



PART NO.

MCL059PURGW

REVISIONS

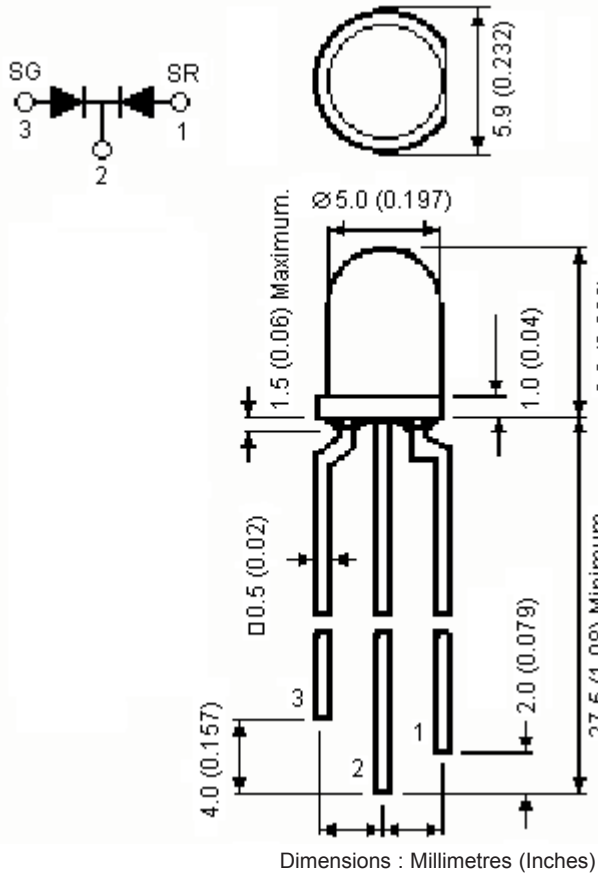
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ramya	14/10/09	Sridhar	14/10/09	Farnell	28/10/09

Specifications:

Dice material	: AlGaAs/GaP.
Emitted colour	: Super red/green.
Lens colour	: White diffused.
Peak wavelength	: 660/568nm.
Viewing angle	: 45 degrees.
Luminous intensity (IV)	: 50/15mcd.

Electrical/Optical Characteristics at T_a = 25°C

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	8/7	16/15	25/22	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	45	-	degrees	
Peak Emission Wavelength	• λ _p	-	635/568	-	nm	-
Dominant Wavelength	• λ _d	-	625/570	-		-
Spectral Line Half-Width	Δλ	-	45/30	-		-
Forward Voltage	VF	1.6/1.7	2.0/2.1	2.6/2.6	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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DRAWN BY:

Ramya

DATE:

14/10/09

CHECKED BY:

Sridhar

DATE:

14/10/09

APPROVED BY:

Farnell

DATE:

28/10/09

DRAWING TITLE:

5.0mm Multi-colour LED Lamp - HI Red/Green

SIZE
A

DWG NO.

M10002396

ELECTRONIC FILE

52937_1581197_DWG

REV

A

SCALE: NTS

U.O.M.: mm (Inches)

SHEET: 1 OF 5



PART NO.

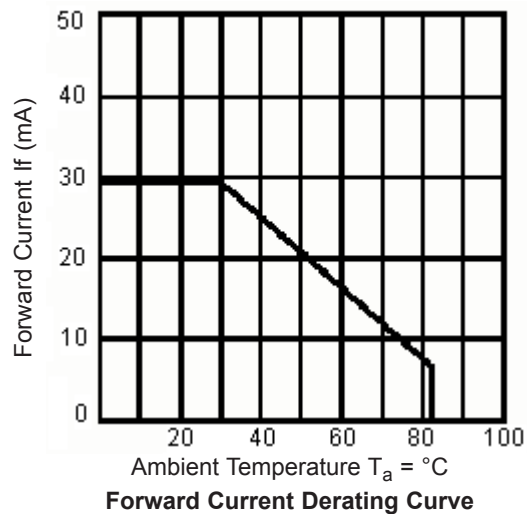
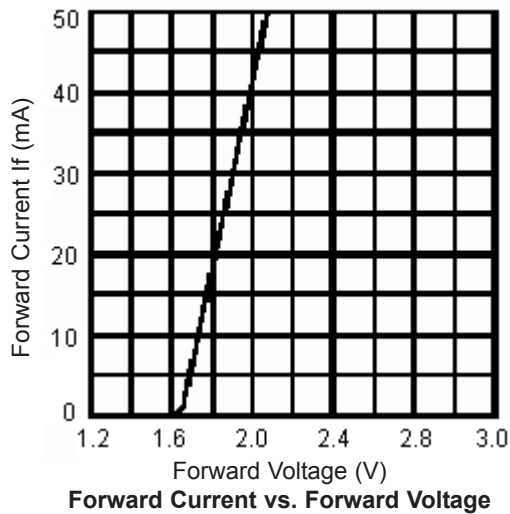
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Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Reverse Voltage	5 Volt
Reverse Current	$10\mu\text{A}$ ($V_R = 5\text{V}$)
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) $\lambda_P = 660\text{nm}$ 

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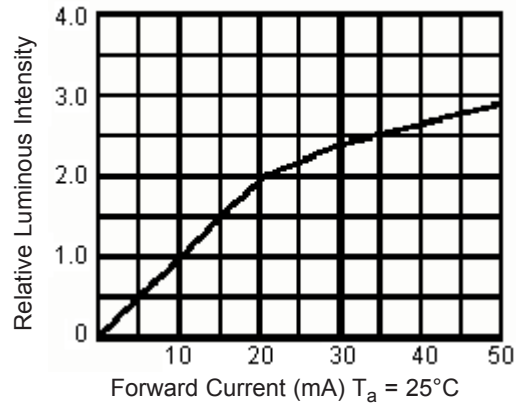


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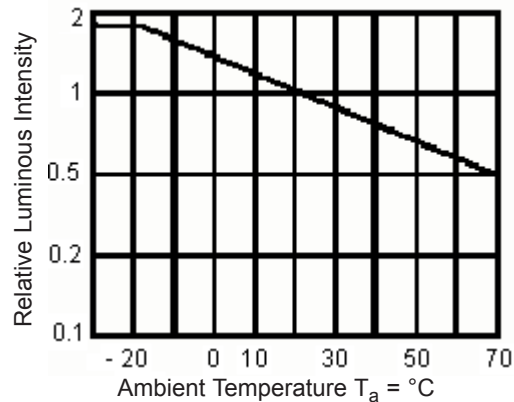
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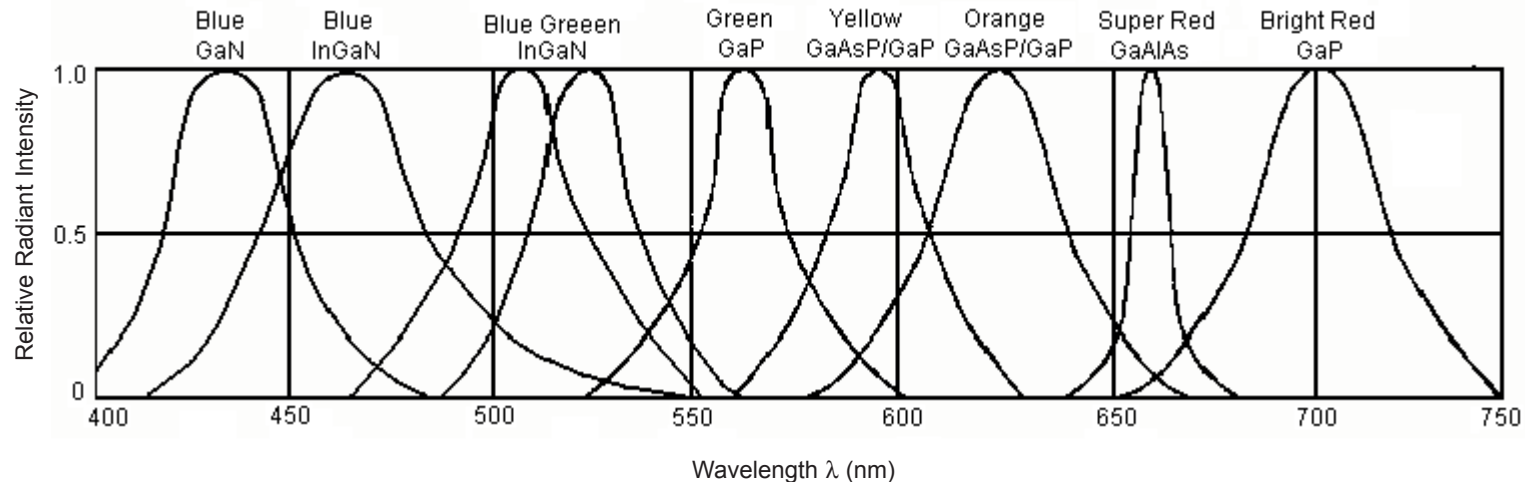
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Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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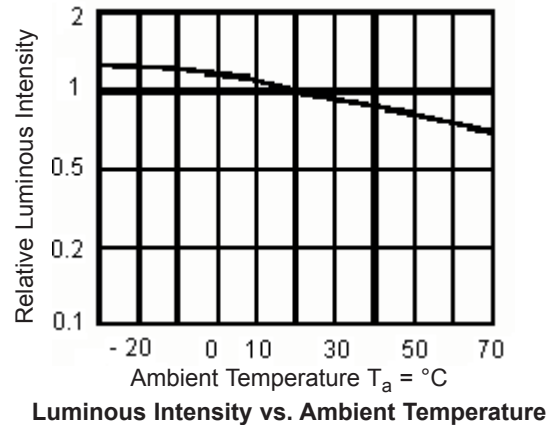
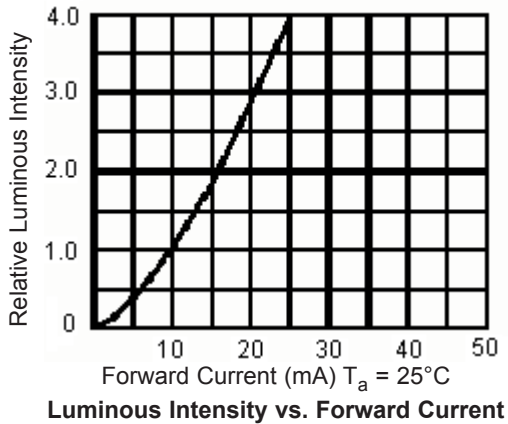
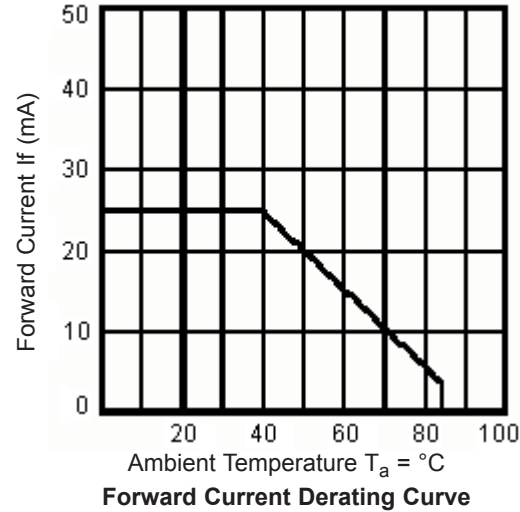
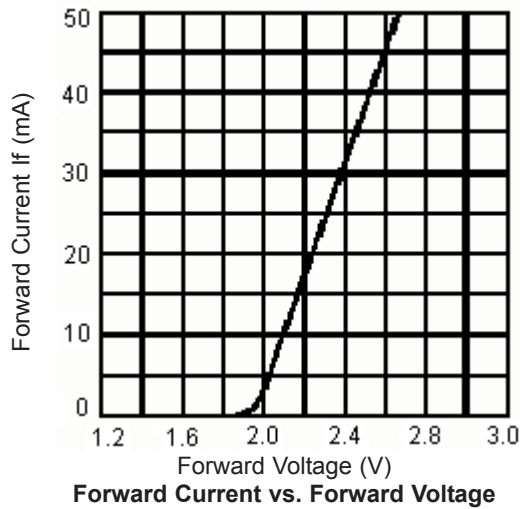


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Green (GaP $\lambda_P = 568\text{nm}$)

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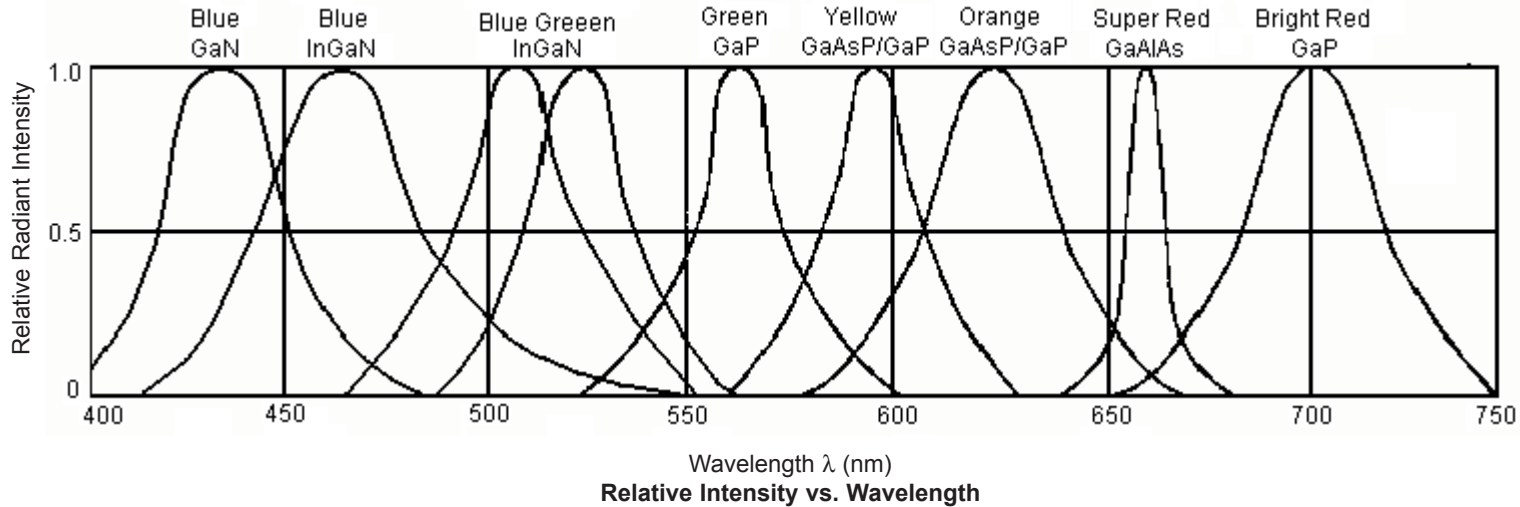


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Part Number Table

Description	Part Number
LED, 3mm, Orange/Green	MCL059PURGW

<http://www.farnell.com><http://www.newark.com><http://www.cpc.co.uk>

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