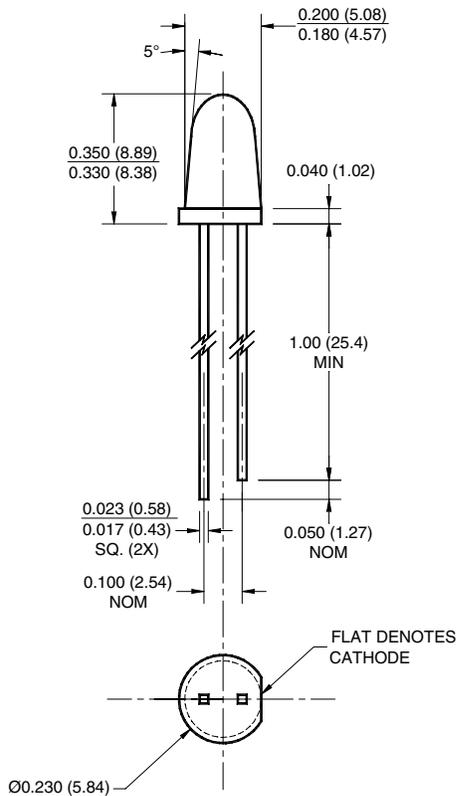


# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear

## 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**  
**MV8410 MV8411**  
**MV8412**

**MV841X**

## 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 narrow viewing angle of 12° for concentrated light output. The MV841X series is made with a GaP LED that emits green light at 565 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 +85	°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>	30	mA
Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10)	I <sub>F</sub>	160	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	85	mW

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

<b>SUPER GREEN</b>	<b>MV841X</b>
<b>MV8410 MV8411</b>	
<b>MV8412</b>	

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

Part Number	MV8410	MV8411	MV8412	Condition
Luminous Intensity (mcd)				I <sub>F</sub> = 20mA
Minimum	160	250	400	
Typical	240	370	600	
Forward Voltage (V)				I <sub>F</sub> = 20mA
Maximum	2.8	2.8	2.8	
Typical	2.1	2.1	2.1	
Peak Wavelength (nm)	565	565	565	I <sub>F</sub> = 20mA
Spectral Line Half Width (nm)	30	30	30	I <sub>F</sub> = 20mA
Viewing Angle (°)	12	12	12	I <sub>F</sub> = 20mA

## TYPICAL PERFORMANCE CURVES

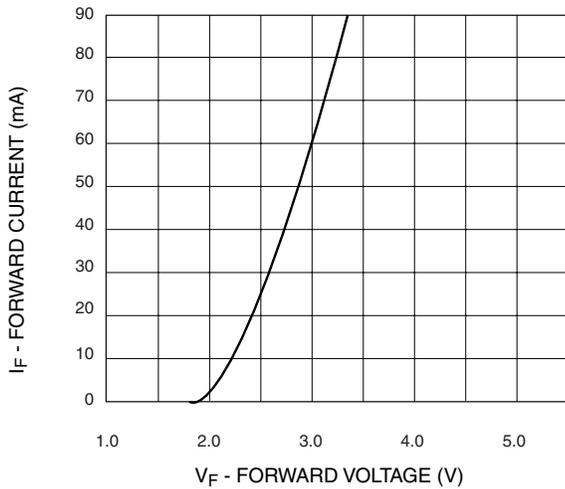


Fig. 1 Forward Current vs. Forward Voltage

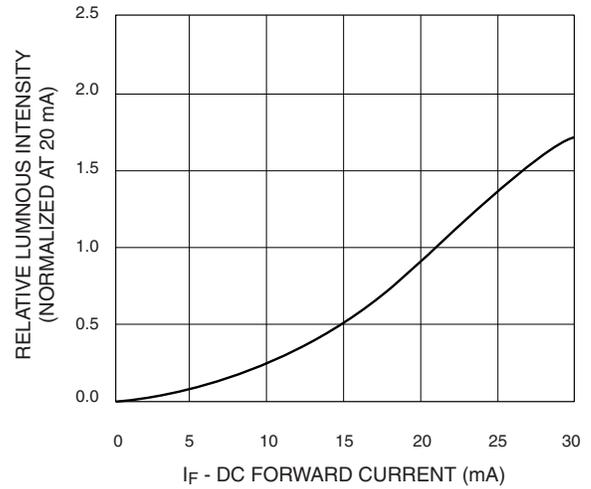
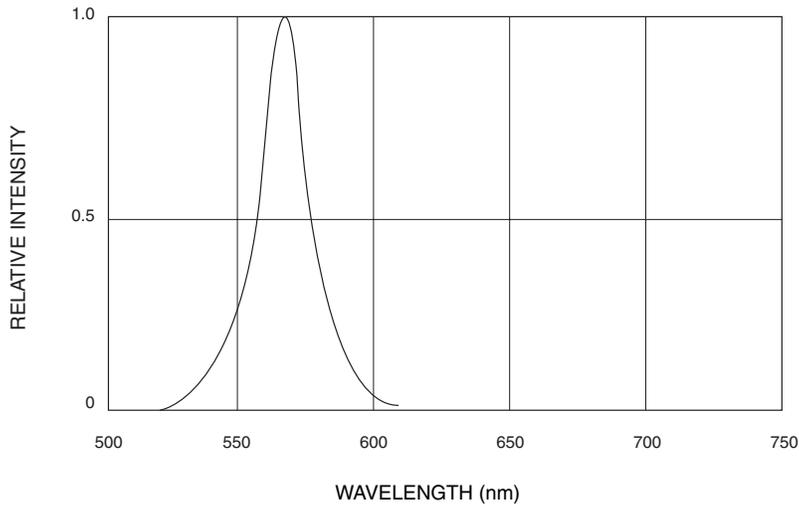


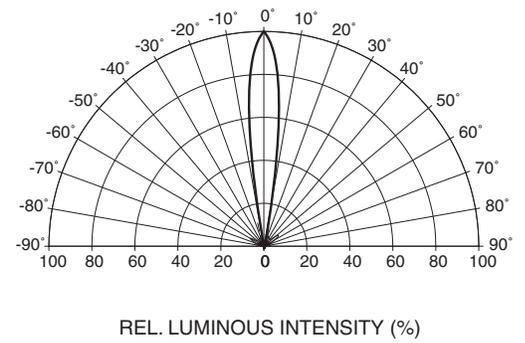
Fig. 2 Relative Luminous Intensity vs. DC Forward Current

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

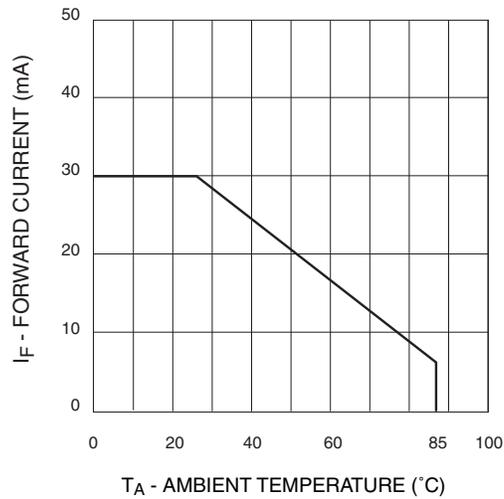
**SUPER GREEN** **MV841X**  
**MV8410 MV8411**  
**MV8412**



**Fig. 3 Relative Intensity vs. Peak 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.