

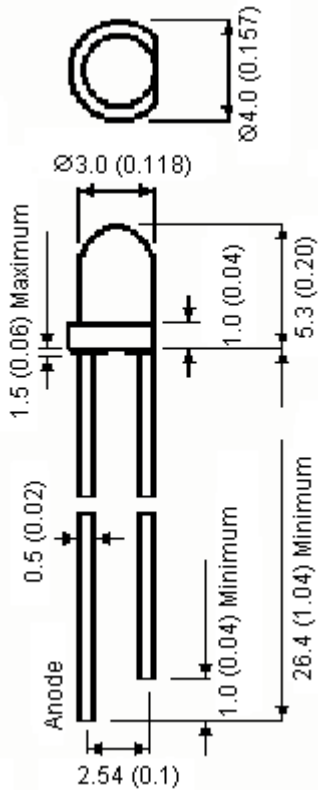


PART NO.

MCL034PD

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Veena	26/5/08	Suresh	26/5/08	G. C	10/6/08



Dimensions : Millimetres (Inches)

Specifications:

Dice material : GaP.  
 Emitted color : HI-red.  
 Lens color : Red diffused.  
 Peak wavelength : 697nm.  
 Viewing angle : 76 degrees.  
 Luminous intensity (IV) : 2.6mcd.



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

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	1.2	26	3.8	mcd	IF = 10mA
Viewing Angle	2θ 1/2	-	76	-	degrees	
Peak Emission Wavelength	• λ <sub>p</sub>	-	697	-	nm	-
Dominant Wavelength	• λ <sub>D</sub>	-	650	-		-
Spectral Line Half-Width	Δλ	-	90	-		-
Forward Voltage	VF	1.7	2.1	2.6	V	IF = 10mA
Power Dissipation	Pd	-	-	85	-	-
Peak Forward Current (Duty 1/10 at 1KHz)	IF (Peak)	-	-	50	-	-
Recommended Operating Current	IF (Rec)	-	10	-	mA	-

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**TOLERANCES:**  
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Suresh	26/05/08
<b>APPROVED BY:</b>	<b>DATE:</b>
G.Cook	10/06/08

DRAWING TITLE:

3.0mm Round LED Lamp - HI Red

<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
A	M10001109	L034PD_DWG	A
<b>SCALE: NTS</b>		<b>U.O.M.: mm (Inches)</b>	<b>SHEET: 1 OF 4</b>



PART NO.

MCL034PD

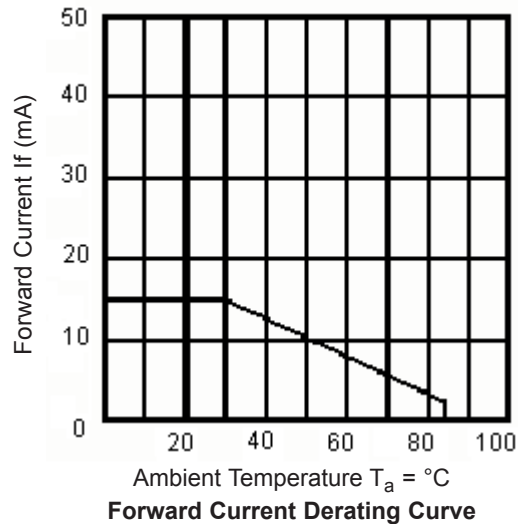
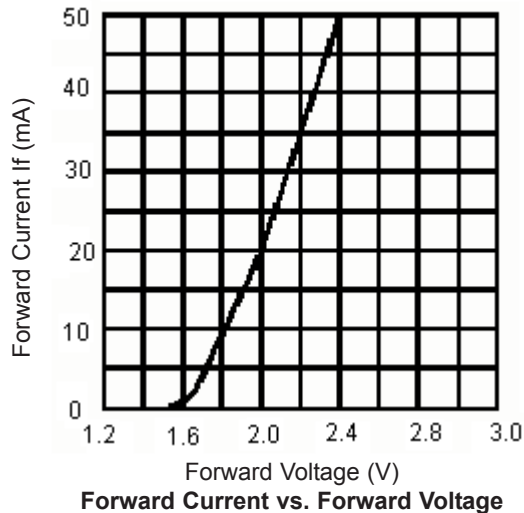
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**Absolute Maximum Ratings (T<sub>a</sub> = 25°C)**

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

**Bright Red (GaP λ<sub>P</sub> = 697nm)**



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G.Cook	10/06/08

**DRAWING TITLE:**

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

<b>SIZE</b> A	<b>DWG NO.</b> M10001109	<b>ELECTRONIC FILE</b> L034PD_DWG	<b>REV</b> A
<b>SCALE: NTS</b>		<b>U.O.M.: mm (Inches)</b>	<b>SHEET: 2 OF 4</b>



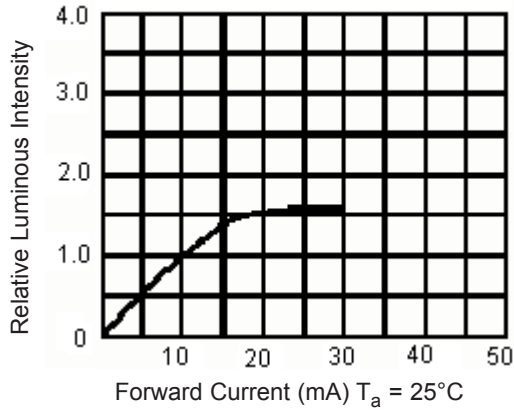
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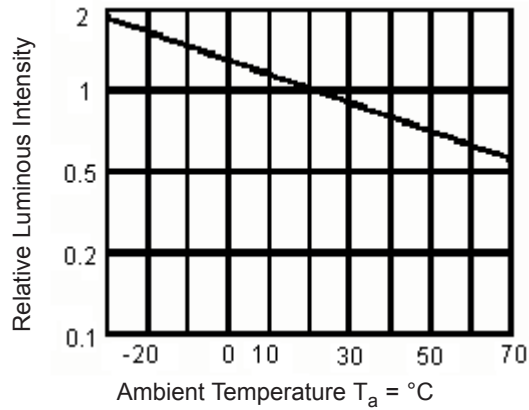
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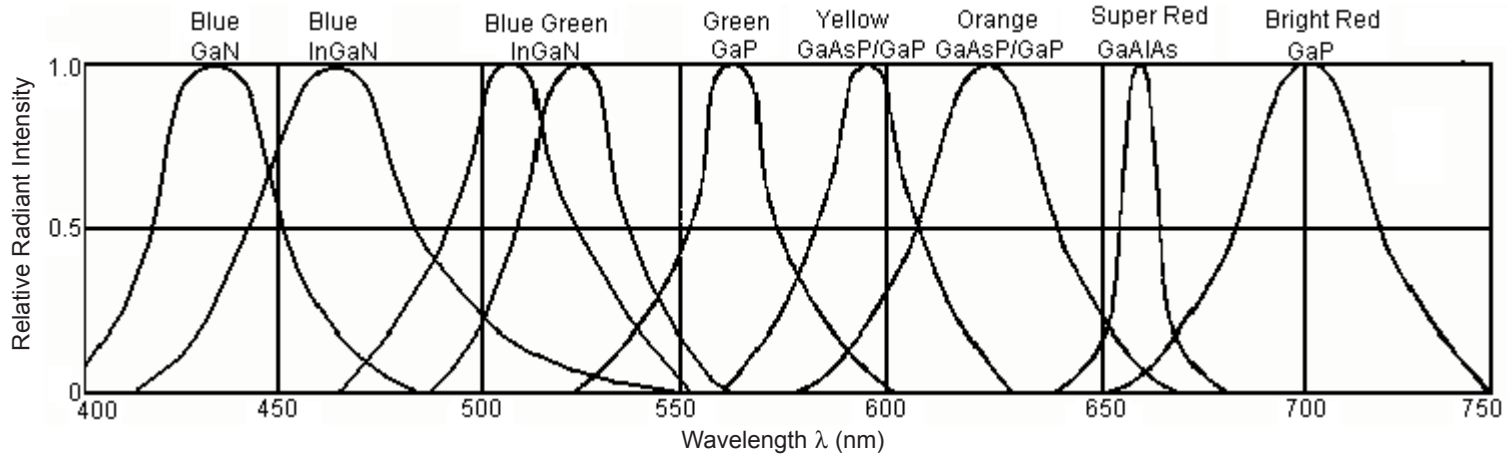
Bright Red (GaP  $\lambda_P = 697\text{nm}$ )



Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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G.Cook	10/06/08

DRAWING TITLE:

3.0mm Round LED Lamp - HI Red

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001109	L034PD_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 3	OF 4



PART NO.

MCL034PD

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Part Number Table

Description	Part Number
LED, 3mm, 70°, HI-Red	MCL034PD

<http://www.farnell.com>

<http://www.newark.com>

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

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DRAWING TITLE:

3.0mm Round LED Lamp - HI Red

SIZE  
A

DWG NO.

M10001109

ELECTRONIC FILE  
L034PD\_DWG

REV  
A

SCALE: NTS

U.O.M.: mm (Inches)

SHEET: 4 OF 4