

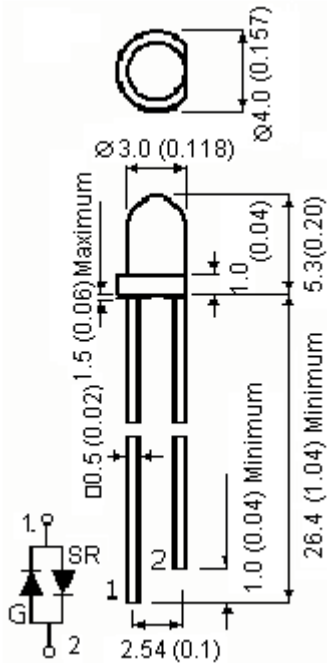


PART NO.

MCL036PURGW

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ramya	14/10/09	Jagan	14/10/09	Farnell	28/10/09



Dimensions : Millimetres (Inches)

Specifications:

Dice material : AlAGas/GaP.  
 Emitted colour : Super red/green.  
 Lens colour : Water diffused.  
 Peak wavelength : 660/568nm.  
 Viewing angle : 76 degrees.  
 Luminous intensity (IV) : 30/10 mcd.



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

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	18/6	30/10	50/18	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	76	-	degrees	
Peak Emission Wavelength	• λ <sub>p</sub>	-	660/568	-	nm	-
Dominant Wavelength	• λ <sub>d</sub>	-	643/570	-		-
Spectral Line Half-Width	Δλ	-	20/30	-		-
Forward Voltage	VF	1.5/1.7	1.8/2.1	2.5/2.6	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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Ramya	14/10/09
<b>CHECKED BY:</b>	<b>DATE:</b>
Jagan	14/10/09
<b>APPROVED BY:</b>	<b>DATE:</b>
Farnell	28/10/09

**DRAWING TITLE:**

3.0mm Bi-colour LED Lamp - HI Red/Green

<b>SIZE</b> A	<b>DWG NO.</b> M10002399	<b>ELECTRONIC FILE</b> 52952_1581204_DWG	<b>REV</b> A
<b>SCALE: NTS</b>		<b>U.O.M.: mm (Inches)</b>	<b>SHEET: 1 OF 5</b>



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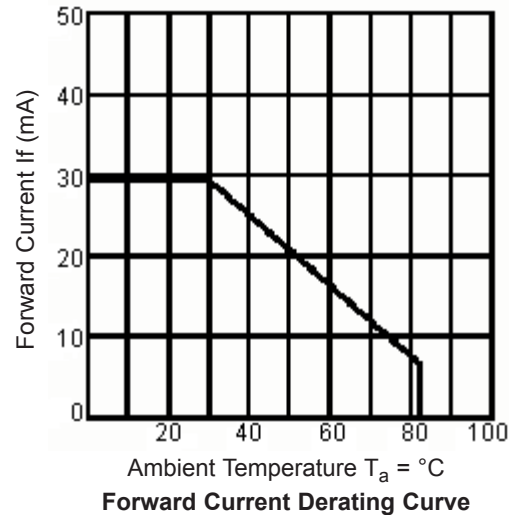
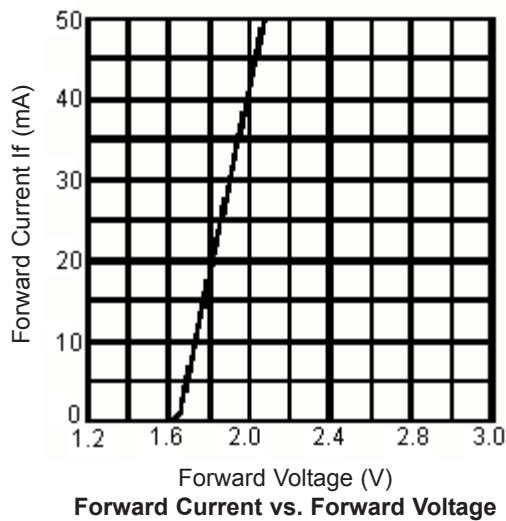
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**Absolute Maximum Ratings (T<sub>a</sub> = 25°C)**

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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Sridhar	14/10/09
<b>APPROVED BY:</b>	<b>DATE:</b>
Farnell	28/10/09

<b>DRAWING TITLE:</b>			
<b>3.0mm Bi-colour LED Lamp - HI Red/Green</b>			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
A	M10002399	52952_1581204_DWG	A
<b>SCALE: NTS</b>		<b>U.O.M.: mm (Inches)</b>	<b>SHEET: 2 OF 5</b>



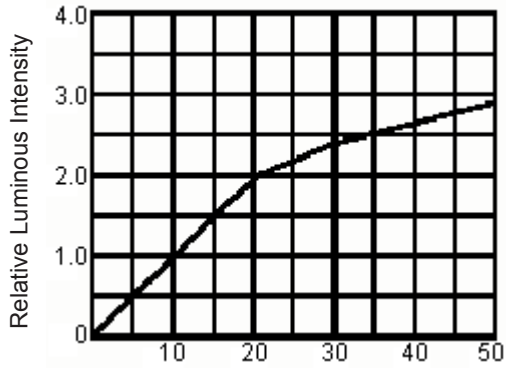
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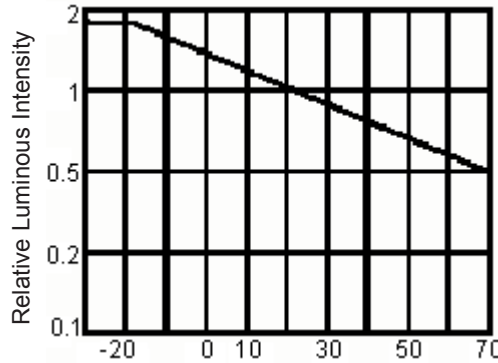
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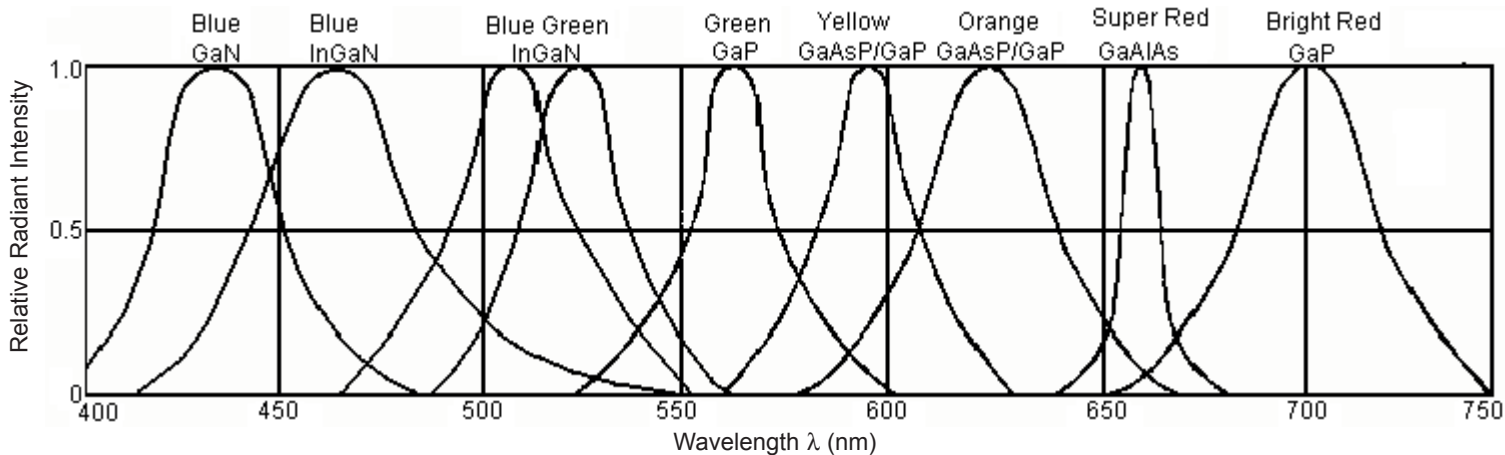
Super Red (GaAlAs)  $\lambda P = 660nm$



Forward Current (mA)  $T_a = 25^\circ C$   
Luminous Intensity vs. Forward Current



Ambient Temperature  $T_a = ^\circ C$   
Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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Sridhar	14/10/09
APPROVED BY:	DATE:
Farnell	28/10/09

DRAWING TITLE:

3.0mm Bi-colour LED Lamp - HI Red/Green

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002399	52952_1581204_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 3 OF 5	



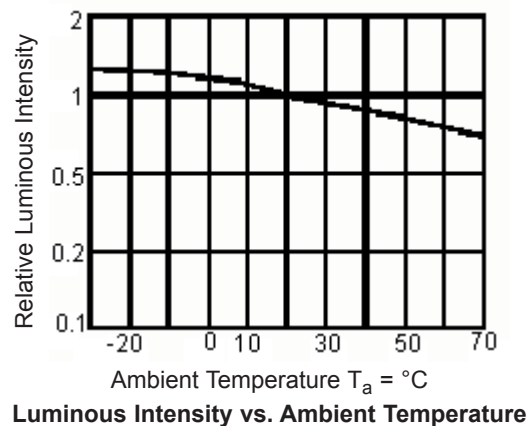
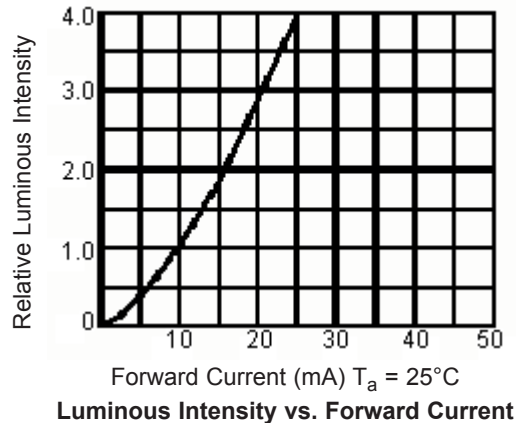
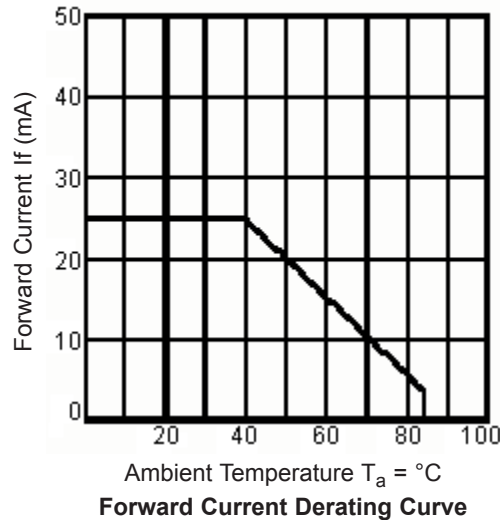
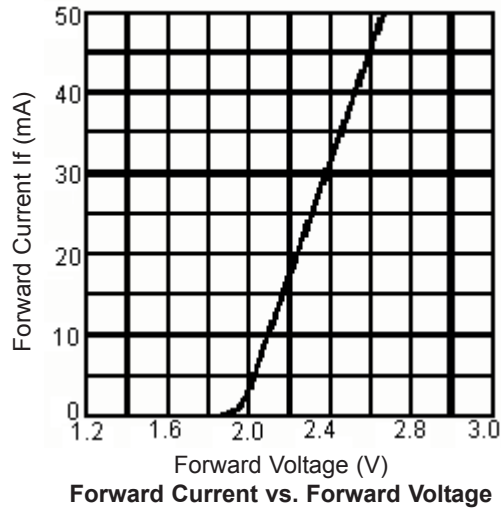
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Green (GaP  $\lambda_P = 568\text{nm}$ )



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Sridhar	14/10/09
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Farnell	28/10/09

DRAWING TITLE:

3.0mm Bi-colour LED Lamp - HI Red/Green

SIZE <b>A</b>	DWG NO. <b>M10002399</b>	ELECTRONIC FILE 52952_1581204_DWG	REV <b>A</b>
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 4 OF 5

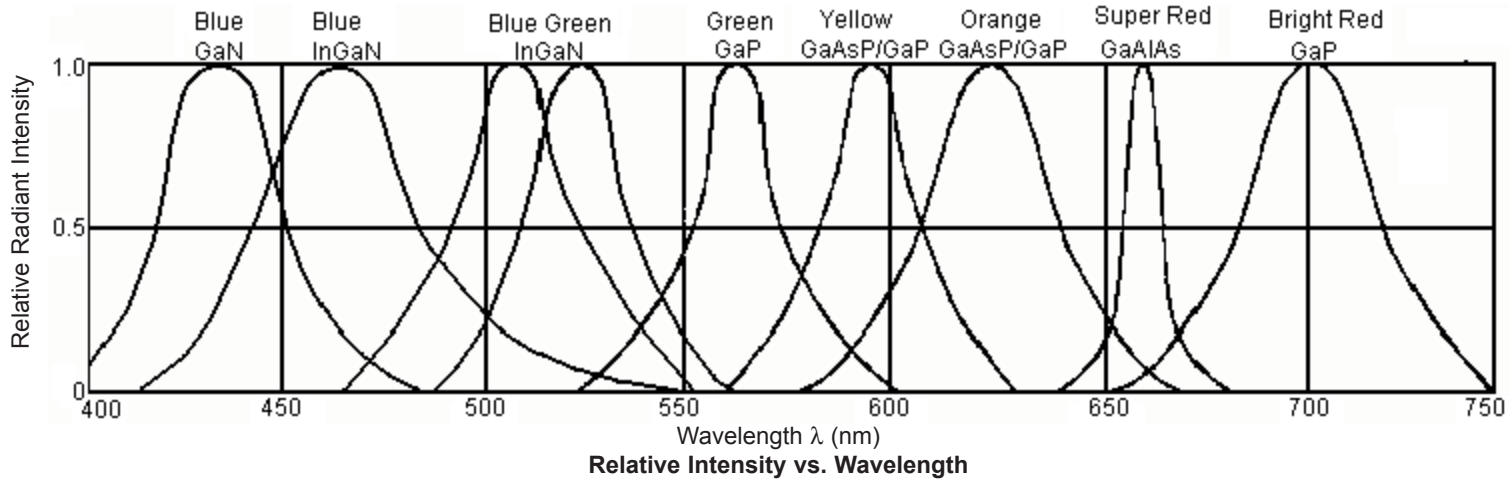


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Part Number Table

Description	Part Number
LED, 3mm, AC, HI-Red/Green	MCL036PURGW

<http://www.farnell.com>

<http://www.newark.com>

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

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DRAWING TITLE:

3.0mm Bi-colour LED Lamp - HI Red/Green

SIZE <b>A</b>	DWG NO. <b>M10002399</b>	ELECTRONIC FILE 52952_1581204_DWG	REV <b>A</b>
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 5 OF 5