

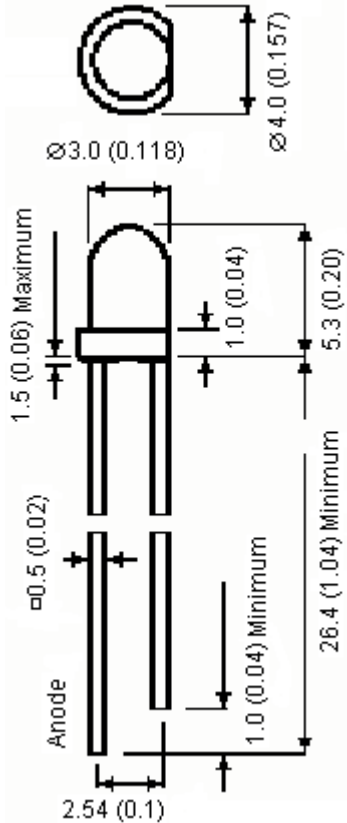


PART NO.

MCL034URC

REVISIONS

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



Dimensions : Millimetres (Inches)

Specifications:

Dice material : GaAlAs.  
 Emitted color : Ultra red.  
 Lens color : Water clear.  
 Peak wavelength : 660nm.  
 Viewing angle : 36 degrees.  
 Luminous intensity (IV) : 1200mcd.



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

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	585	1200	1800	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	36	-	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	1.9	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	27/05/08
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Suresh	27/05/08
<b>APPROVED BY:</b>	<b>DATE:</b>
G.Cook	11/06/08

DRAWING TITLE:

3.0mm Round LED Lamp - Super Red

<b>SIZE</b> A	<b>DWG NO.</b> M10001123	<b>ELECTRONIC FILE</b> L034URC_DWG	<b>REV</b> A
<b>SCALE:</b> NTS		<b>U.O.M.:</b> mm (Inches)	<b>SHEET:</b> 1 OF 4



PART NO.

MCL034URC

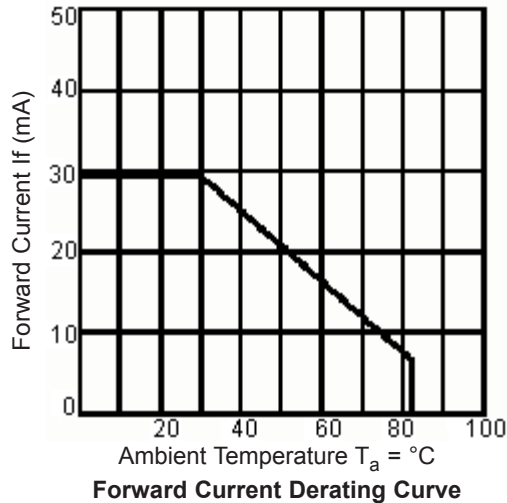
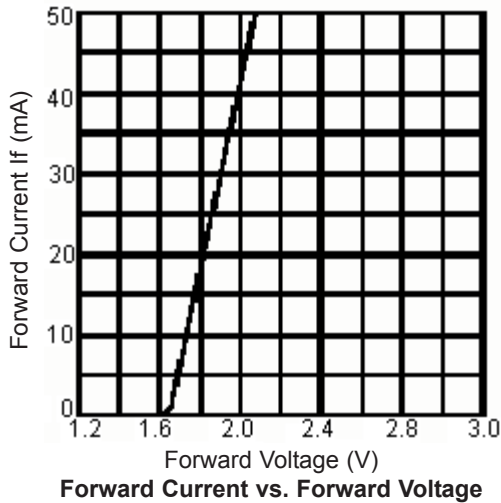
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**Absolute Maximum Ratings (T<sub>a</sub> = 25°C)**

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

**Ultra Red (GaAlAs) λP = 660nm**



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G.Cook	11/06/08

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**3.0mm Round LED Lamp - Super Red**

<b>SIZE</b> A	<b>DWG NO.</b> M10001123	<b>ELECTRONIC FILE</b> L034URC_DWG	<b>REV</b> A
<b>SCALE: NTS</b>		<b>U.O.M.: mm (Inches)</b>	<b>SHEET: 2 OF 4</b>



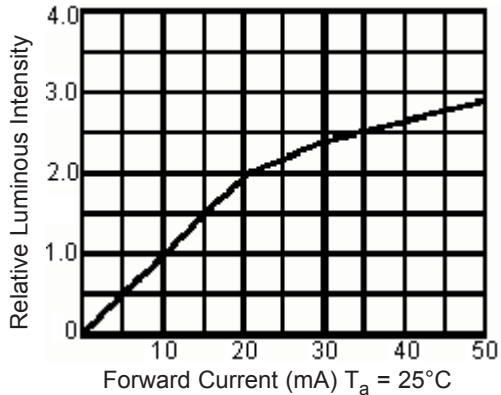
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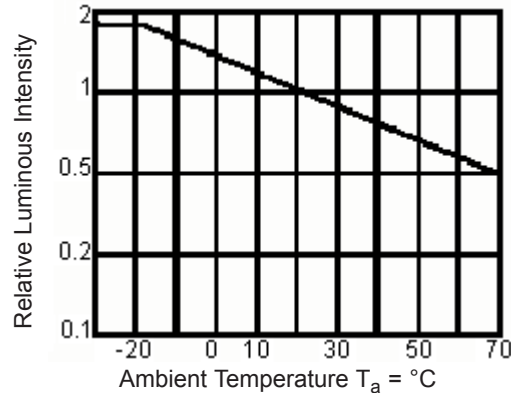
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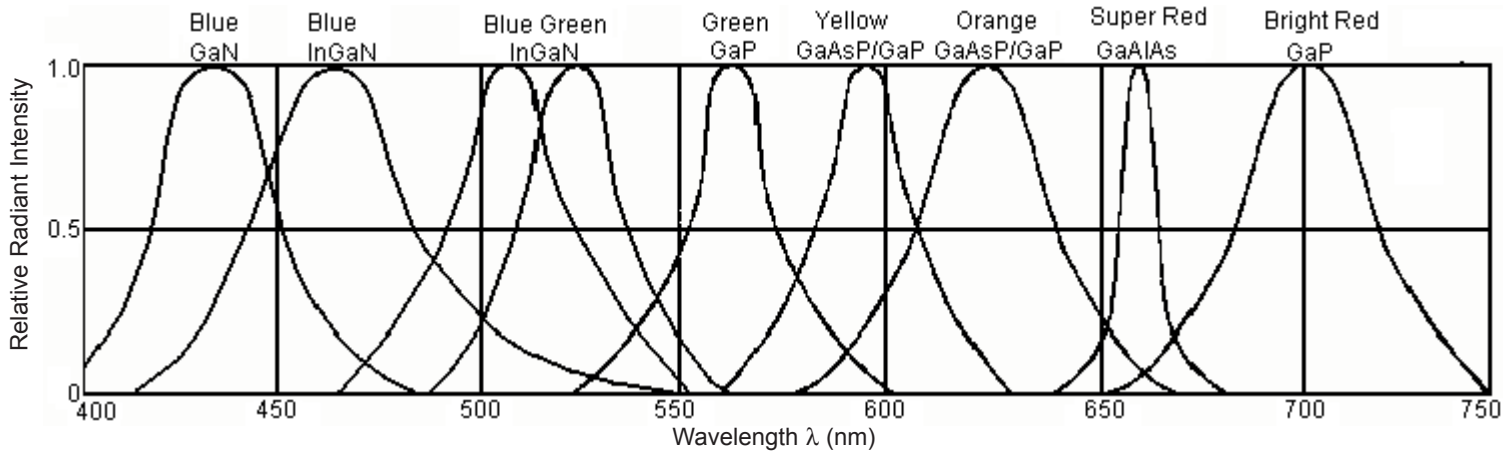
Ultra Red (GaAlAs)  $\lambda_P = 660\text{nm}$



Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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G.Cook	11/06/08

DRAWING TITLE:

3.0mm Round LED Lamp - Super Red

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001123	L034URC_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 3 OF 4	



PART NO.

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Part Number Table

Description	Part Number
LED, 3mm, 32°, Super-Red	MCL034URC

<http://www.farnell.com>

<http://www.newark.com>

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

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3.0mm Round LED Lamp - Super Red

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