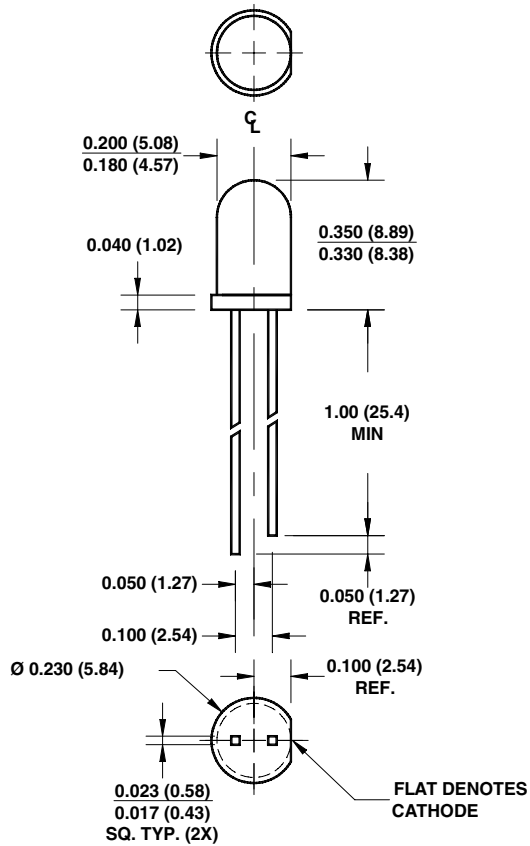


# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

## 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 GREEN**

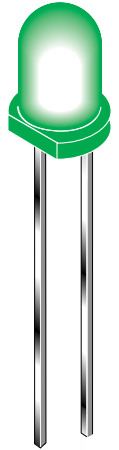
**MV8R01**

**MV8R03**

**MV8R0X**

## 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 green light at 520 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

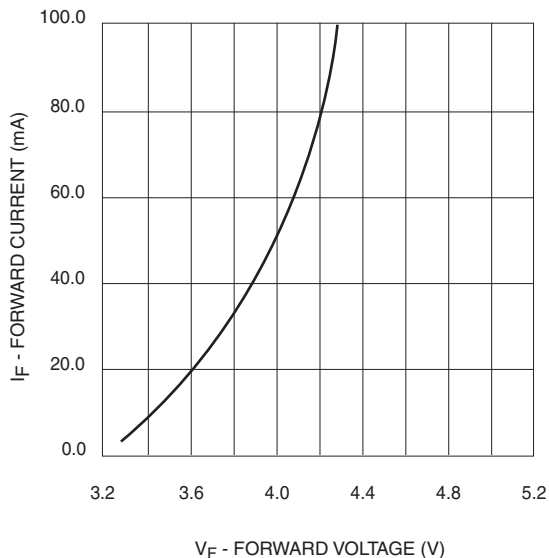
**SUPER GREEN**  
**MV8R01**  
**MV8R03**

**MV8R0X**

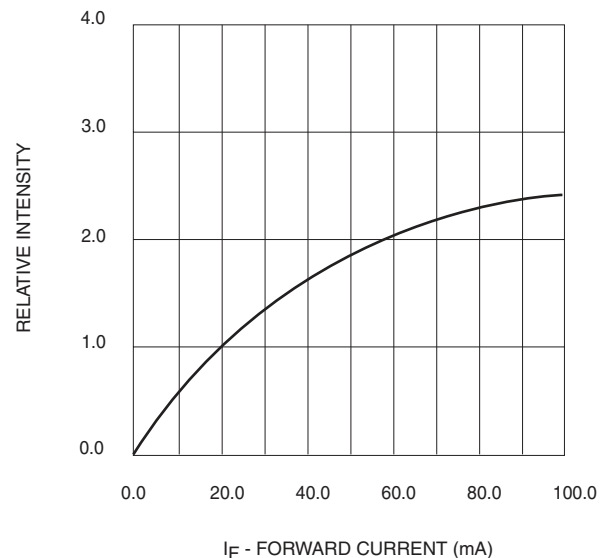
## ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>A</sub> = 25°C)

Part Number	MV8R01	MV8R03	Condition
<b>Luminous Intensity (mcd)</b>			<b>I<sub>F</sub> = 20 mA</b>
Minimum	1500	3000	
Typical	1900	3500	
<b>Forward Voltage (V)</b>			<b>I<sub>F</sub> = 20 mA</b>
Maximum	4.2	4.2	
Typical	3.6	3.6	
<b>Wavelength (nm)</b>			<b>I<sub>F</sub> = 20 mA</b>
Peak		520	
Dominant		525	
<b>Spectral Line Half Width (nm)</b>		40	<b>I<sub>F</sub> = 20 mA</b>
<b>Viewing Angle (°)</b>		20	<b>I<sub>F</sub> = 20 mA</b>

## TYPICAL PERFORMANCE CURVES

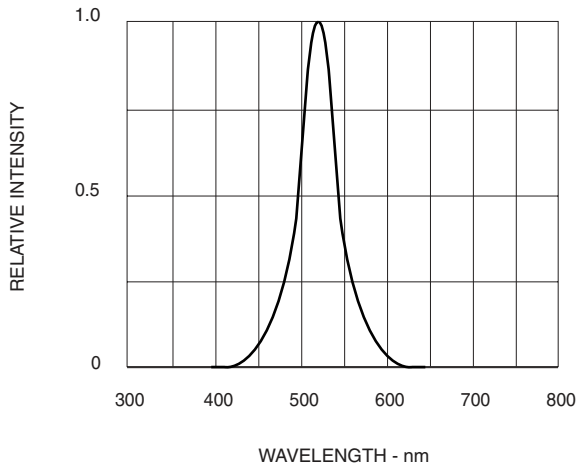


**Fig. 1 Forward Current vs. Forward Voltage**

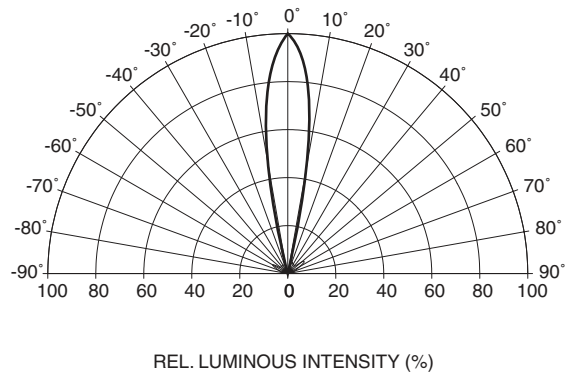


**Fig. 2 Relative Luminous Intensity vs. Forward Current**

<b>SUPER GREEN</b>	<b>MV8R0X</b>
<b>MV8R01</b>	
<b>MV8R03</b>	



**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.