

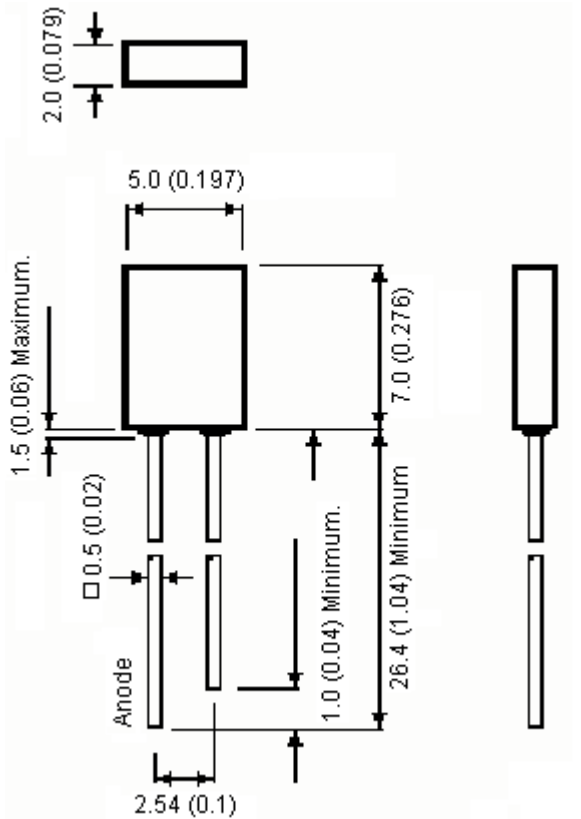


PART NO.

MCL453SRD

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Rekha	27/5/08	Suresh	27/5/08	G. C	11/6/08



Dimensions : Millimetres (Inches)

Specifications:

Dice material : AlAGas.  
 Emitted color : Super red.  
 Lens color : Red diffused.  
 Peak wavelength : 660nm.  
 Viewing angle : 120 degrees.  
 Luminous intensity (IV) : 12mcd.



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

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	5	12	18	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	120	-	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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Rekha	27/05/08
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Suresh	27/05/08
<b>APPROVED BY:</b>	<b>DATE:</b>
G.Cook	11/06/08

<b>DRAWING TITLE:</b>			
2.0mm x 5.0mm Rectangular LED Lamp - Super Red			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
A	M10001166	L453SRD_DWG	A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 1 OF 4</b>



PART NO.

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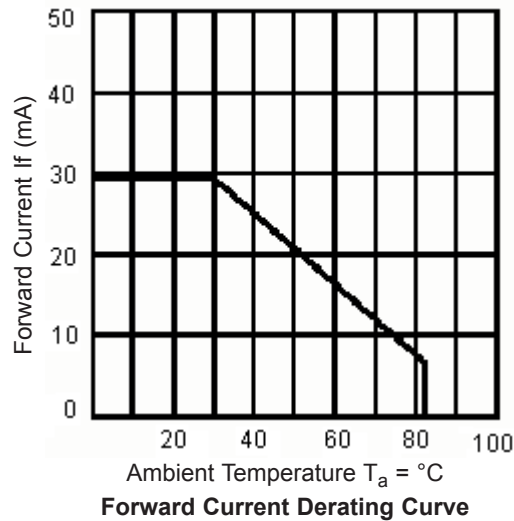
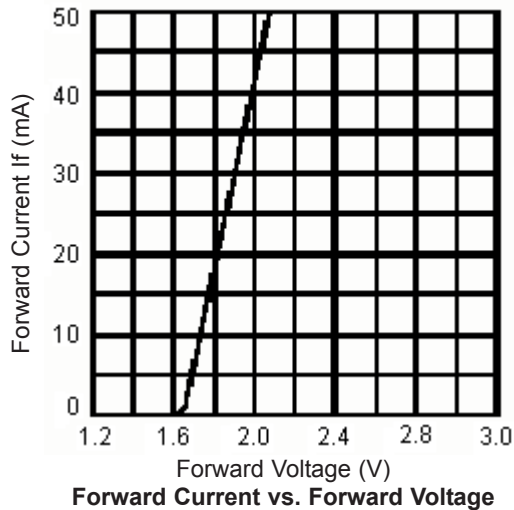
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**Absolute Maximum Ratings (T<sub>a</sub> = 25°C)**

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) λP = 660nm**



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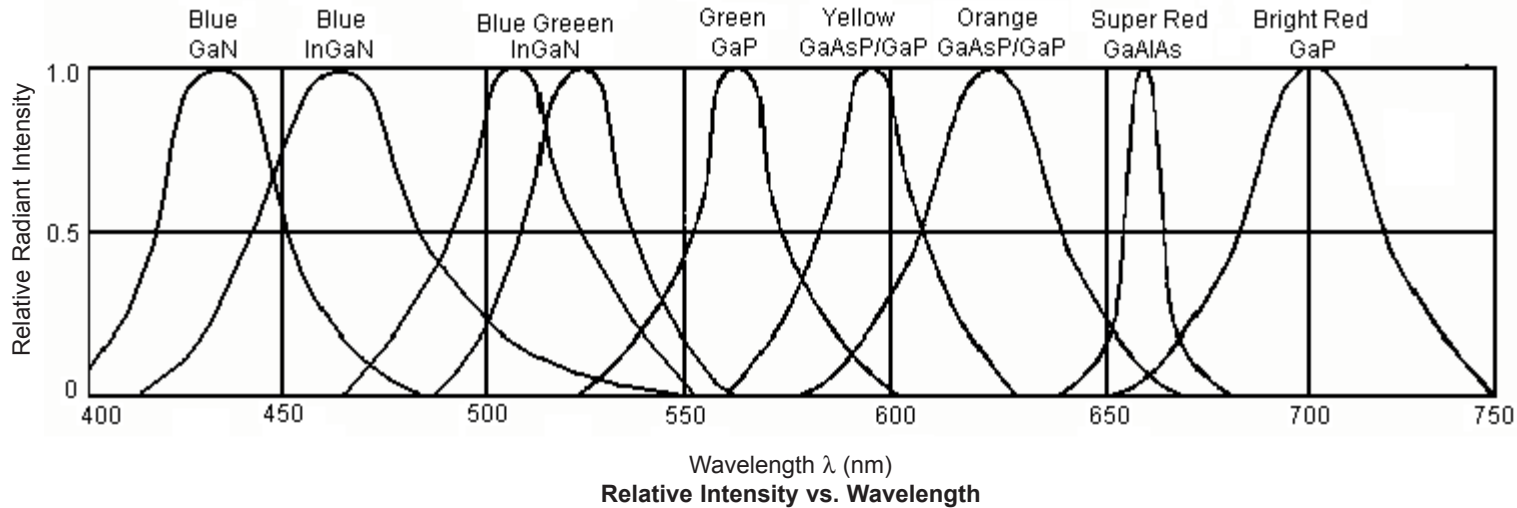
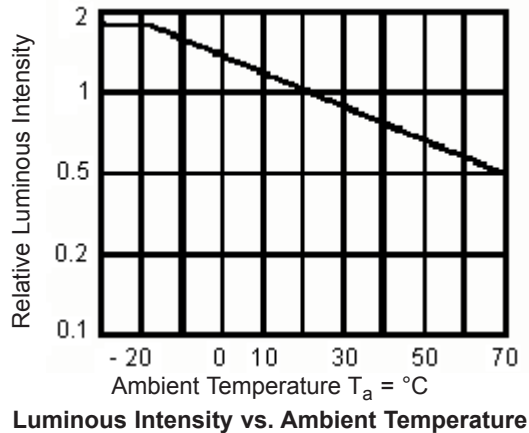
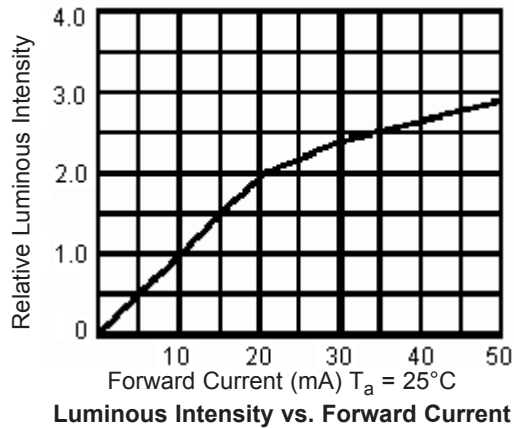
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G.Cook	11/06/08

<b>DRAWING TITLE:</b> 2.0mm x 5.0mm Rectangular LED Lamp - Super Red			
<b>SIZE</b> A	<b>DWG NO.</b> M10001166	<b>ELECTRONIC FILE</b> L453SRD_DWG	<b>REV</b> A
<b>SCALE:</b> NTS		<b>U.O.M.:</b> mm	<b>SHEET:</b> 3 OF 4



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Part Number Table

Description	Part Number
LED, 2mmX5mm, 120°, Super-Red	MCL453SRD

<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