

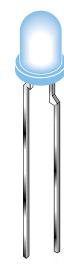
SUPER BRIGHT T-100 (3 mm) **LED LAMP**

PACKAGE DIMENSIONS Ø0.137 (3.48) 0.122 (3.1) 0.106 (2.7) Ø0.113 (2.88) 0.047 (1.2) 0.032 (0.8) 0.189 (4.8) 0.165 (4.2) 0.059 (1.5) 0.032 (0.8) 1.040 (26.4) 0.040 (1.00) 0.100 (2.54) 0.020 (0.51) SQ. (2X)

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

FEATURES

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



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.

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	I _F	100	mA	
(f = 1.0 KHz, Duty Factor = 1/10)				
Reverse Voltage (I _R = 10 μA)	V_R	5	V	
Power Dissipation	P _D	120	mW	

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SUPER BRIGHT T-100 (3 mm) LED LAMP

SUPER BLUE (WATER CLEAR) SUPER BLUE (BLUE DIFFUSED)

MV5B60 MV5B640

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

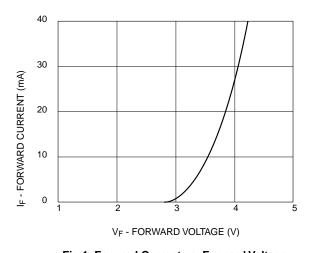


Fig.1 Forward Current vs. Forward Voltage

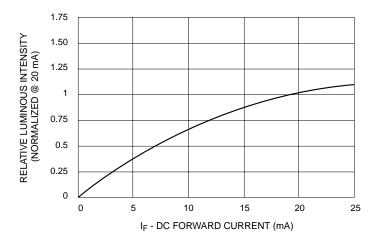


Fig.2 Relative Luminous Intensity vs. DC Forward Current

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SUPER BLUE (WATER CLEAR) SUPER BLUE (BLUE DIFFUSED)

MV5B60 MV5B640

TYPICAL PERFORMANCE CURVES

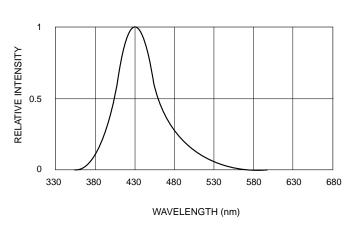


Fig.3 Relative Intensity vs. Peak Wavelength

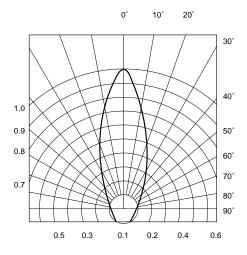


Fig. 4b Radiation Diagram for MV5B640

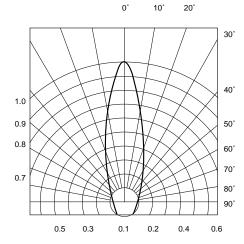


Fig. 4a Radiation Diagram for MV5B60

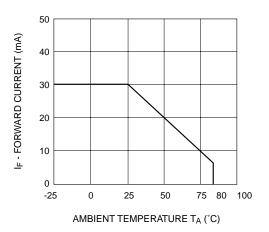


Fig.5 Current Derating Curve

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SUPER BRIGHT T-100 (3 mm)

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