

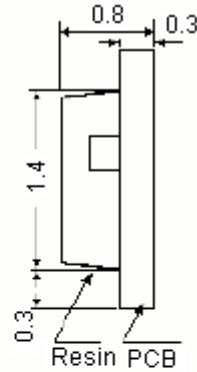
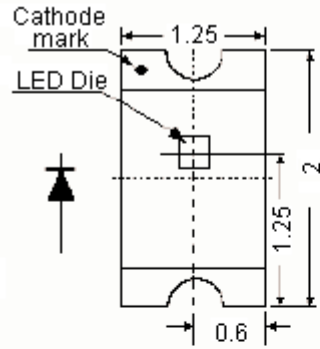


PART NO.

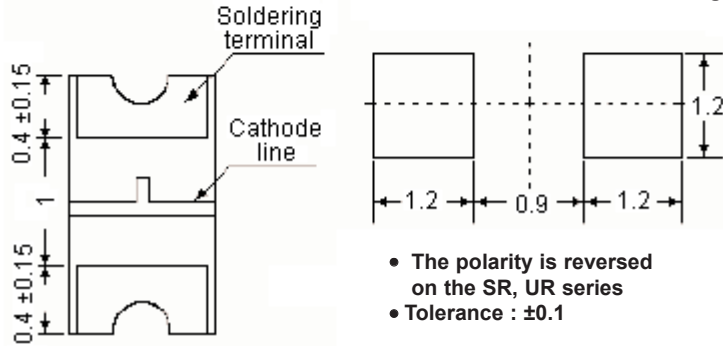
MCL-S270SBLC

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	SID	29/9/12	AMU	29/5/12		12/6/12



• Recommended Soldering Patten for Reflow Soldering



• The polarity is reversed on the SR, UR series
• Tolerance : ±0.1

Dimensions : Millimetres

Electrical / Optical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	45	55	75	mcd	IF = 20 mA
Viewing Angle	2θ 1/2	-	140	-	degrees	
Peak Emission Wavelength	λ_P	-	470	-	nm	-
Dominant Wavelength	λ_D	-	472	-		-
Spectral Line Half-Width	$\Delta\lambda$	-	45	-		-
Forward Voltage	VF	2.8	3.5	4	V	IF = 20 mA
Power Dissipation	Pd	-	-	85	-	-
Peak Forward Current Duty 1 / 10 at 1 KHz)	IF (Peak)	-	-	100	-	-
Recommended Operating Current	IF (Rec)	-	20	-	mA	-

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Reverse Voltage	5 V
Reverse Current	10 μA ($V_R = 5\text{ V}$)
Electrostatic Discharge (ESD)	200 V
Operating Temperature Range	-40°C to 85°C
Storage Temperature Range	-40°C to 100°C
Lead Soldering Temperature	260°C for 5 Seconds

Specifications:

Dice Material : InGaN
 Emitted Colour : Super blue
 Epoxy Colour : Water clear
 Peak Wavelength : 470 nm
 Viewing Angle : 140 degrees
 Luminous Intensity (IV) : 55 mcd



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SID	29/05/12
CHECKED BY:	DATE:
AMU	29/05/12
APPROVED BY:	DATE:
	12/06/12

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 2	



PART NO.

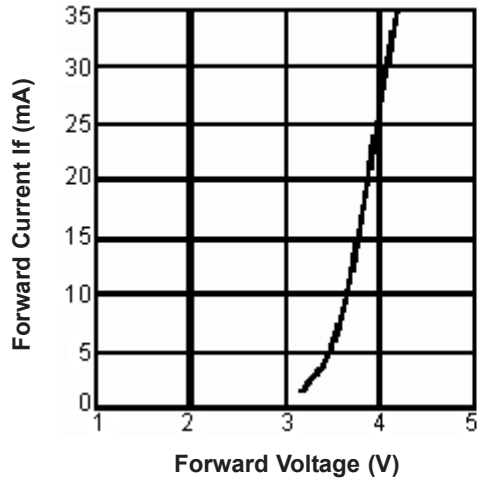
MCL-S270SBLC

REVISIONS

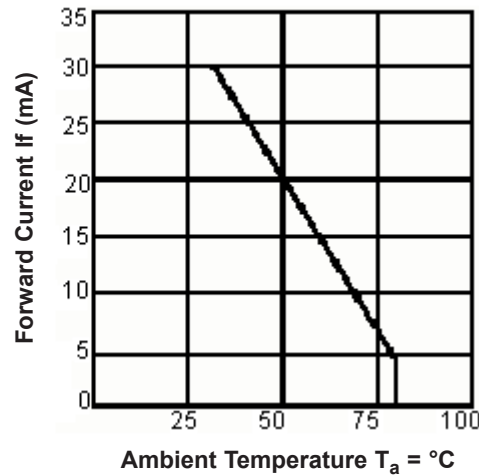
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Super Blue (InGaN) $\lambda_P = 470 \text{ nm}$

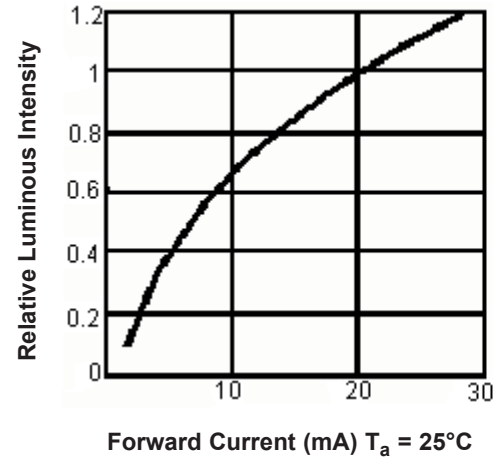
Forward Current vs. Forward Voltage



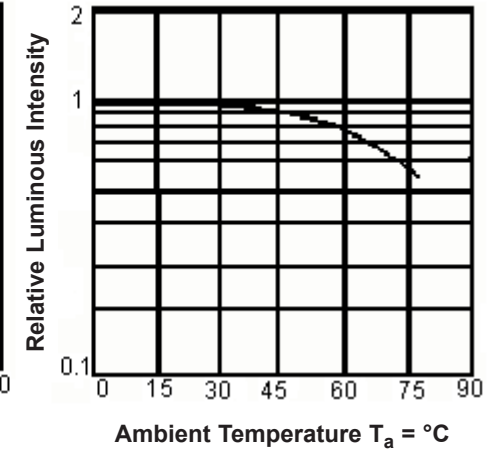
Forward Current Derating Curve



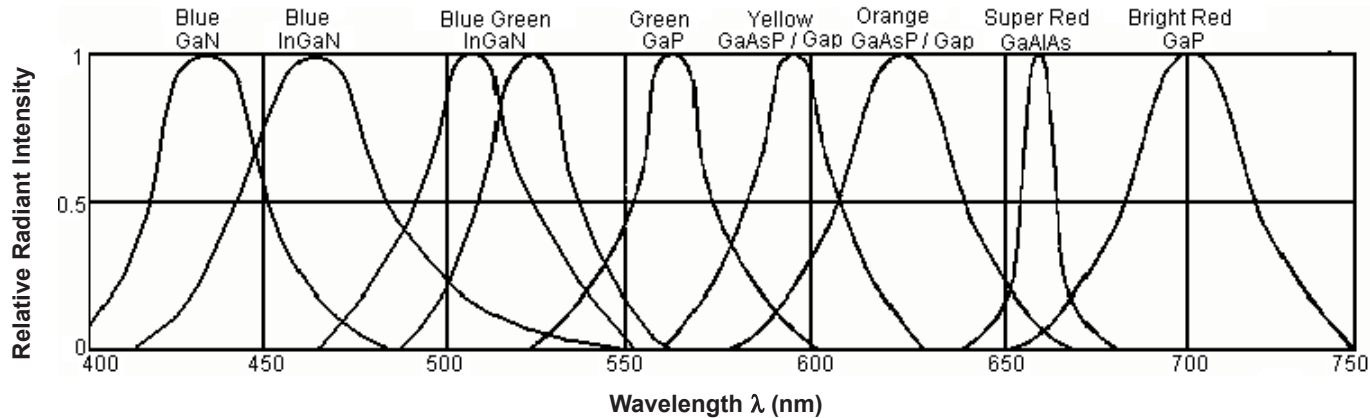
Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength



Part Number Table

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

www.element14.com
www.farnell.com
www.newark.com

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DRAWING TITLE:

0805 SMD LED - Super Blue

SIZE A	DWG NO. M10001151	ELECTRONIC FILE L-S270SBLC_DWG	REV A
SCALE: NTS	U.O.M.: mm	SHEET: 2 OF 2	