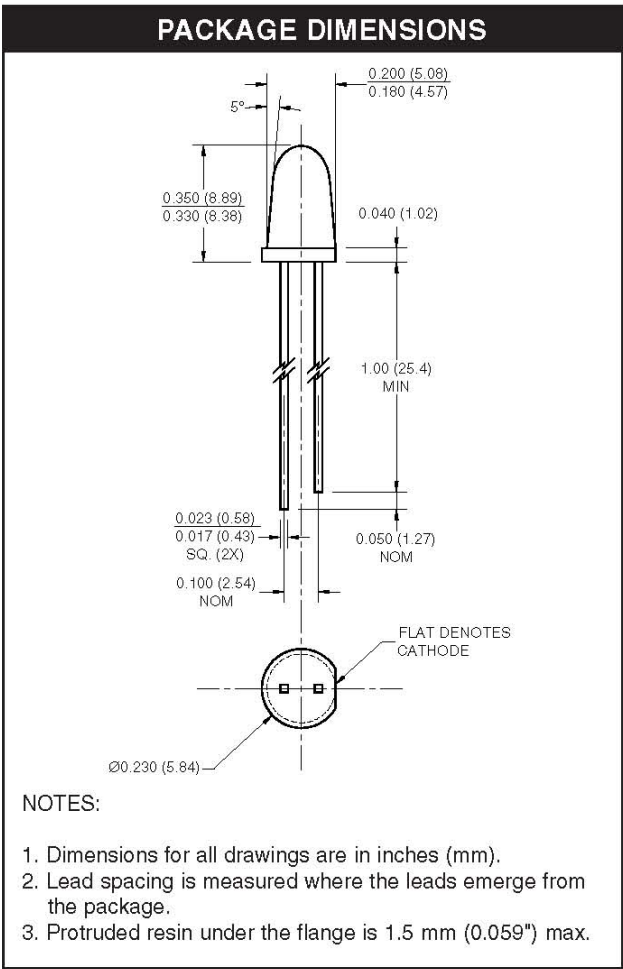




# SUPER BRIGHT T-1 3/4 (5 mm) LED LAMP - Water Clear



<b>SUPER RED</b>	<b>MV811X</b>
<b>MV8111 MV8112</b>	
<b>MV8113 MV8114</b>	

**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 MV811X series is made with an AlGaAs LED that emits red light at 660 nm. It is encapsulated in a water clear epoxy lens package.

<b>ABSOLUTE MAXIMUM RATINGS</b> (T <sub>A</sub> = 25°C unless otherwise specified)			
Parameter	Symbol	Rating	Unit
Operating Temperature	T <sub>OPR</sub>	-40 to +100	°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>	200	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	100	mW

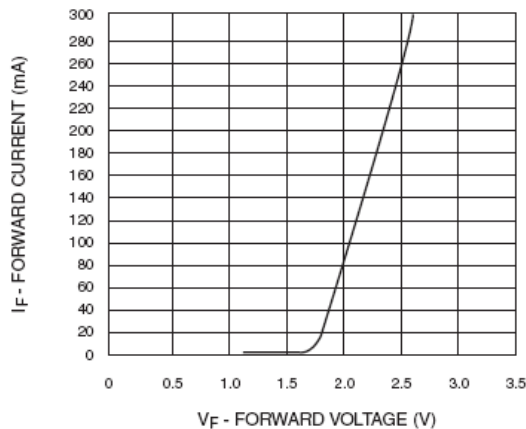


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LED LAMP -Water Clear**

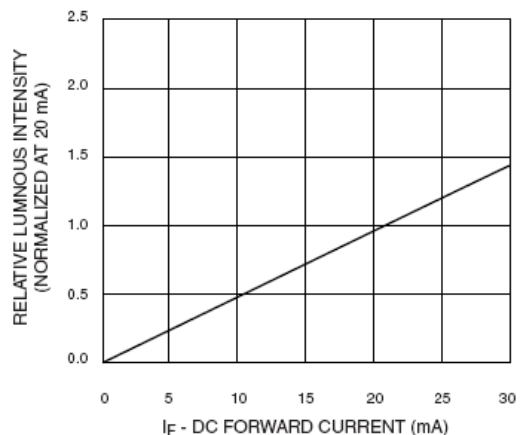
**SUPER RED MV811X  
MV8111 MV8112  
MV8113 MV8114**

<b>ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>A</sub>=25°C)</b>					
<b>Part Number</b>	<b>MV8111</b>	<b>MV8112</b>	<b>MV8113</b>	<b>MV8114</b>	<b>Condition</b>
Luminous Intensity (mcd)					I <sub>F</sub> = 20 mA
Minimum	250	630	1000	1600	
Typical	370	940	1500	2400	
Forward Voltage (V)					I <sub>F</sub> = 20 mA
Maximum	2.4	2.4	2.4	2.4	
Typical	1.7	1.7	1.7	1.7	
Peak Wavelength (nm)	660	660	660	660	I <sub>F</sub> = 20 mA
Spectral Line Half Width (nm)	20	20	20	20	I <sub>F</sub> = 20 mA
Viewing Angle (°)	15	15	15	15	I <sub>F</sub> = 20 mA

**TYPICAL PERFORMANCE CURVES**



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

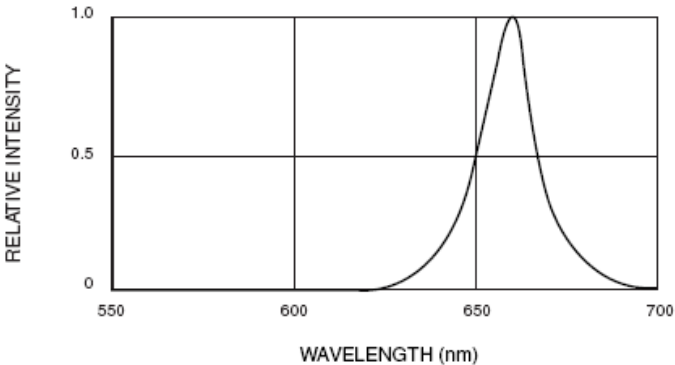


**Fig. 2 Relative Luminous Intensity vs. DC Forward Current**

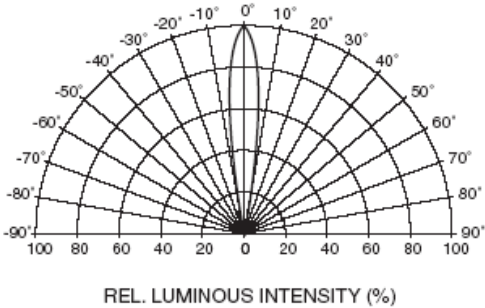


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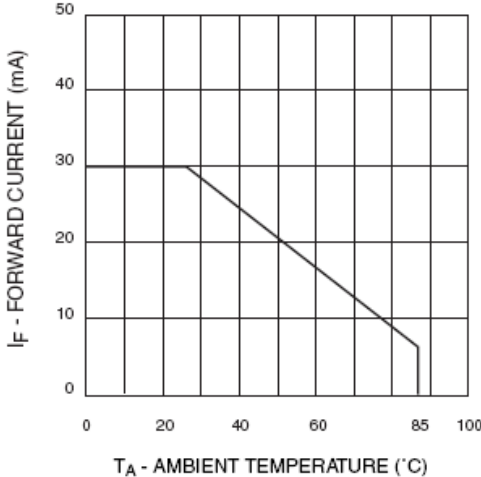
**SUPER RED MV811X  
MV8111 MV8112  
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**Fig. 3 Relative Intensity vs. Peak Wavelength**



**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.

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