

## Excellent Integrated System Limited

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[Fairchild Semiconductor](#)

[MV8W00](#)

For any questions, you can email us directly:

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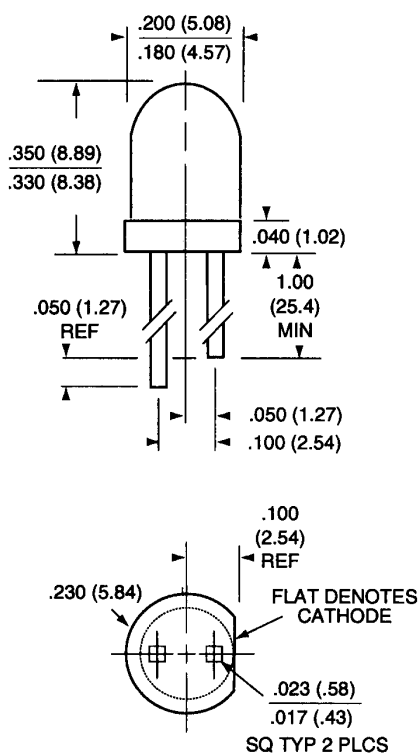
# FAIRCHILD

## SEMICONDUCTOR™

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

WHITE MV8W00

#### PACKAGE DIMENSIONS



#### DESCRIPTION

This T-1 3/4 white LED has a water clear lens and provides a viewing angle of 20°. It utilizes a GaN or InGaN blue LED chip with a phosphorous powder coating to produce the white light.

#### FEATURES

- Popular T-1 3/4 package
- Fluorescent light emission
- Standard 100 mil. lead spacing
- Emission color:  
X = 0.31  
Y = 0.32

- Note: 1) All dimensions are in inches (mm).  
 2) Lead spacing is measured where the leads emerge from the package.  
 3) Protruded resin under the flange is 0.059" (1.5mm) max.  
 4) All tolerances are ± 0.010" (0.25mm) unless otherwise noted.

#### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

DC Forward Current (I <sub>F</sub> )	30 mA
Peak Forward Current (I <sub>F</sub> ) @ f = 100Hz, Duty factor = 1/10	100 mA
Power Dissipation (P <sub>d</sub> )	120 mW
Operating Temperature Range	-30°C to +80°C
Storage Temperature Range	-40°C to +100°C
Lead Soldering Time (1/16" from body)	3 secs @ 260°C

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**SUPER BRIGHT T-1 ¾ (5 mm)  
 LED LAMP – Water Clear**

**ELECTRO-OPTICAL CHARACTERISTICS** (T<sub>A</sub>=25°C unless otherwise specified)

Part Number:	MV8W00	Test Condition
<b>Luminous Intensity (mcd)</b> <i>Testing Condition @ 550nm</i>		I <sub>F</sub> = 20 mA
<b>Minimum</b>	1300	
<b>Typical</b>	2500	
<b>Forward Voltage (V)</b>		I <sub>F</sub> = 20 mA
<b>Typical</b>	3.8	
<b>Maximum</b>	5.0	
<b>Peak Wavelength (nm)</b>	550	I <sub>F</sub> = 20 mA
<b>Chromaticity Coordinates</b>		I <sub>F</sub> = 10 mA
<b>Typical</b>	X = 0.31    Y = 0.32	
<b>Reverse Breakdown Voltage (V)</b>	5	I <sub>R</sub> = 10 μA
<b>Viewing Angle (Deg.)</b>	20	I <sub>F</sub> = 20 mA

**TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES** (T<sub>A</sub> = 25°C)

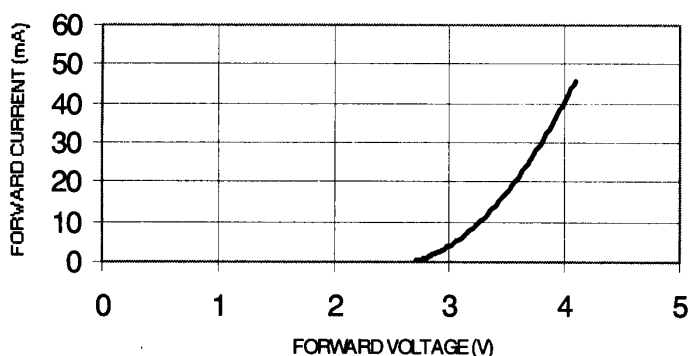


Fig 1. Forward Voltage vs. Forward Current

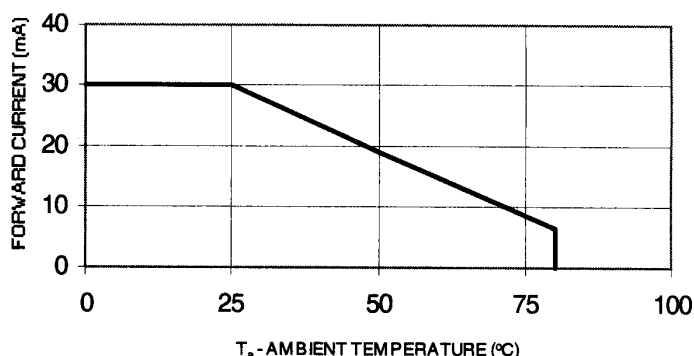


Fig 2. Forward Current vs. Ambient Temperature

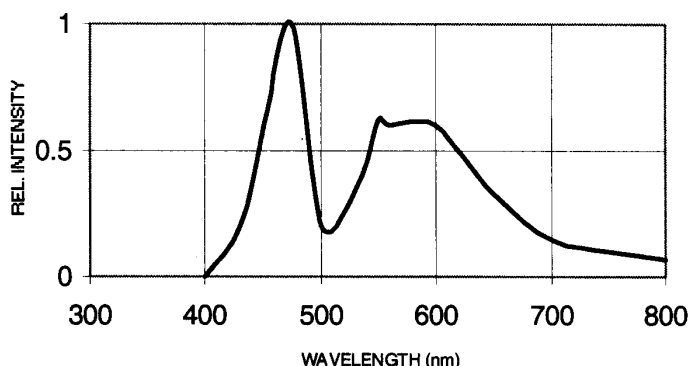


Fig 3. Rel. Intensity vs. Wavelength

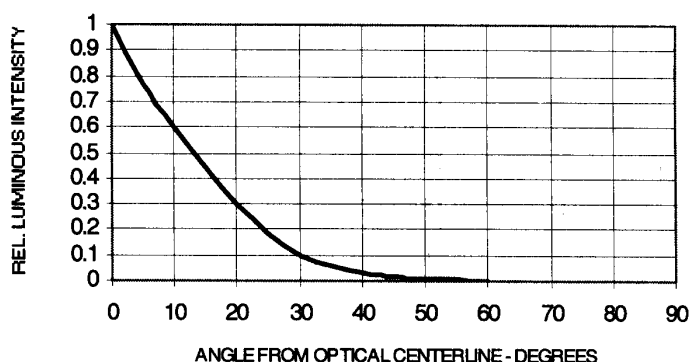


Fig 4. Rel. Intensity vs. Angular Displacement

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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.