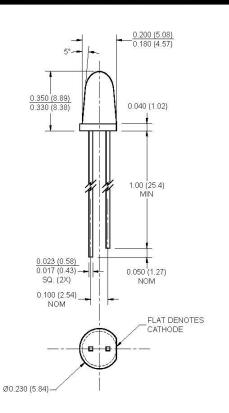


SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

PACKAGE DIMENSIONS



SUPER ORANGE MV8713 MV8714 MV8715 MV8716

MV871X

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).
- 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 12° 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 °C
Operating Temperature	T _{OPR}	-40 to +100	
Storage Temperature	T _{STG}	-40 to +100	°C
Lead Soldering Time	T _{SOL}	260 for 5 sec	°C
Continuous Forward Current	J _F	40	mA
Peak Forward Current	L	160	mA
(f = 1.0 KHz, Duty Factor = 1/10)	ļ F	160	
Reverse Voltage	V _R	5	٧
Power Dissipation	P _D	100	mW



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SUPER ORANGE MV871X MV8713 MV8714 MV8715 MV8716

Part Number	MV8713	MV8714	MV8715	MV8716	Condition
Luminous Intensity (mcd)					$I_F = 20 \text{ mA}$
Minimum	630	1000	1600	2500	
Typical	940	1500	2400	3500	
Forward Voltage (V)					I _F = 20 mA
Maximum	2.8	2.8	2.8	2.8	
Typical	2.1	2.1	2.1	2.1	
Peak Wavelength (nm)					I _F = 20 mA
Peak	620	620	620	620	
Dominant	615	615	615	615	
Spectral Line Half Width (nm)	20	20	20	20	I _F = 20 mA
Viewing Angle (°)	12	12	12	12	I _F = 20 mA

TYPICAL PERFORMANCE CURVES

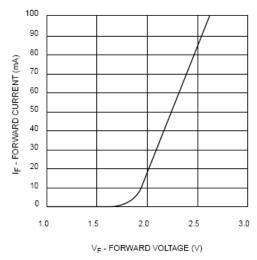


Fig. 1 Forward Current vs. Forward Voltage

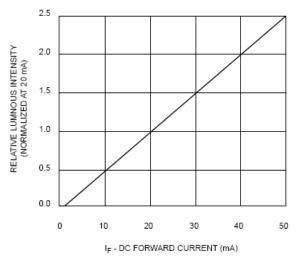
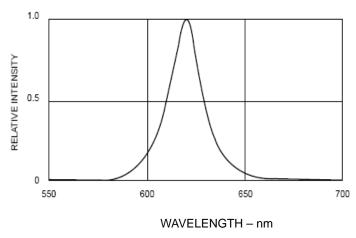


Fig. 2 Relative Luminous Intensity vs. DC Forward Current



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SUPER ORANGE MV8713 MV8714 MV8715 MV8716 **MV871X**



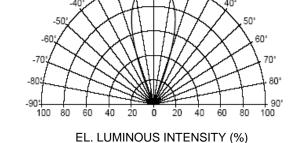


Fig. 3 Relative Intensity vs Peak Wavelength

Fig. 4 Radiation Diagram

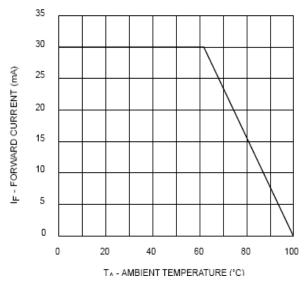


Fig. 5 Current Derating Curve



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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.