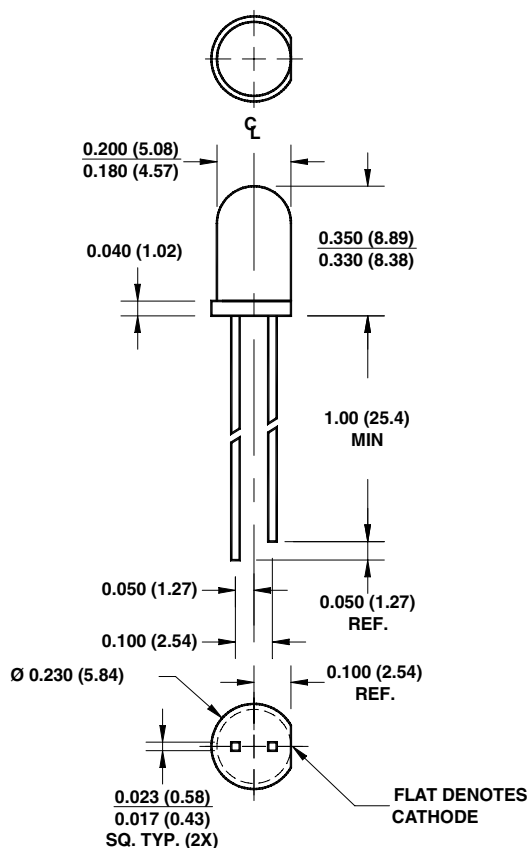


# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

## 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

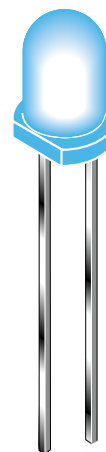
MV8U01

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

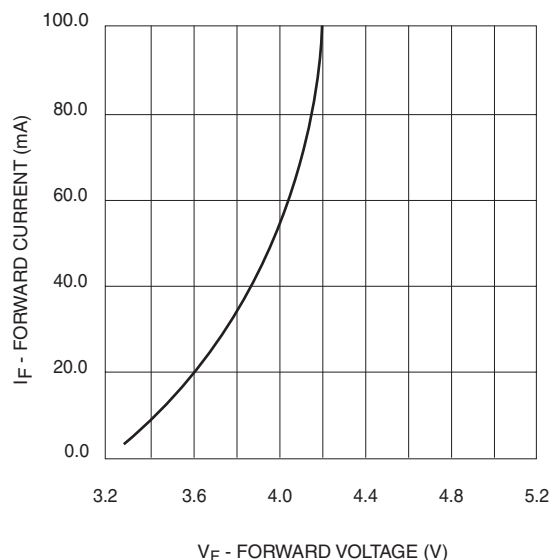
**SUPER BLUE**  
**MV8U01**  
**MV8U03**

**MV8U0X**

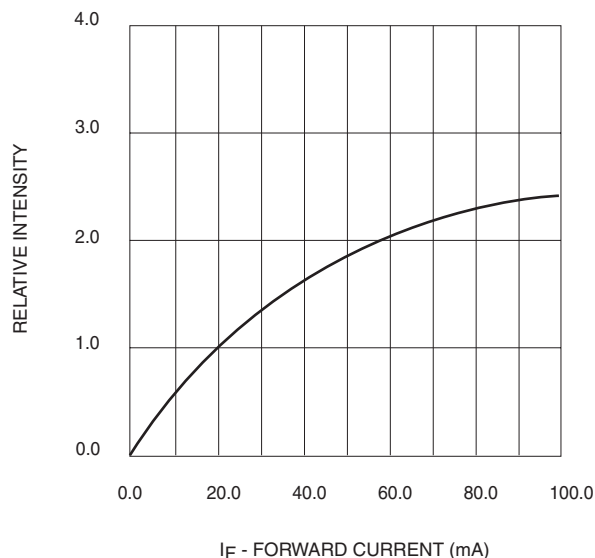
## ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>A</sub> = 25°C)

Part Number	MV8U01	MV8U03	Condition
Luminous Intensity (mcd)			I <sub>F</sub> = 20 mA
Minimum	250	550	
Typical	340	650	
Forward Voltage (V)			I <sub>F</sub> = 20 mA
Maximum	4.2	4.2	
Typical	3.6	3.6	
Wavelength (nm)			I <sub>F</sub> = 20 mA
Peak	465		
Dominant	470		
Spectral Line Half Width (nm)	30		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**

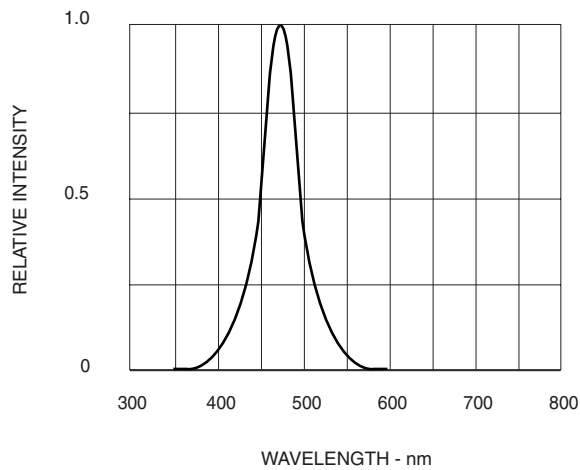


**Fig. 2 Relative Luminous Intensity vs. Forward Current**

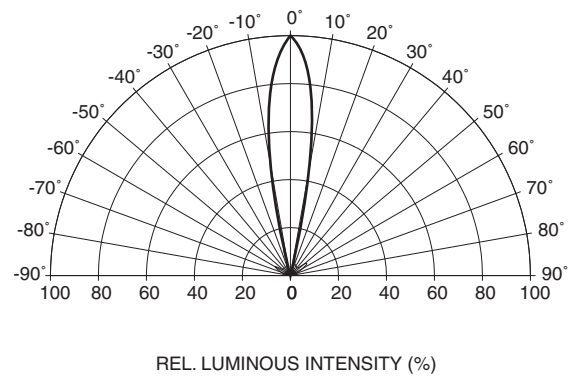
# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

**SUPER BLUE**  
**MV8U01**  
**MV8U03**

**MV8U0X**



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



**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.