

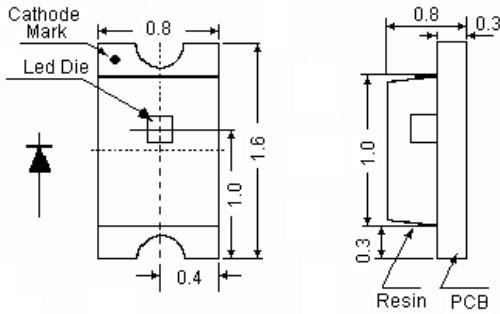


PART NO.

MCL-S291SBLC

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ramya	14/10/09	Sridhar	14/10/09	Farnell	28/10/09



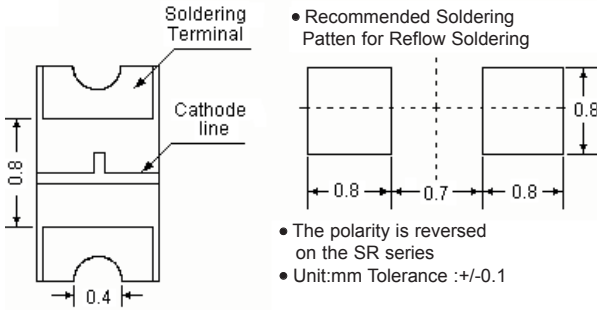
Specifications:

Dice material : InGaN.
 Emitted colour : Super blue.
 Epoxy colour : 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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Ramya	14/10/09
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Sridhar	14/10/09
APPROVED BY:	DATE:
Farnell	28/10/09

DRAWING TITLE:			
0603 SMD LED - Super Blue			
SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002401	53040_1581248_DWG	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 4	



PART NO.

MCL-S291SBLC

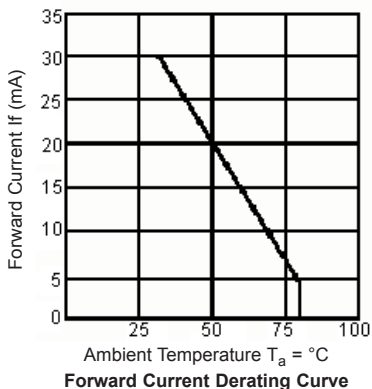
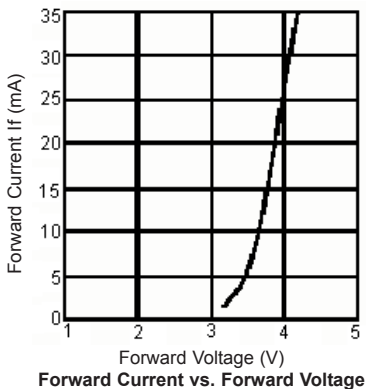
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Absolute Maximum Ratings (T_a = 25°C)

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 Range 1.6mm (1/16 inch) from body	260°C for 5 Seconds

Super Blue (InGaN) λP = 470nm



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Farnell	28/10/09

DRAWING TITLE:

0603 SMD LED - Super Blue

SIZE A	DWG NO. M10002401	ELECTRONIC FILE 53040_1581248_DWG	REV A
SCALE: NTS		U.O.M.: mm	SHEET: 2 OF 4



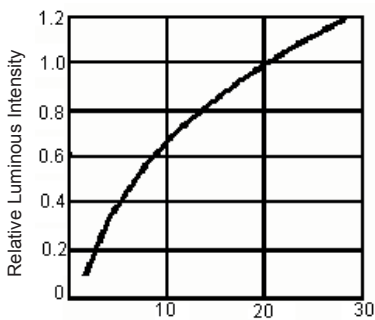
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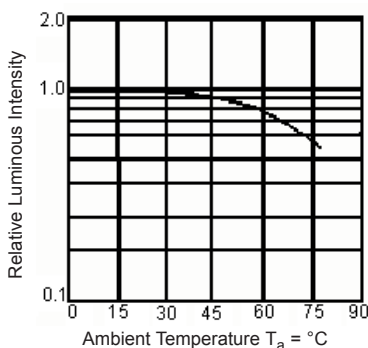
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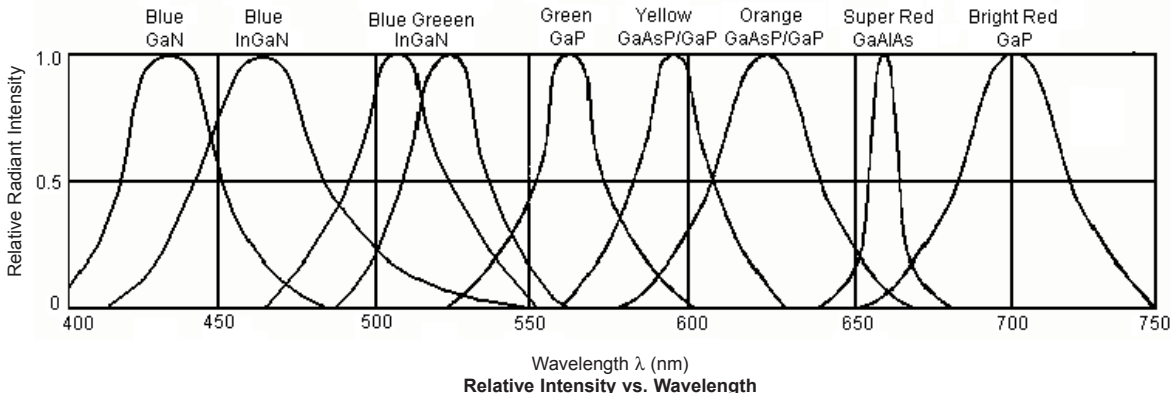
Super Blue (InGaN) λP = 470nm



Forward Current (mA) T_a = 25°C
Luminous Intensity vs. Forward Current



Ambient Temperature T_a = °C
Luminous Intensity vs. Ambient Temperature



Wavelength λ (nm)
Relative Intensity vs. Wavelength

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



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MCL-S291SBLC

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Part Number Table

Description	Part Number
LED, SMD, 0603, Super-Blue	MCL-S291SBLC

<http://www.farnell.com>

<http://www.newark.com>

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

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0603 SMD LED - Super Blue

SIZE A	DWG NO. M10002401	ELECTRONIC FILE 53040_1581248_DWG	REV A
SCALE: NTS	U.O.M.: mm	SHEET: 4 OF 4	