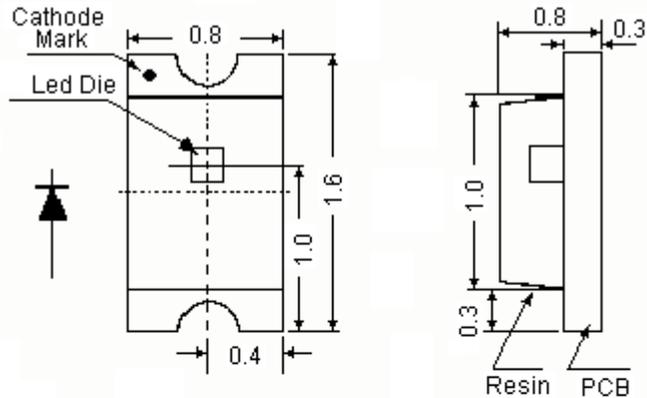


REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Veena	29/5/08	Suresh	29/5/08	G. C	13/6/08



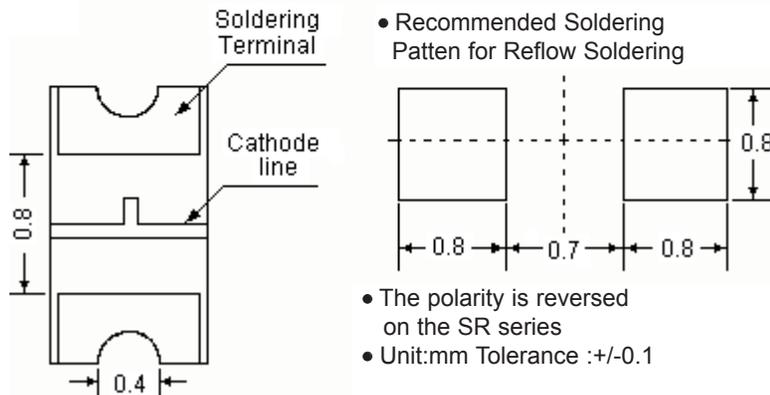
Specifications:

Dice material : InGaN.
 Emitted color : Super blue.
 Epoxy color : Water clear.
 Peak wavelength : 470nm.
 Viewing angle : 140 degrees.
 Luminous intensity (IV) : 50mcd.



Electrical/Optical Characteristics at T_a = 25°C

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	25	50	75	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	140	-	degrees	
Peak Emission Wavelength	• p	-	470	-	nm	-
Dominant Wavelength	• D	-	472	-		-
Spectral Line Half-Width	Δλ	-	45	-		-
Forward Voltage	VF	2.7	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	-



• Recommended Soldering Patten for Reflow Soldering

- The polarity is reversed on the SR series
- Unit:mm Tolerance : +/-0.1

Dimensions : Millimetres

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Suresh	29/05/08
APPROVED BY:	DATE:
G.Cook	13/06/08

DRAWING TITLE:

0603 SMD LED - Super Blue

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001185	L-S290SBLC_DWG	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 4	



PART NO.

MCL-S290SBLC

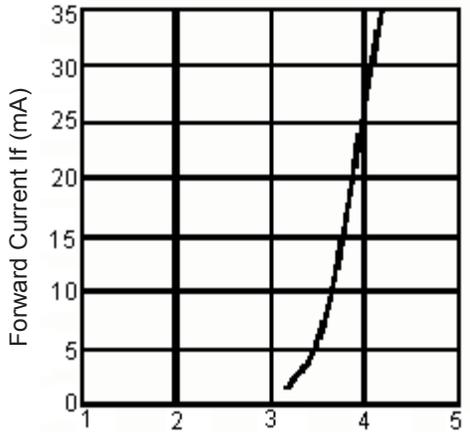
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-	A	RELEASED	Veena	29/5/08	Suresh	29/5/08	G. C	13/6/08

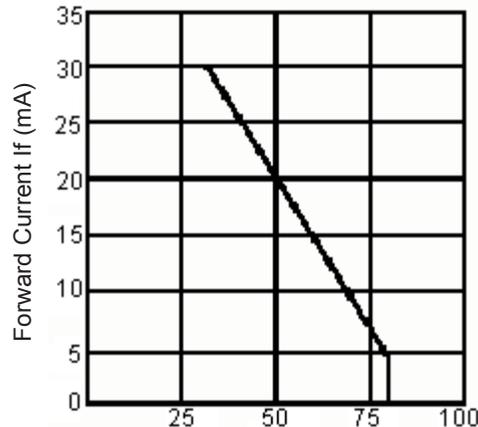
Absolute Maximum Ratings (T_a = 25°C)

Reverse Voltage	5 Volt
Reverse Current	10µA (V _R = 5V)
Electrostatic Discharge (ESD)	200V
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)



Forward Current vs. Forward Voltage



Forward Current Derating Curve

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APPROVED BY:	DATE:
G.Cook	13/06/08

DRAWING TITLE:

0603 SMD LED - Super Blue

SIZE A	DWG NO. M10001185	ELECTRONIC FILE L-S290SBLC_DWG	REV A
SCALE: NTS		U.O.M.: mm	SHEET: 2 OF 4



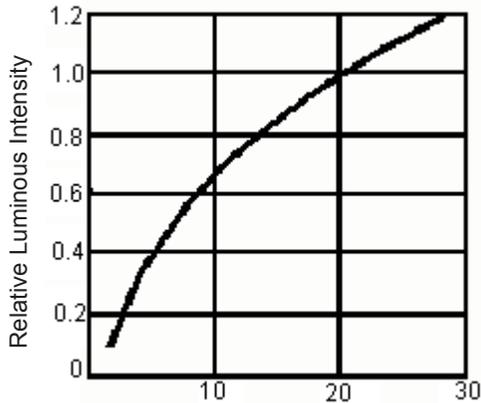
PART NO.

MCL-S290SBLC

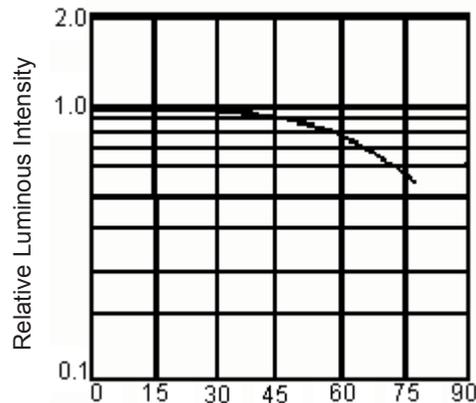
REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Veena	29/5/08	Suresh	29/5/08	G. C	13/6/08

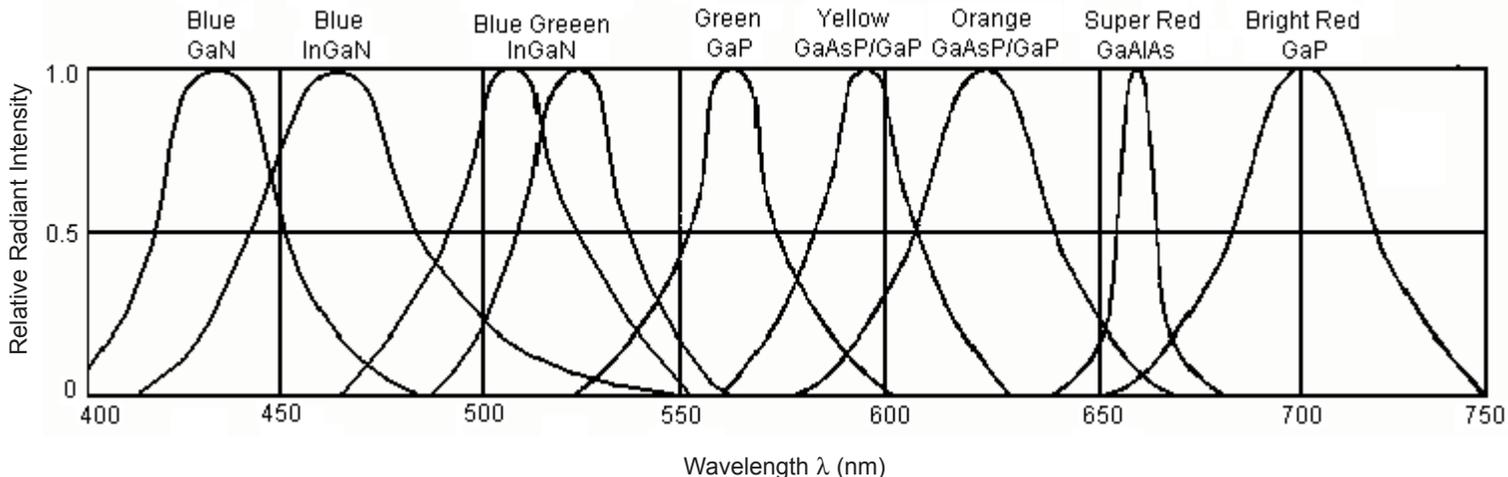
Super Blue (InGaN) $\lambda_P = 470\text{nm}$



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



Wavelength λ (nm)
Relative Intensity vs. Wavelength

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APPROVED BY:

G.Cook

DATE:

29/05/08

DATE:

29/05/08

DATE:

13/06/08

DRAWING TITLE:

0603 SMD LED - Super Blue

SIZE
A

DWG NO.

M10001185

ELECTRONIC FILE
L-S290SBLC_DWG

REV
A

SCALE: NTS

U.O.M.: mm

SHEET: 3 OF 4



PART NO.

MCL-S290SBLC

REVISIONS

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Part Number Table

Description	Part Number
LED, SMD, 0603, Super-Blue	MCL-S290SBLC

<http://www.farnell.com>

<http://www.newark.com>

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

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0603 SMD LED - Super Blue			
SIZE	DWG NO.	ELECTRONIC FILE	REV
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SCALE: NTS		U.O.M.: mm	SHEET: 4 OF 4