

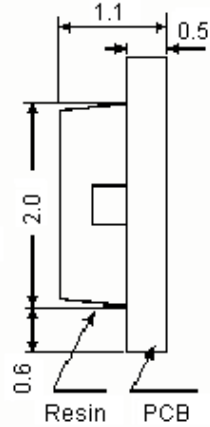
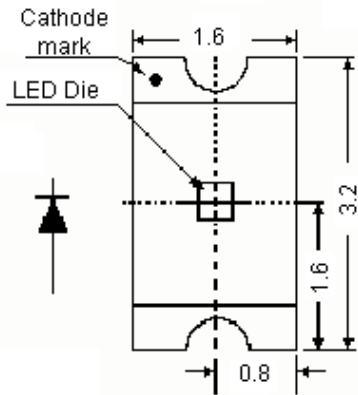


PART NO.

MCL-S250SBLC

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Geetha	28/5/08	Suresh	28/5/08	G. C	12/6/08



Specifications:

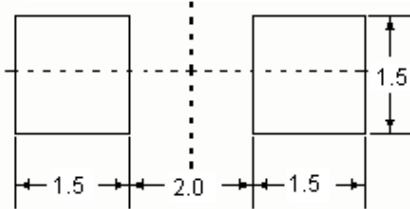
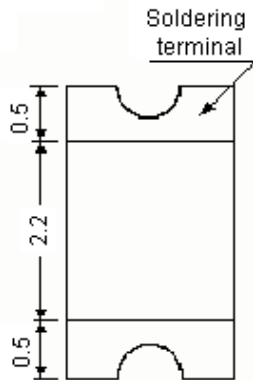
Dice material : InGaN.  
 Emitted color : Super blue.  
 Epoxy color : Water clear.  
 Peak wavelength : 470nm.  
 Viewing angle : 140 degrees.  
 Luminous intensity (IV) : 65mcd.



Electrical/Optical Characteristics at T<sub>a</sub> = 25°C

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	32	65	98	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	140	-	degrees	
Peak Emission Wavelength	λ <sub>p</sub>	-	470	-	nm	-
Dominant Wavelength	λ <sub>d</sub>	-	472	-		-
Spectral Line Half-Width	Δλ	-	45	-		-
Forward Voltage	V <sub>F</sub>	2.7	3.4	4.0	V	IF = 20mA
Power Dissipation	P <sub>d</sub>	-	-	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, UR series
- Unit:mm Tolerance : +/-0.1

Dimensions : Millimetres

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DRAWN BY:	DATE:
Geetha	28/05/08
CHECKED BY:	DATE:
Suresh	28/05/08
APPROVED BY:	DATE:
G.Cook	12/06/08

DRAWING TITLE:

1206 SMD LED - Super Blue

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001143	L-S250SBLC_DWG	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 4	



PART NO.

MCL-S250SBLC

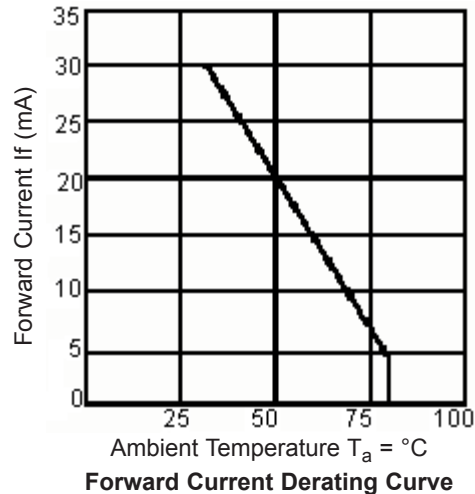
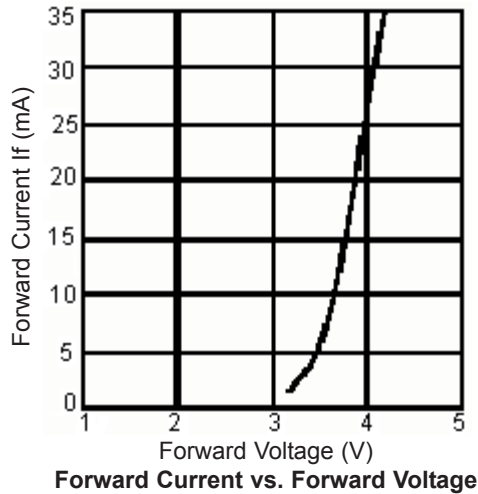
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**Absolute Maximum Ratings (T<sub>a</sub> = 25°C)**

Reverse Voltage	5 Volt
Reverse Current	10µA (V <sub>R</sub> = 5V)
Electrostatics 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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G.Cook	12/06/08

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**1206 SMD LED - Super Blue**

<b>SIZE</b> A	<b>DWG NO.</b> M10001143	<b>ELECTRONIC FILE</b> L-S250SBLC_DWG	<b>REV</b> A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 2 OF 4</b>



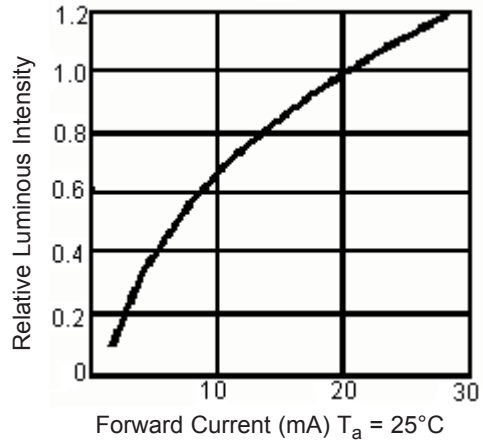
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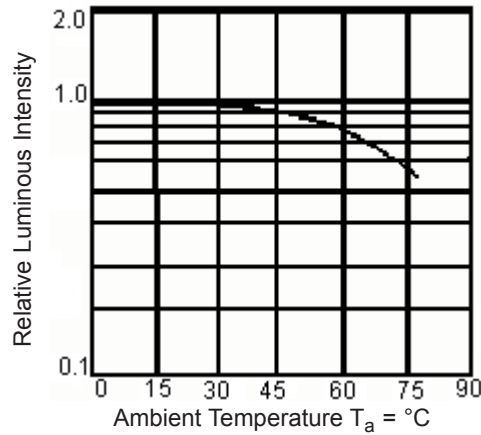
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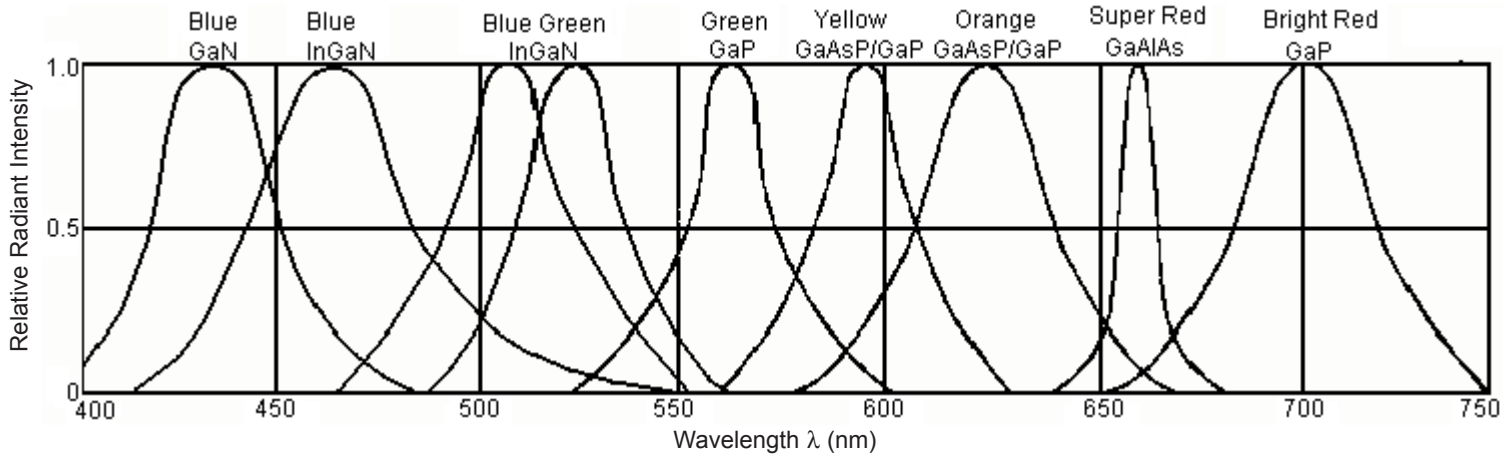
Super Blue (InGaN  $\lambda_P = 470\text{nm}$ )



Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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SCALE: NTS	U.O.M.: mm	SHEET: 3 OF 4	



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Part Number Table

Description	Part Number
LED, SMD, 1206, Super-Blue	MCL-S250SBLC

<http://www.farnell.com>

<http://www.newark.com>

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

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SIZE  
A

DWG NO.

M10001143

SCALE: NTS

U.O.M.: mm

ELECTRONIC FILE  
L-S250SBLC\_DWG

REV  
A

SHEET: 4 OF 4