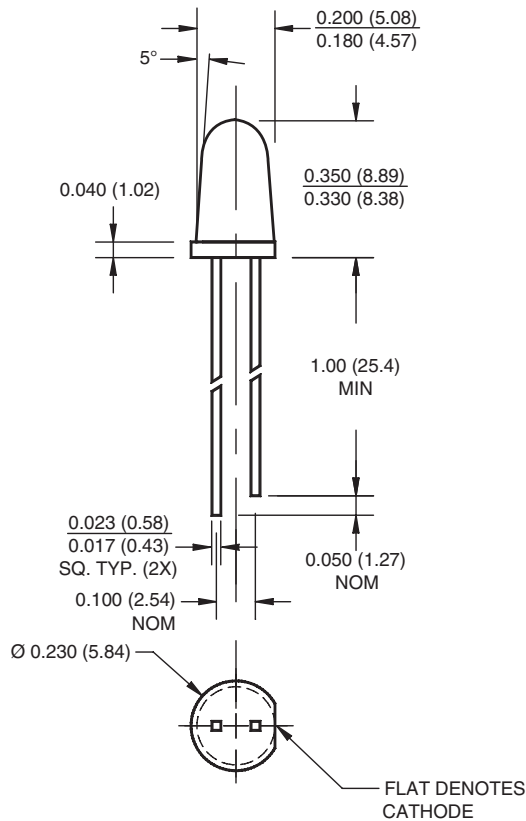


**Blue**

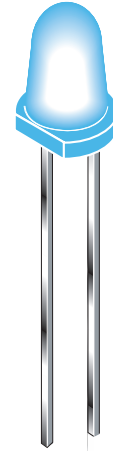
**MV8B01**

**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

**Blue**

**MV8B01**

**ABSOLUTE MAXIMUM RATINGS** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	$T_{OPR}$	-40 to +85	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-40 to +100	$^\circ\text{C}$
Lead Soldering Time	$T_{SOL}$	260 for 5 sec	$^\circ\text{C}$
Continuous Forward Current	$I_F$	30	mA
Peak Forward Current ( $f = 1.0 \text{ KHz}$ , Duty Factor = 1/10)	$I_{FM}$	100	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	135	mW

**ELECTRICAL / OPTICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$ )

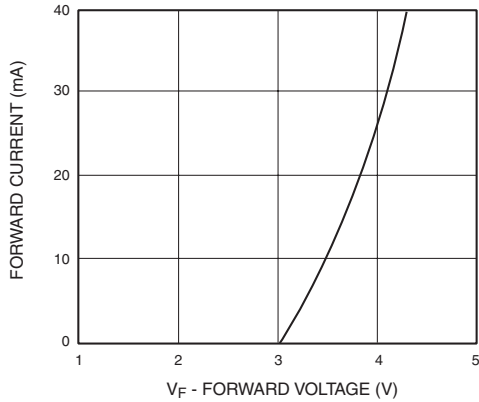
Part Number	MV8B01A	Condition
Luminous Intensity (mcd)		
Minimum	300	$I_F = 20 \text{ mA}$
Typical	450	
Forward Voltage (V)		
Typical	3.8	$I_F = 20 \text{ mA}$
Maximum	4.5	
Wavelength (nm)		
Peak	430	$I_F = 20 \text{ mA}$
Dominant	465	
Spectral Line Half Width (nm)	65	$I_F = 20 \text{ mA}$
Viewing Angle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

**Blue**

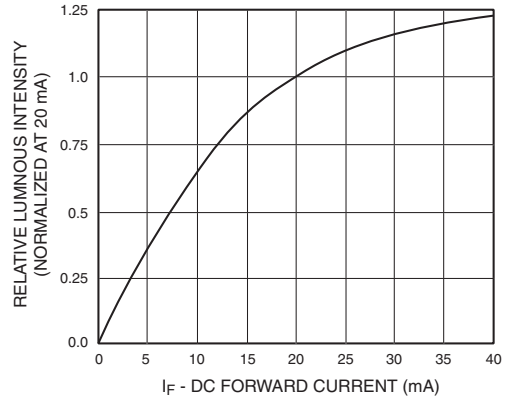
**MV8B01**

**TYPICAL PERFORMANCE CURVES**

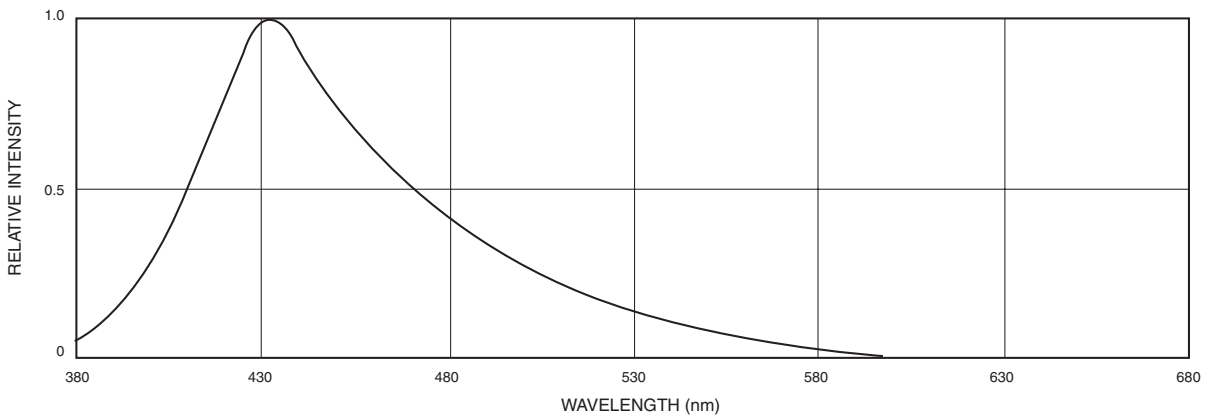
**Fig. 1 Forward Current vs. Forward Voltage**



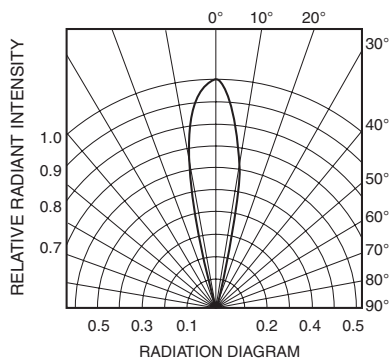
**Fig. 2 Relative Luminous Intensity vs. DC Forward Current**



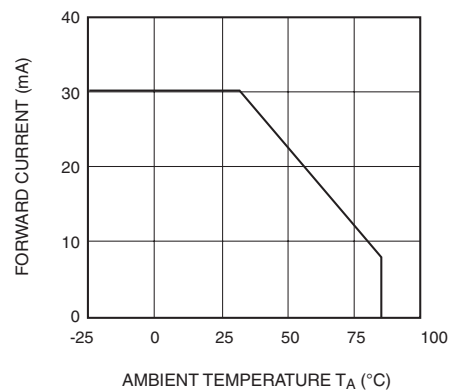
**Fig. 3 Relative Intensity vs. Wavelength**



**Fig. 4 Radiation Diagram**



**Fig. 5 Maximum Forward Current vs. Ambient Temperature**



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**Blue**

**MV8B01**

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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.