

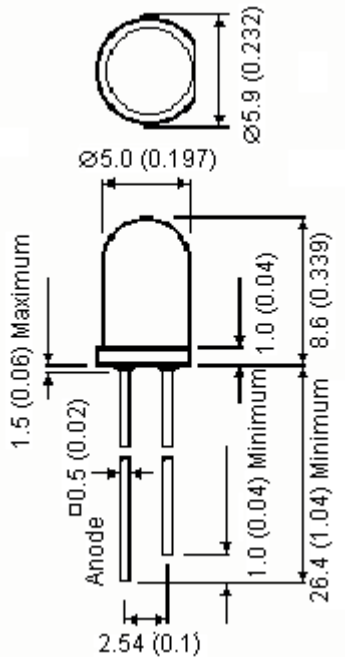


PART NO.

MCL053SRD

REVISIONS

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



Dimensions : Millimetres (Inches)

Specifications:

- Dice material : GaAlAs.
- Emitted color : Super red.
- Lens color : Red diffused.
- Peak wavelength : 660nm.
- Viewing angle : 45 degrees.
- Luminous intensity (IV) : 50mcd.



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

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	25	50	75	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	45	-	degrees	
Peak Emission Wavelength	• λ <sub>p</sub>	-	660	-	nm	-
Dominant Wavelength	• λ <sub>d</sub>	-	643	-		-
Spectral Line Half-Width	Δλ	-	20	-		-
Forward Voltage	VF	1.5	1.85	2.5	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	-

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

DRAWING TITLE:

5.0mm Round LED Lamp - Super Red

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001187	L053SRD_DWG	A
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 1 OF 4



PART NO.

MCL053SRD

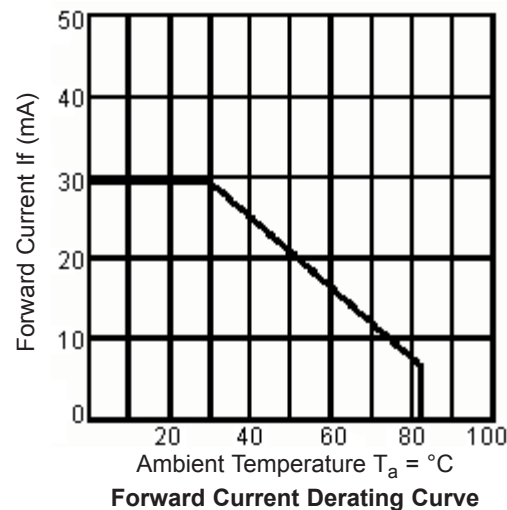
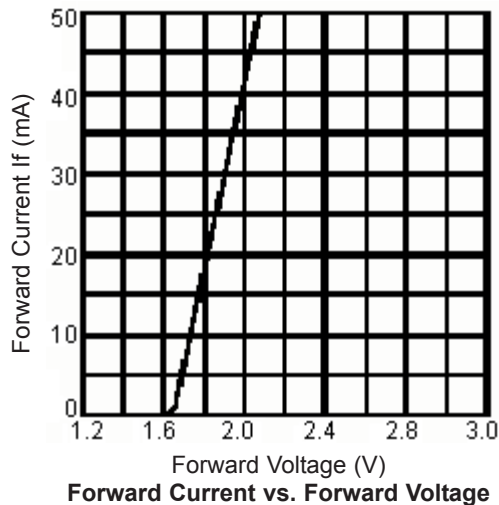
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**Absolute Maximum Ratings (T<sub>a</sub> = 25°C)**

Reverse Voltage	5 Volt
Reverse Current	10µA (V <sub>R</sub> = 5V)
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 Red (GaAlAs λ<sub>P</sub> = 660nm)**



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G.Cook	13/06/08

**DRAWING TITLE:**

**5.0mm Round LED Lamp - Super Red**

<b>SIZE</b> A	<b>DWG NO.</b> M10001187	<b>ELECTRONIC FILE</b> L053SRD_DWG	<b>REV</b> A
<b>SCALE: NTS</b>		<b>U.O.M.: mm (Inches)</b>	<b>SHEET: 2 OF 4</b>



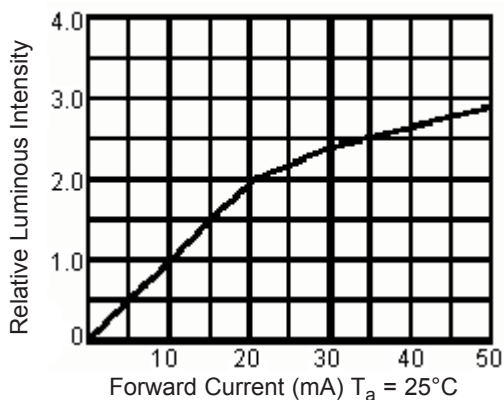
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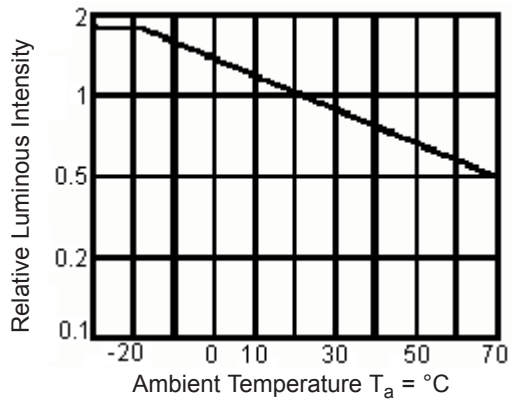
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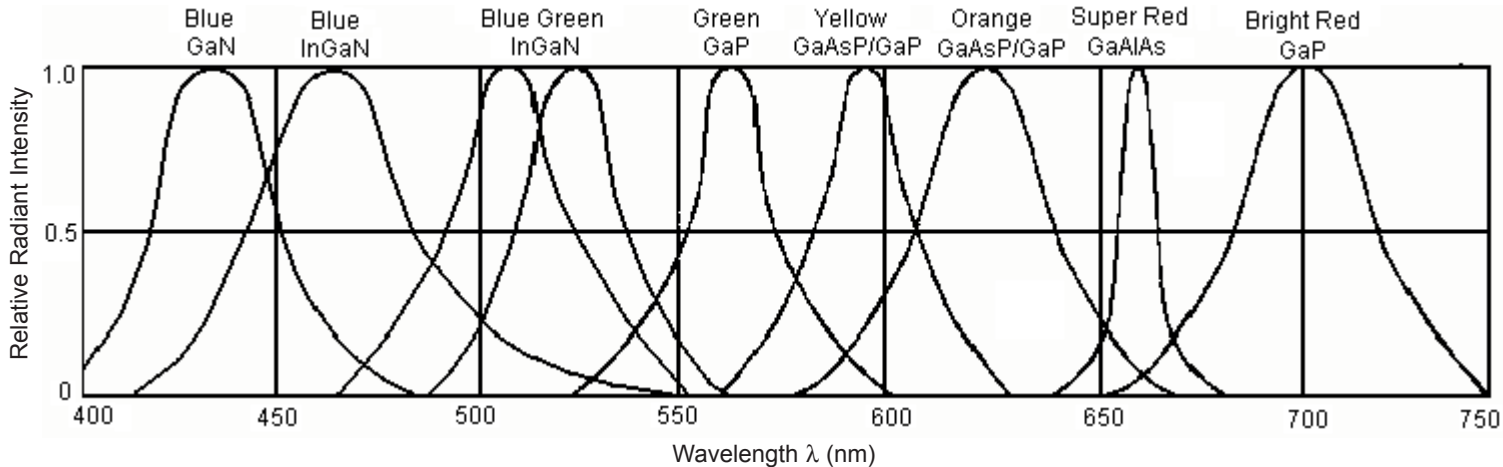
Super Red (GaAlAs  $\lambda_P = 660\text{nm}$ )



Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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



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Part Number Table

Description	Part Number
LED, 5mm, 36°, Super-Red	MCL053SRD

<http://www.farnell.com>

<http://www.newark.com>

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

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SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 4 OF 4	