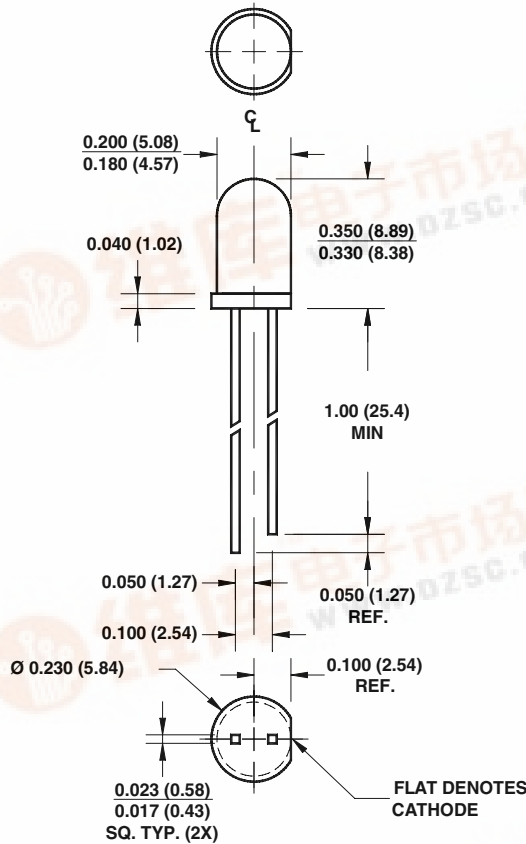


FAIRCHILD
SEMICONDUCTOR™

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

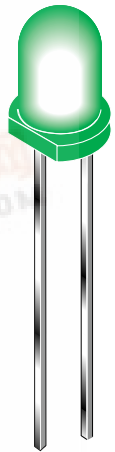
MV8R0X

MV8R01

MV8R03

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°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T _{OPR}	-20 to +80	°C
Storage Temperature	T _{STG}	-30 to +100	°C
Lead Soldering Time	T _{SOL}	260 for 5 sec	°C
Continuous Forward Current	I _F	30	mA
Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10)	I _F	100	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	120	mW



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SUPER GREEN
MV8R01
MV8R03

MV8R0X

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

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

TYPICAL PERFORMANCE CURVES

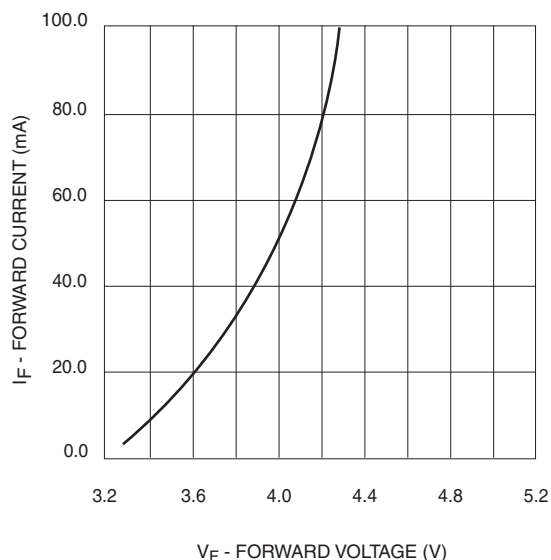


Fig. 1 Forward Current vs. Forward Voltage

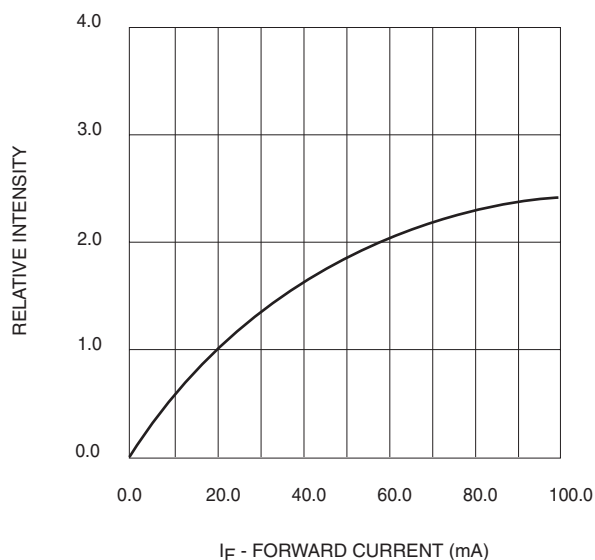


Fig. 2 Relative Luminous Intensity vs. Forward Current

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

SUPER GREEN
MV8R01
MV8R03

MV8R0X

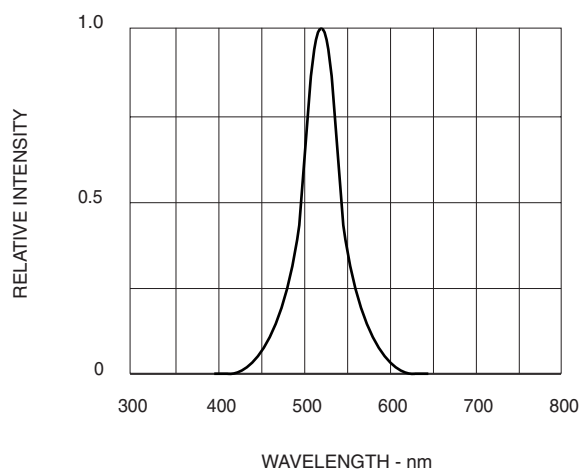


Fig. 3 Relative Luminous Intensity vs. Wavelength

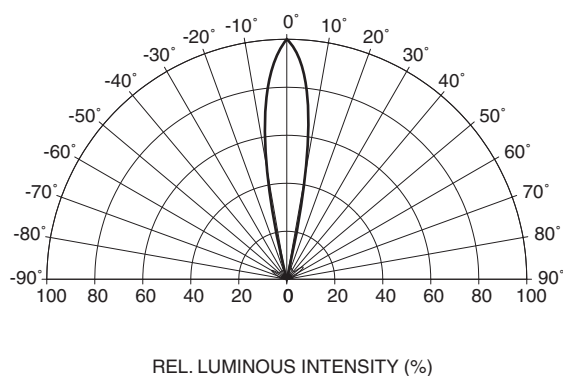


Fig. 4 Radiation Diagram



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

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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.