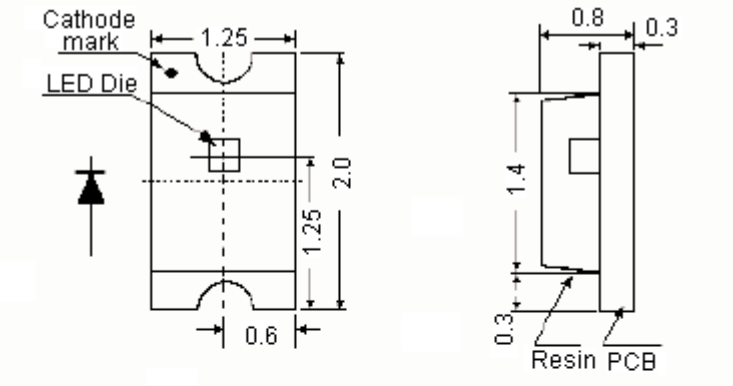
multicomp

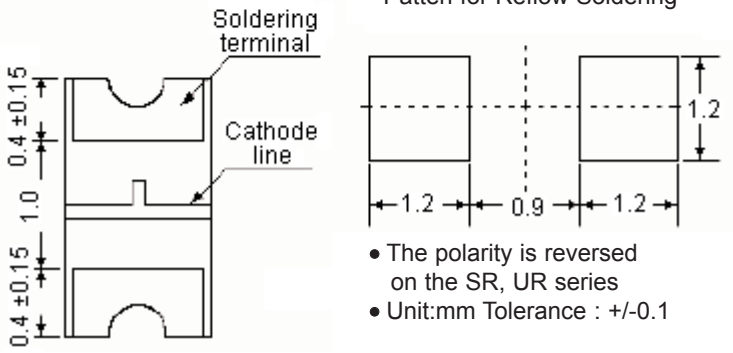
PART NO.

MCL-S270SBLC

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



- Recommended Soldering Patten for Reflow Soldering



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

Dimensions : Millimetres

Specifications:

Dice material : InGaN.
Emitted color : Super blue.
Epoxy color : Water clear.
Peak wavelength : 470nm.
Viewing angle : 140 degrees.
Luminous intensity (IV) : 55mcd.

RoHS Compliant

Electrical/Optical Characteristics at T_a = 25°C

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	45	55	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	2.8	3.5	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	-

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

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

DRAWING TITLE: 0805 SMD LED - Super Blue

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001151	L-S270SBLC_DWG	A

SCALE: NTS | U.O.M.: mm | SHEET: 1 OF 4

PART NO.	REVISIONS								
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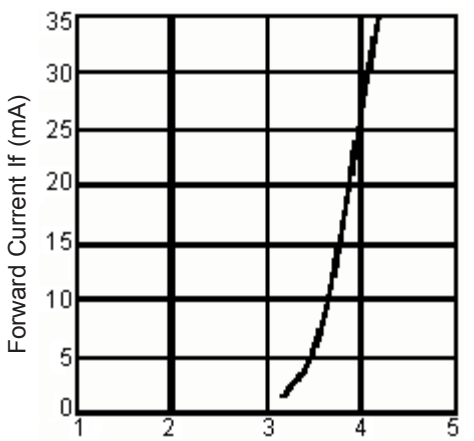
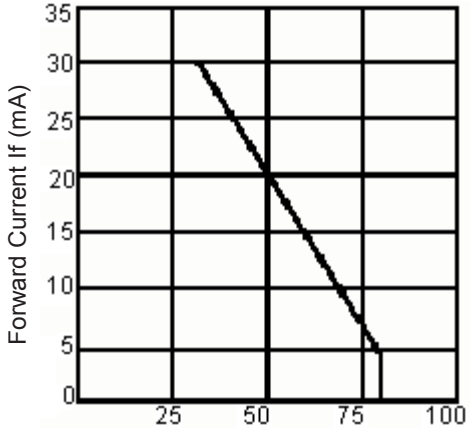
Absolute Maximum Ratings (T_a = 25°C)

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	260°C for 5 Seconds

Super Blue (InGaN) λP = 470nm)



Forward Current vs. Forward Voltage



Forward Current Derating Curve

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SCALE: NTS | U.O.M.: mm | SHEET: 2 OF 4

PART NO.	REVISIONS								
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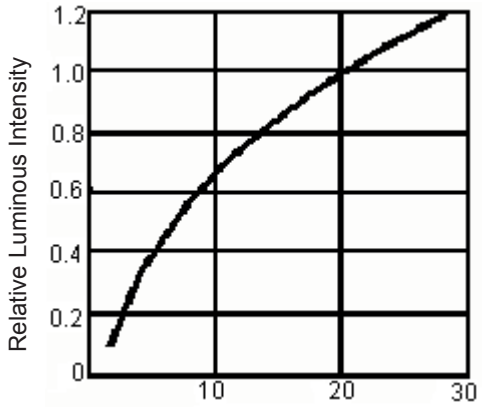
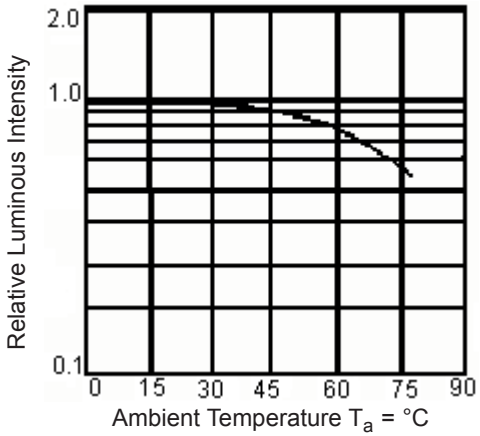
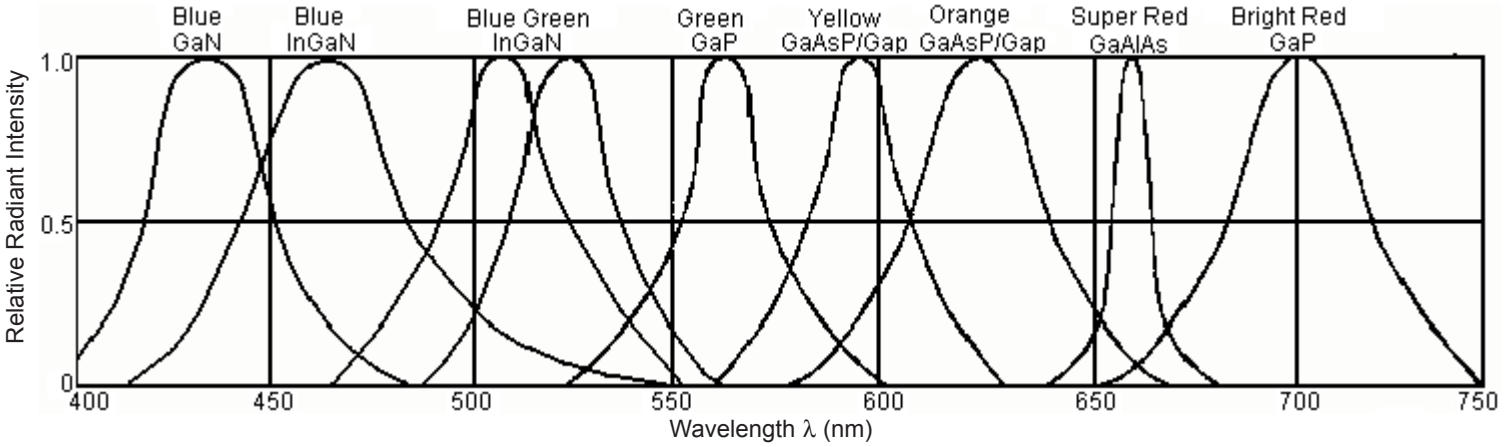


Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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G.Cook	12/06/08

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

PART NO.	REVISIONS								
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Part Number Table

Description	Part Number
LED, SMD, 0805, Super-Blue	MCL-S270SBLC

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

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