

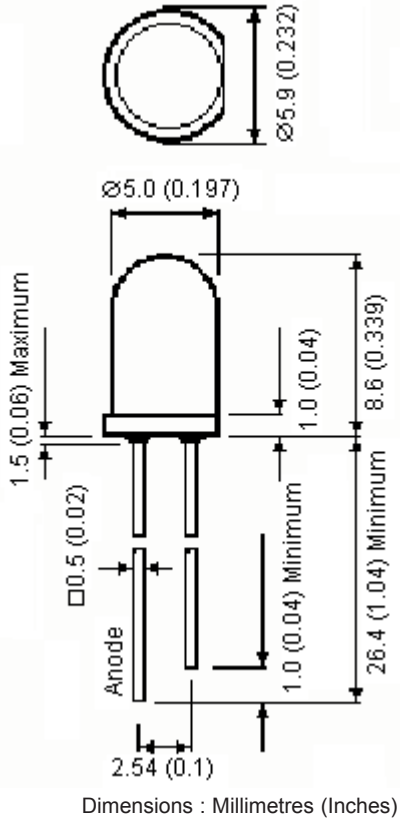


PART NO.

MCL053SBLC

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Veena	25/6/08	Suresh	25/6/08	G. C	10/7/08



Specifications:

Dice material : InGaN.
 Emitted color : Super blue.
 Lens color : Water clear.
 Peak wavelength : 470nm.
 Viewing angle : 16 degrees.
 Luminous intensity (IV) : 2500mcd.



Electrical/Optical Characteristics at T_a = 25°C

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	-	2500	-	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	16	-	degrees	
Peak Emission Wavelength	• λ _p	-	470	-	nm	-
Dominant Wavelength	• λ _d	-	472	-		-
Spectral Line Half-Width	Δλ	-	45	-		-
Forward Voltage	VF	1.7	3.4	4.0	V	IF = 20mA
Power Dissipation	Pd	-	-	85	-	-
Peak Forward Current (Duty 1/10 at 1KHz)	IF (Peak)	-	-	100	-	-
Recommended Operating Current	IF (Rec)	-	20	-	mA	-

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DRAWN BY:	DATE:
Veena	25/06/08
CHECKED BY:	DATE:
Suresh	25/06/08
APPROVED BY:	DATE:
G.Cook	10/07/08

DRAWING TITLE:

5.0mm Round LED Lamp - Super Blue

SIZE A	DWG NO. M10001261	ELECTRONIC FILE L053SBLC_DWG	REV A
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 1 OF 4



PART NO.

MCL053SBLC

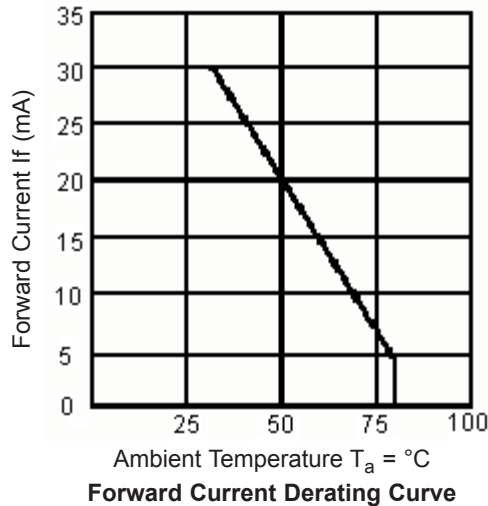
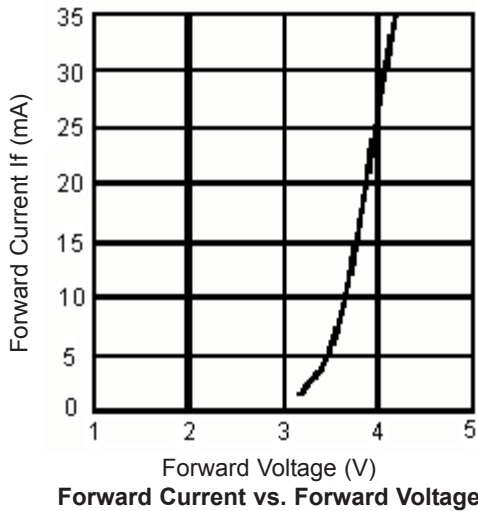
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Absolute Maximum Ratings (T_a = 25°C)

Reverse Voltage	5 Volt
Reverse Current	10µA (V _R = 5V)
Electrostatic Discharge (ESD)	200 Volt
Operating Temperature Range	-40°C to 85°C
Storage Temperature Range	-40°C to 100°C
Lead Soldering Temperature Range 1.6mm (1/16 inch) from body	260°C for 5 Seconds

Super Blue (InGaN λP = 470nm)



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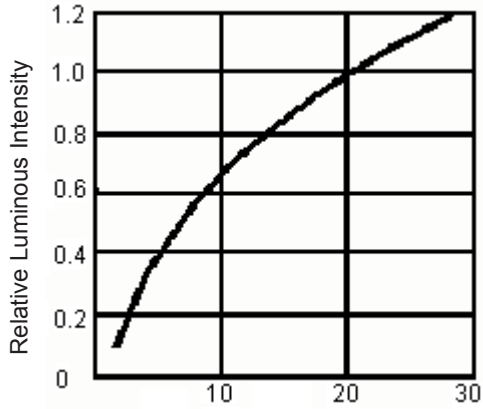
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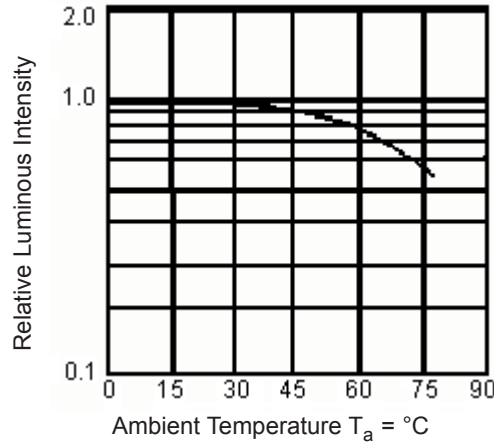
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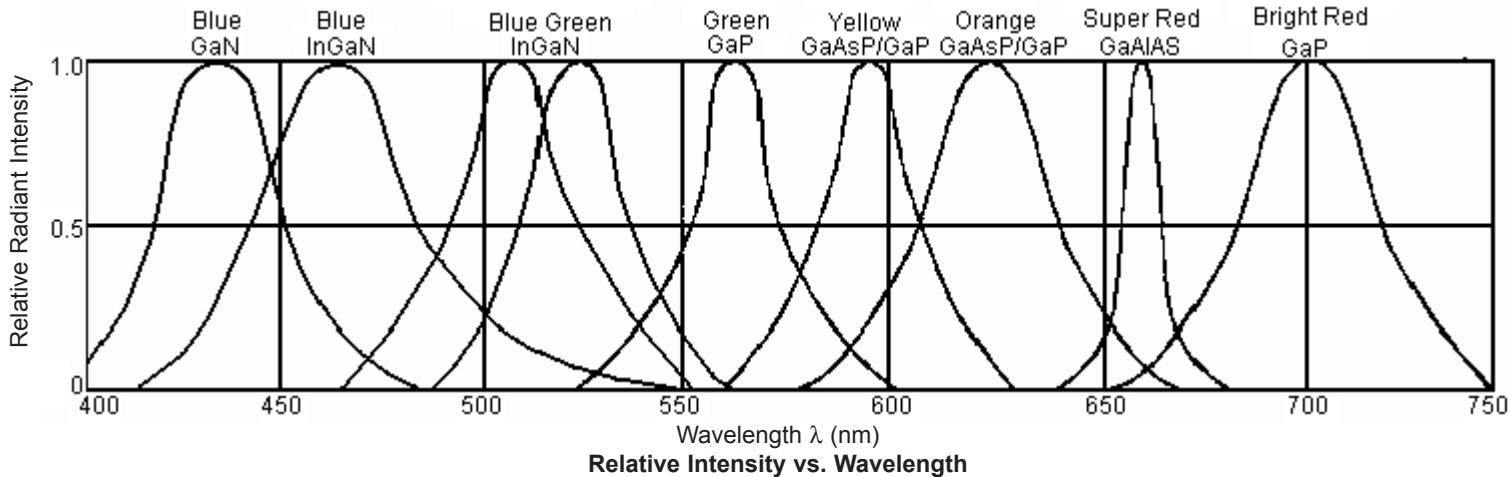
Super Blue (InGaN $\lambda_P = 470\text{nm}$)



Forward Current (mA) $T_a = 25^\circ\text{C}$
Luminous Intensity vs. Forward Current



Ambient Temperature $T_a = ^\circ\text{C}$
Luminous Intensity vs. Ambient Temperature



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A	M10001261	L053SBLC_DWG	A
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 3 OF 4



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MCL053SBLC

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Part Number Table

Description	Part Number
LED, 5mm, 16°, Super-Blue	MCL053SBLC

<http://www.farnell.com>

<http://www.newark.com>

<http://www.cpc.co.uk>

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SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 4 OF 4	