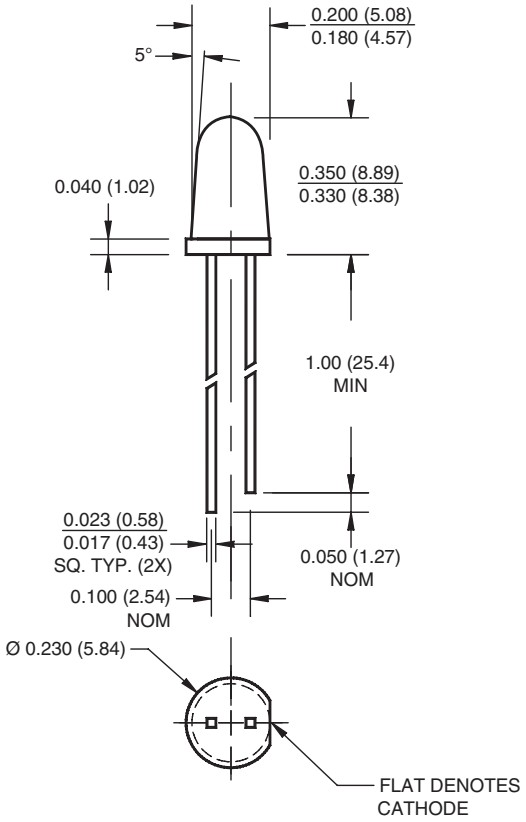
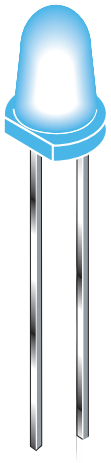
SUPER BRIGHT T-1 3/4 (5 mm)
LED LAMP - Water Clear

Blue — MV8B01

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 1.5mm (0.059”) max.

DESCRIPTION

This T-1 3/4 super bright LED has a moderate viewing angle of 20° for concentrated light output. It is made with GaN/SiC technology LED that emits blue light at 430 nm. It is encapsulated in a water clear epoxy lens package.

FEATURES

- Popular T-1 3/4 package
- Solid state reliability
- Water clear optics
- Standard 100 mil. lead spacing

FAIRCHILD
SEMICONDUCTOR®

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ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T_{OPR}	-40 to +85	°C
Storage Temperature	T_{STG}	-40 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_{FM}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	135	mW

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

Part Number	MV8B01A	Condition
Luminous Intensity (mcd)		
Minimum	300	I_F = 20 mA
Typical	450	
Forward Voltage (V)		
Typical	3.8	I_F = 20 mA
Maximum	4.5	
Wavelength (nm)		
Peak	430	I_F = 20 mA
Dominant	465	
Spectral Line Half Width (nm)	65	I_F = 20 mA
Viewing Angle (°)	20	I_F = 20 mA

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TYPICAL PERFORMANCE CURVES

Fig. 1 Forward Current vs. Forward Voltage

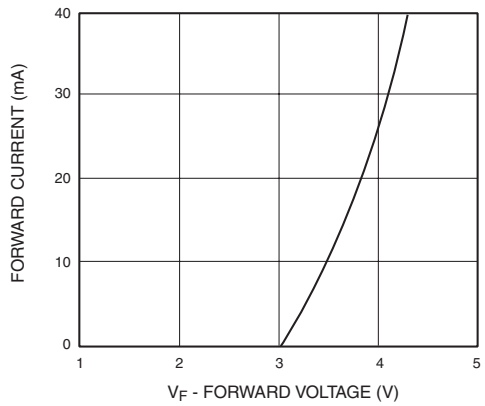


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

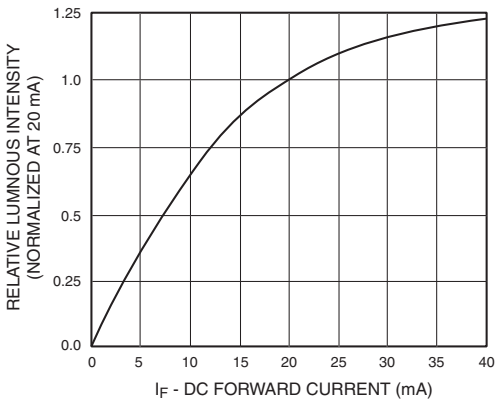


Fig. 3 Relative Intensity vs. Wavelength

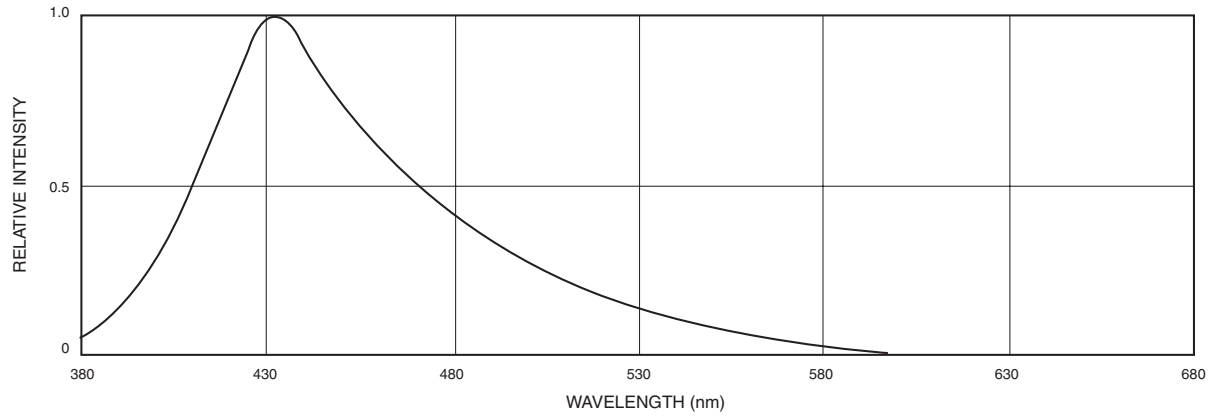


Fig. 4 Radiation Diagram

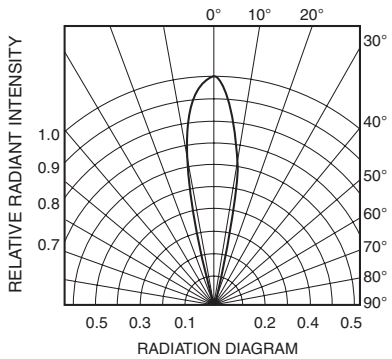
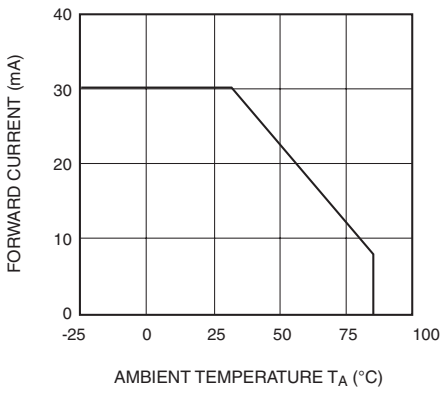


Fig. 5 Maximum Forward Current vs. Ambient Temperature



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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.