

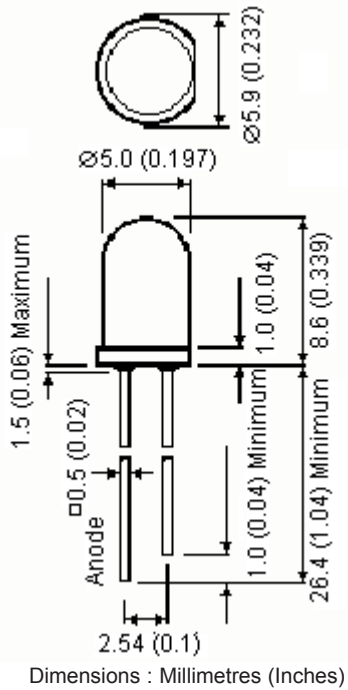


PART NO.

MCL053SRDD

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



Specifications:

Dice material : GaAlAs.
 Emitted color : Super red.
 Lens color : Red diffused.
 Peak wavelength : 660nm.
 Viewing angle : 45 degrees.
 Luminous intensity (IV) : 75mcd.



Electrical/Optical Characteristics at T_a = 25°C

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	40	75	115	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	45	-	degrees	
Peak Emission Wavelength	• λ _p	-	660	-	nm	-
Dominant Wavelength	• λ _d	-	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 - Red			
SIZE A	DWG NO. M10001188	ELECTRONIC FILE L053SRDD_DWG	REV A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 1 OF 4	



PART NO.

MCL053SRDD

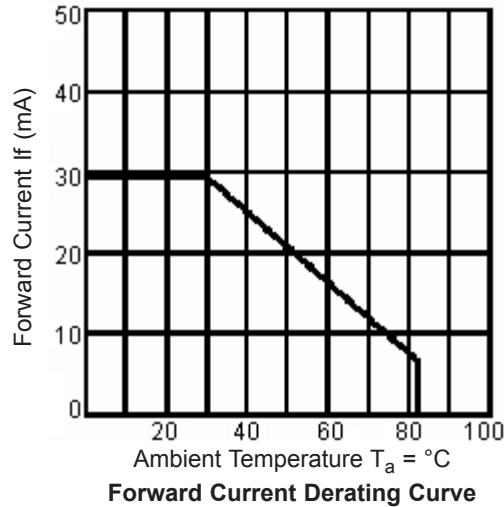
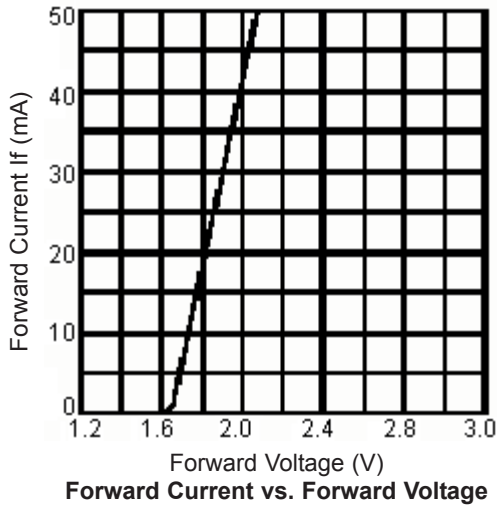
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Absolute Maximum Ratings (T_a = 25°C)

Reverse Voltage	5 Volt
Reverse Current	10µA (V _R = 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 λP = 660nm)



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G.Cook	13/06/08

DRAWING TITLE:

5.0mm Round LED Lamp - Red

SIZE A	DWG NO. M10001188	ELECTRONIC FILE L053SRDD_DWG	REV A
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 2 OF 4



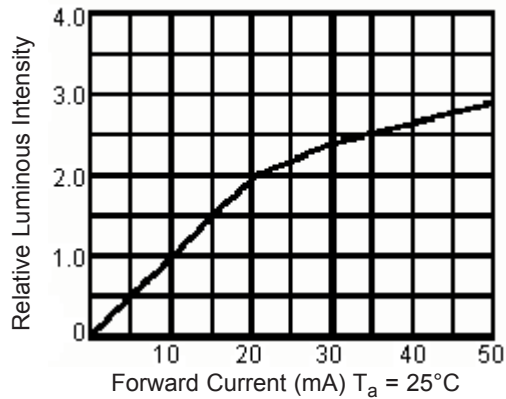
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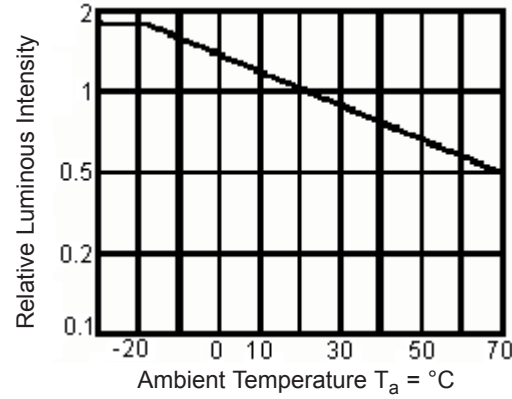
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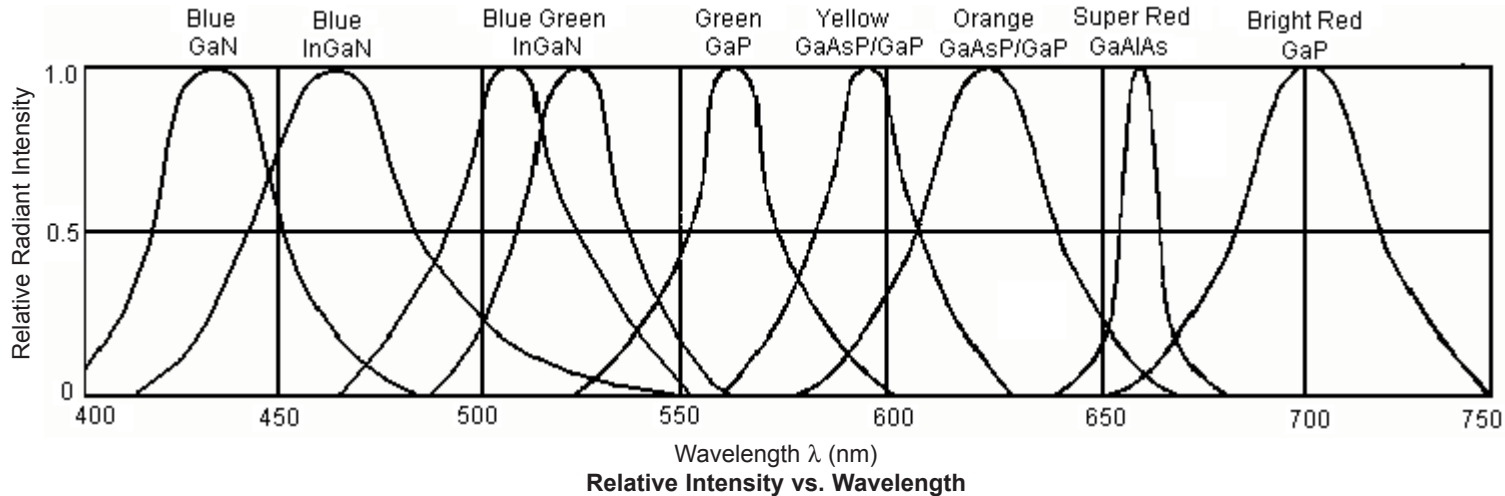
Super Red (GaAlAs $\lambda_P = 660\text{nm}$)



Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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DRAWING TITLE:

5.0mm Round LED Lamp - Red

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A	M10001188	L053SRDD_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 3 OF 4	



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Part Number Table

Description	Part Number
LED, 5mm, 36°, Red	MCL053SRDD

<http://www.farnell.com>

<http://www.newark.com>

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

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5.0mm Round LED Lamp - Red

SIZE
A

DWG NO.

M10001188

ELECTRONIC FILE
L053SRDD_DWG

REV
A

SCALE: NTS

U.O.M.: mm (Inches)

SHEET: 4 OF 4