE** MV873X MV8731 MV8732 MV8733

## **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



## 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° for concentrated light output. It is made with an AllnGaP LED that emits orange light at 620 nm. It is encapsulated in a water clear epoxy lens package.

ABSOLUTE MAXIMUM RATINGS (T <sub>A</sub> = 25°C unless otherwise specified)						
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	I <sub>F</sub>	40	mA			
Peak Forward Current	1	160	mA			
(f = 1.0 KHz, Duty Factor = 1/10)	l le	160				
Reverse Voltage	$V_R$	5	V			
Power Dissipation	P <sub>D</sub>	100	mW			



SUPER ORANGE	MV873X
MV8731 MV8732	
MV8733	

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)						
Part Number	MV8731	MV8732	MV8733	Condition		
Luminous Intensity (mcd)				$I_F = 20mA$		
Minimum	400	630	1000			
Typical	600	940	1500			
Forward Voltage (V)				$I_F = 20mA$		
Maximum	2.8	2.8	2.8			
Typical	2.1	2.1	2.1			
Wavelength (nm)				$I_F = 20mA$		
Peak		620				
Dominant		615				
Spectral Line Half Width (nm)		20		$I_F = 20mA$		
Viewing Angle (°)		20		$I_F = 20mA$		

## **TYPICAL PERFORMANCE CURVES**

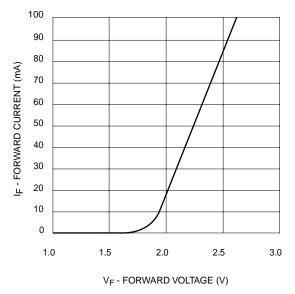


Fig. 1 Forward Current vs. Forward Voltage

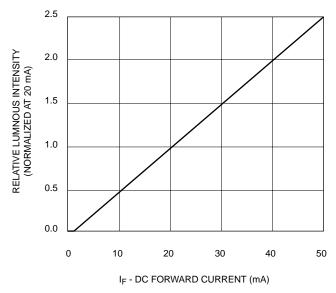


Fig. 2 Relative Luminous Intensity vs. DC Forward Current



SUPER ORANGE MV8731 MV8732 MV8733 **MV873X** 

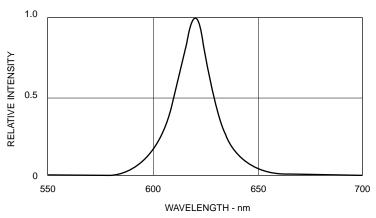
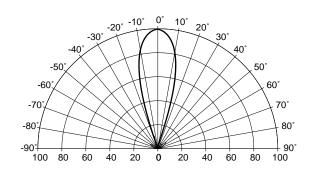


Fig. 3 Relative Intensity vs Peak Wavelength



REL. LUMINOUS INTENSITY (%)

Fig. 4 Radiation Diagram

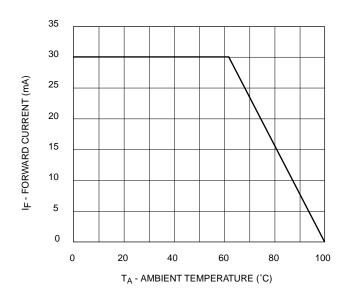


Fig. 5 Current Derating Curve



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