



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

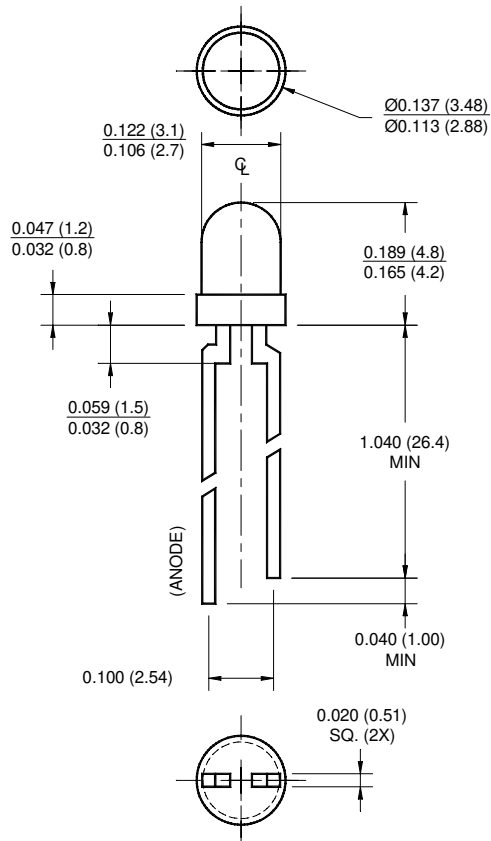
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PACKAGE DIMENSIONS



NOTES:

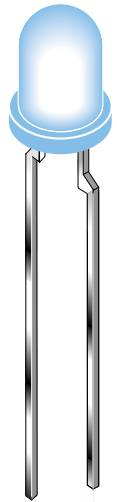
1. Dimensions for all drawings are in inches (mm).
2. Lead spacing is measured where the leads emerge from the package.
3. Protruded resin under the flange is 1.5 mm (0.059") max.

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



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

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

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

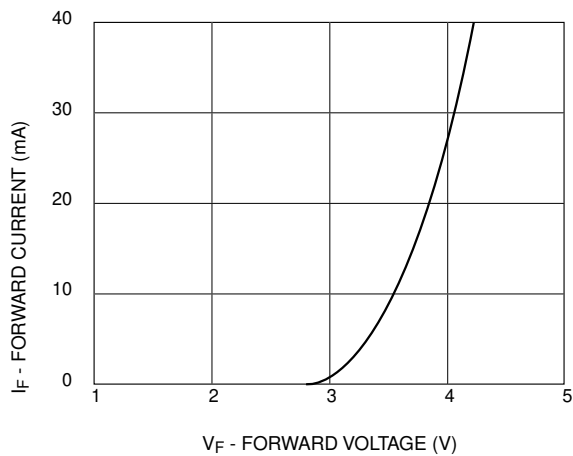


Fig.1 Forward Current vs. Forward Voltage

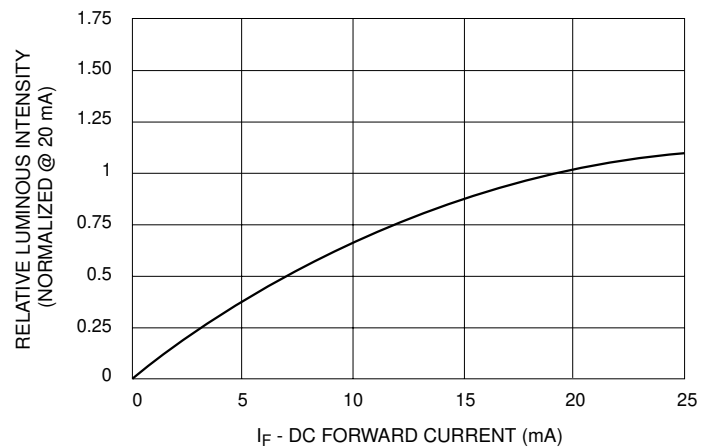


Fig.2 Relative Luminous Intensity vs. DC Forward Current

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

TYPICAL PERFORMANCE CURVES

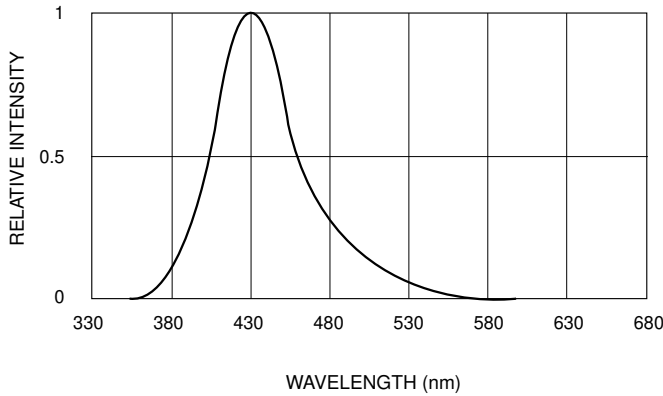


Fig. 3 Relative Intensity vs. Peak Wavelength

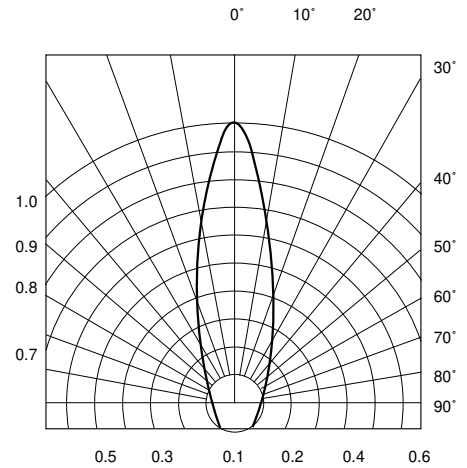


Fig. 4a Radiation Diagram for MV5B60

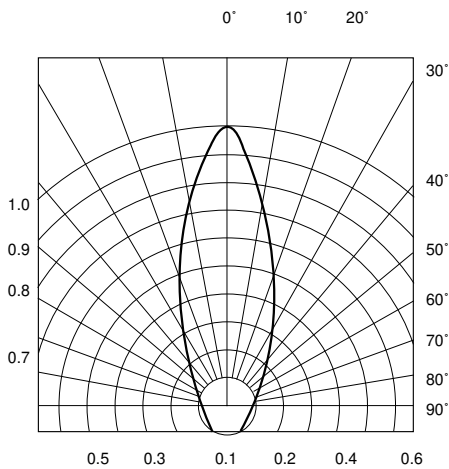


Fig. 4b Radiation Diagram for MV5B640

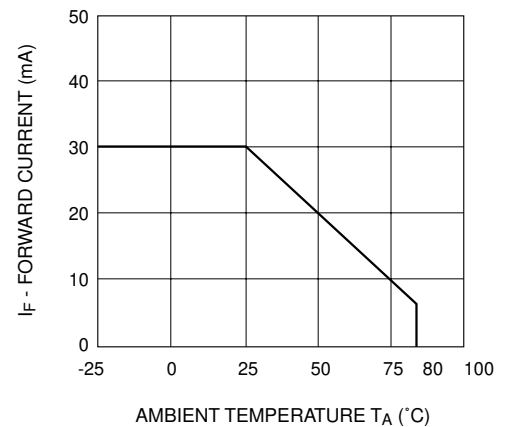


Fig. 5 Current Derating Curve

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