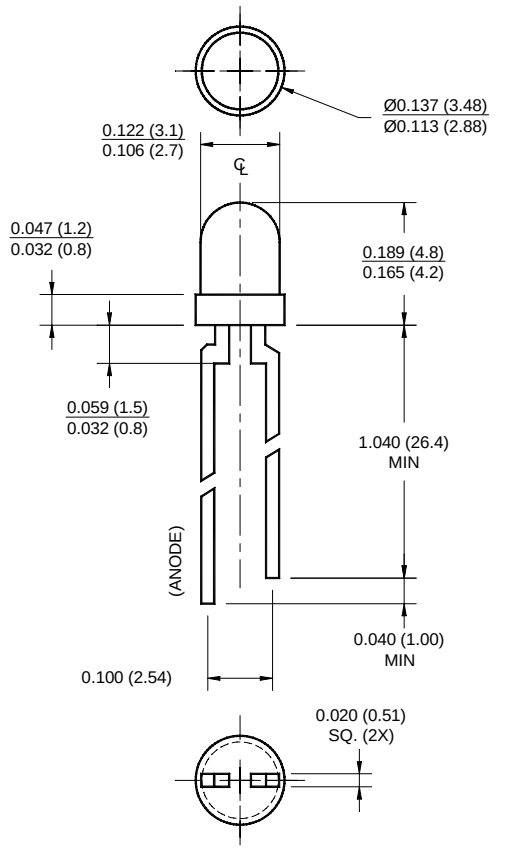
SUPER BRIGHT T-100 (3 mm)
LED LAMP

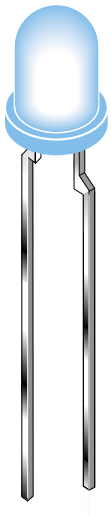
SUPER BLUE (WATER CLEAR) MV5B60
SUPER BLUE (BLUE DIFFUSED) MV5B640

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.



FEATURES

- Low drive current
- Solid state reliability
- Water clear or blue diffused optics
- Standard 100 mil. lead spacing

DESCRIPTION

These T-100 super bright blue LEDs have a moderate viewing angle of 35° or 45° for concentrated light output. The blue diode chip is constructed with GaN/SiC technology and emits a peak wavelength of 430 nm.

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

Parameter	Symbol	Rating	Unit
Operating Temperature	T_{OPR}	-40 to +100	°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_F	100	mA
Reverse Voltage (I_R = 10 µA)	V_R	5	V
Power Dissipation	P_D	120	mW

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ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

Part Number	MV5B60	MV5B640	Condition
Luminous Intensity (mcd)			I_F = 20 mA
Minimum	100	60	
Typical	150	100	
Forward Voltage (V)			I_F = 20 mA
Maximum	4.5	4.5	
Typical	3.8	3.8	
Peak Wavelength (nm)	430	430	I_F = 20 mA
Spectral Line Half Width (nm)	65	65	I_F = 20 mA
Viewing Angle (°)	35	45	I_F = 20 mA

TYPICAL PERFORMANCE CURVES

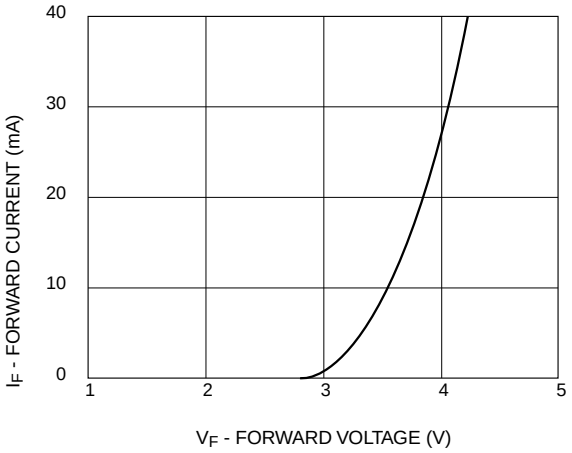

Fig.1 Forward Current vs. Forward Voltage

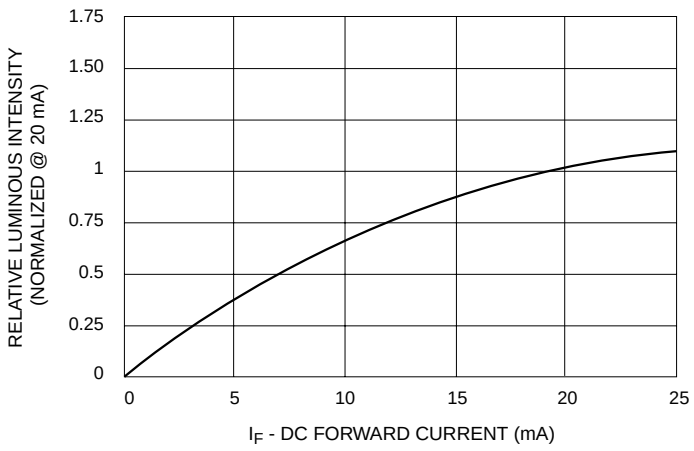

Fig.2 Relative Luminous Intensity vs. DC Forward Current

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TYPICAL PERFORMANCE CURVES

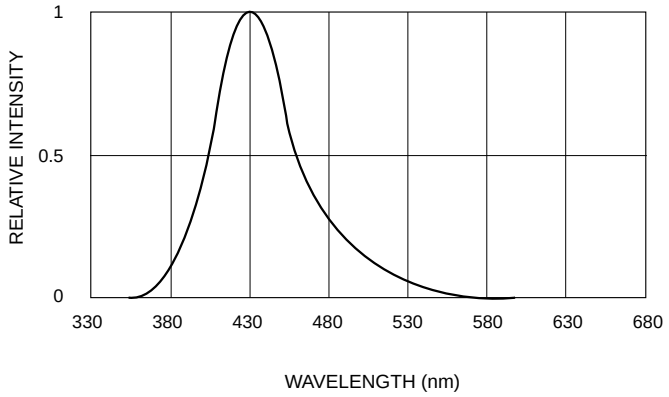

Fig.3 Relative Intensity vs. Peak Wavelength

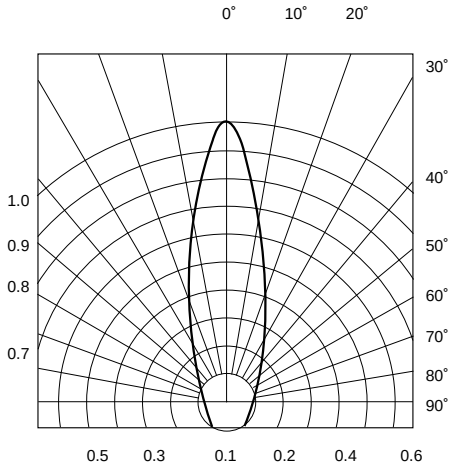

Fig. 4a Radiation Diagram for MV5B60

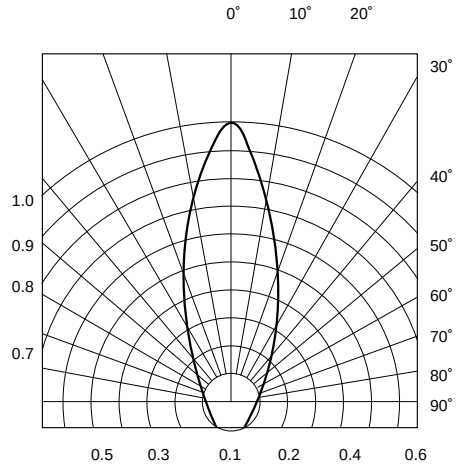

Fig. 4b Radiation Diagram for MV5B640

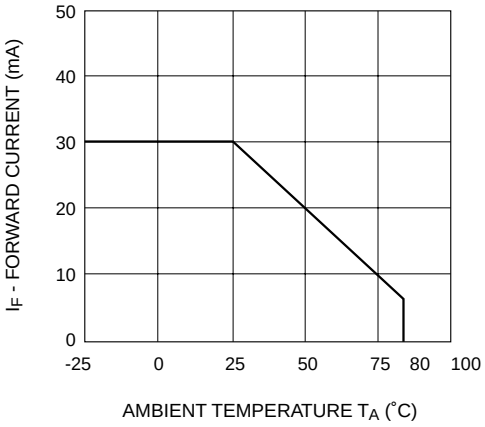

Fig.5 Current Derating Curve

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