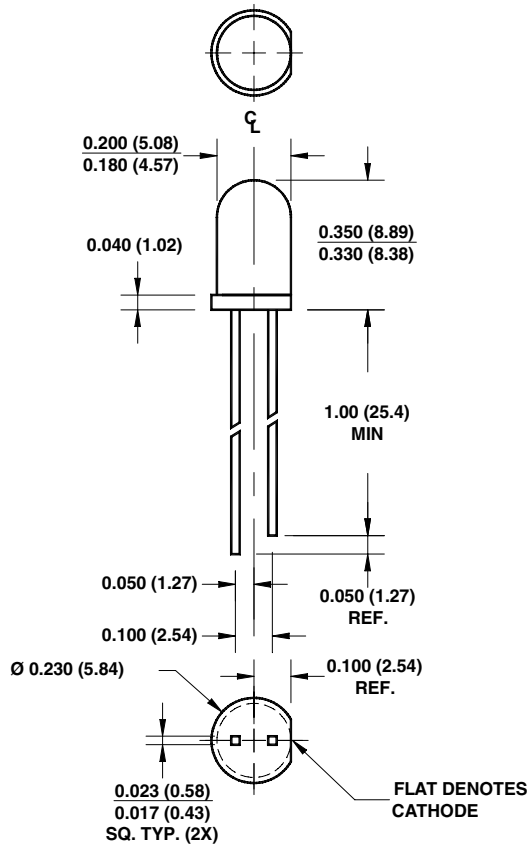


SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

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 BLUE

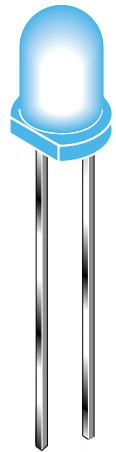
MV8U01

MV8U03

MV8U0X

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 20° for concentrated light output. It is made with an InGaN LED that emits blue light at 465 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}	-20 to +80	$^\circ\text{C}$
Storage Temperature	T_{STG}	-30 to +100	$^\circ\text{C}$
Lead Soldering Time	T_{SOL}	260 for 5 sec	$^\circ\text{C}$
Continuous Forward Current	I_F	30	mA
Peak Forward Current ($f = 1.0 \text{ KHz}$, Duty Factor = 1/10)	I_F	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	120	mW

SUPER BLUE
MV8U01
MV8U03

MV8U0X

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

Part Number	MV8U01	MV8U03	Condition
Luminous Intensity (mcd)			I_F = 20 mA
Minimum	250	550	
Typical	340	650	
Forward Voltage (V)			I_F = 20 mA
Maximum	4.2	4.2	
Typical	3.6	3.6	
Wavelength (nm)			I_F = 20 mA
Peak		465	
Dominant		470	
Spectral Line Half Width (nm)		30	I_F = 20 mA
Viewing Angle (°)		20	I_F = 20 mA

TYPICAL PERFORMANCE CURVES

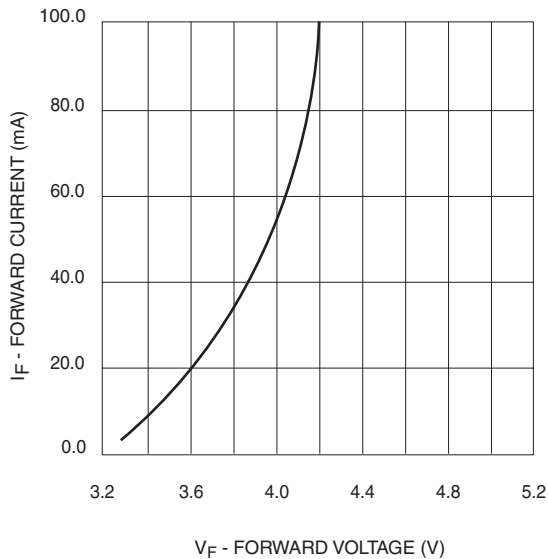


Fig. 1 Forward Current vs. Forward Voltage

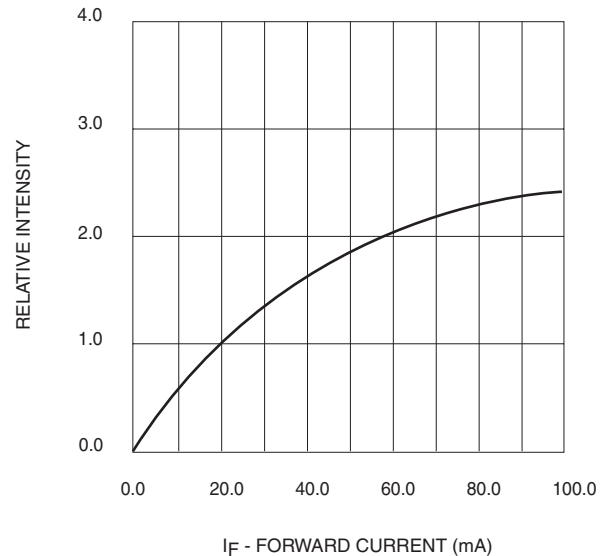


Fig. 2 Relative Luminous Intensity vs. Forward Current

SUPER BLUE	MV8U0X
MV8U01	
MV8U03	

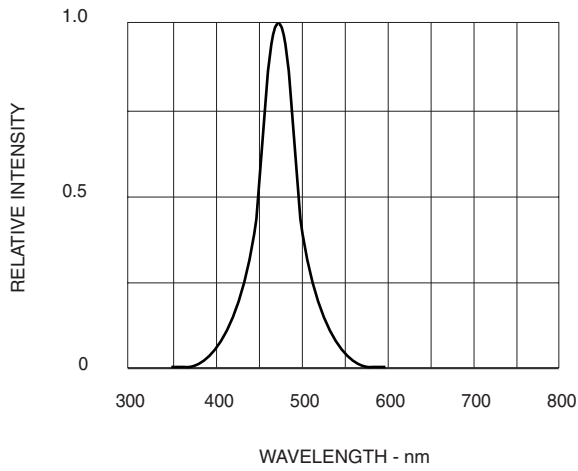
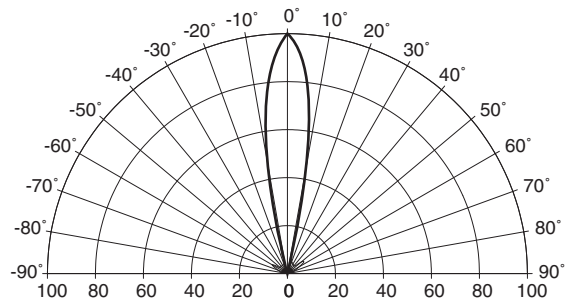


Fig. 3 Relative Luminous Intensity vs. Wavelength



REL. LUMINOUS INTENSITY (%)

Fig. 4 Radiation Diagram

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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.