

Features

- LOW POWER CONSUMPTION.
- ULTRA BRIGHTNESS IS AVAILABLE .
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- SUITABLE FOR LEVEL INDICATOR.
- LONG LIFE - SOLID STATE RELIABILITY.

L914H BRIGHT RED

L914I HIGH EFFICIENCY RED

L914A YELLOW

L914G GREEN

L914E ORANGE

L914PG PURE GREEN

Description

The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

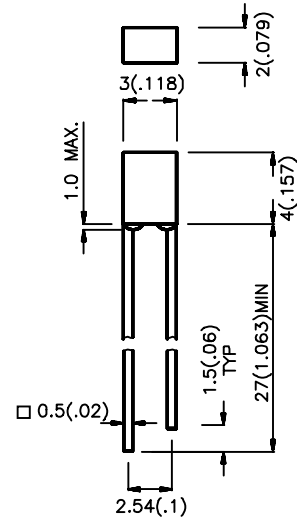
The High Efficiency Red and Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

The Pure Green source color devices are made with Gallium Phosphide Pure Green Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Typ.	
L914HD	BRIGHT RED (GaP)	RED DIFFUSED	0.2	1	100°
L914HT	BRIGHT RED (GaP)	RED TRANS.	0.5	1	90°
L914ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	2	8	100°
L914IT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED TRANS.	3	8	90°
L914ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	2	8	100°
L914ET	ORANGE (GaAsP/GaP)	ORANGE TRANS.	3	8	90°
L914GD	GREEN (GaP)	GREEN DIFFUSED	2	6	100°
L914GT	GREEN (GaP)	GREEN TRANS.	5	8	90°
L914AD	YELLOW (GaAsP/GaP)	AMBER DIFFUSED	2	5	100°
L914AT	YELLOW (GaAsP/GaP)	AMBER TRANS.	5	8	90°
L914PGT	PURE GREEN (GaP)	GREEN TRANS.	0.5	1	90°

Note:

1. $\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

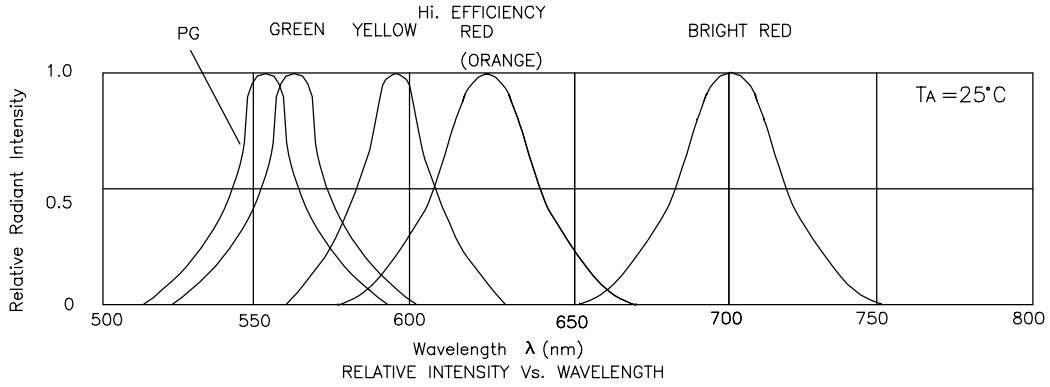
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Green	700 625 625 565 590 555		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Bright Red High Efficiency Red Orange Green Yellow Pure Green	45 45 45 30 35 30		nm	I _F =20mA
C	Capacitance	Bright Red High Efficiency Red Orange Green Yellow Pure Green	40 12 12 45 10 45		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Bright Red High Efficiency Red Orange Green Yellow Pure Green	2.0 2.0 2.0 2.2 2.1 2.25	2.5 2.5 2.5 2.5 2.5 2.6	V	I _F =20mA
I _R	Reverse Current	All		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

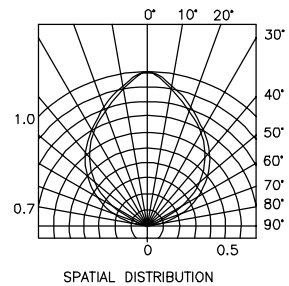
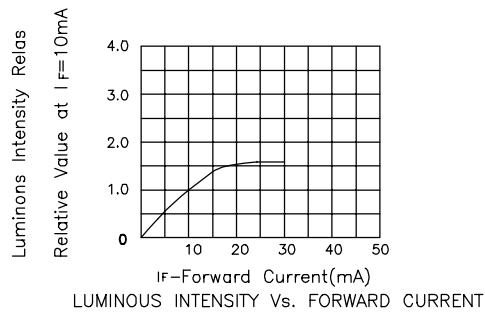
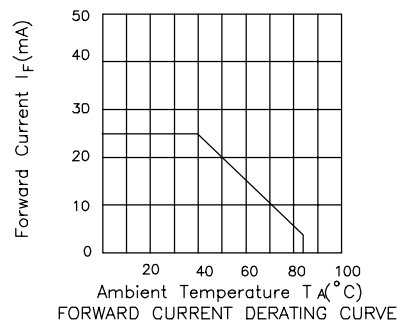
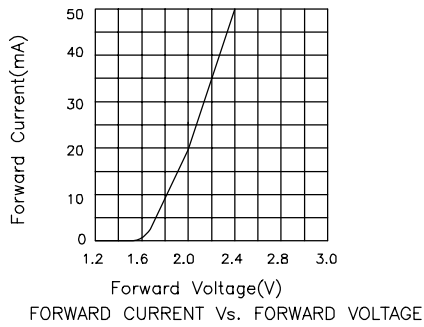
Parameter	Bright Red	High Efficiency Red	Orange	Green	Yellow	Pure Green	Units
Power dissipation	120	105	105	105	105	105	mW
DC Forward Current	25	30	30	25	30	25	mA
Peak Forward Current [1]	150	150	150	150	150	150	mA
Reverse Voltage	5	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C						
Lead Soldering Temperature [2]	260°C For 5 Seconds						

Notes:

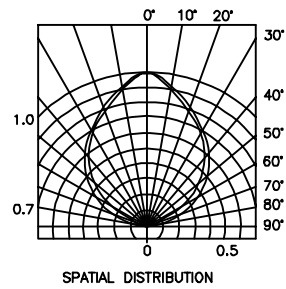
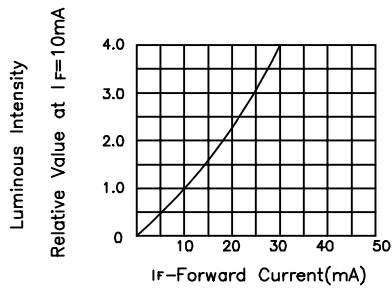
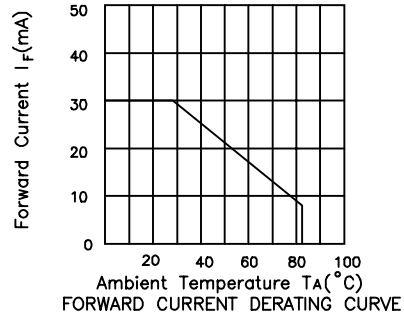
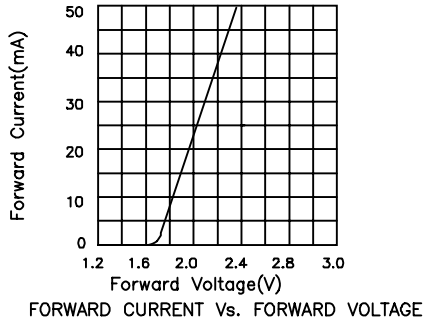
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



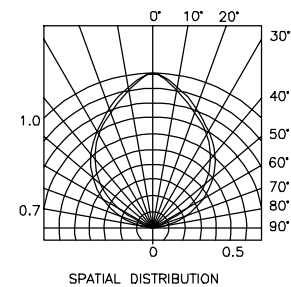
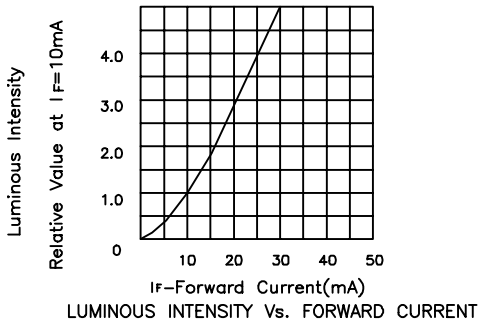
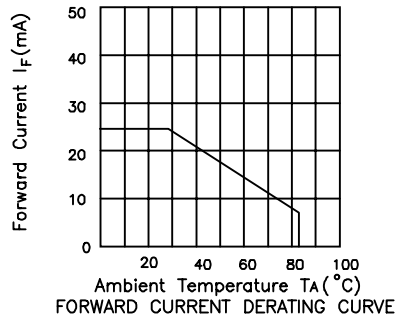
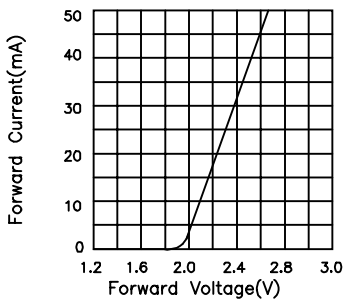
Bright Red L914HD,L914HT



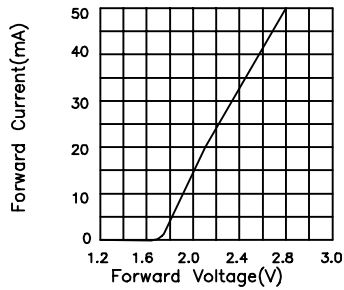
High Efficiency Red L914ID,L914IT Orange L914ED,L914EC



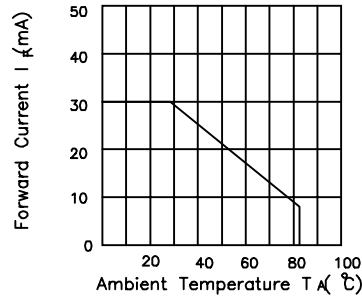
Green L914GD,L914GT



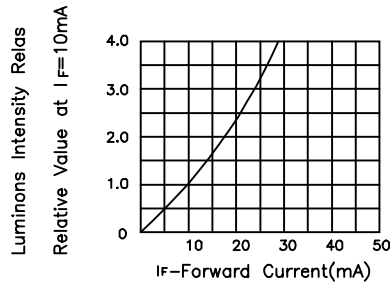
Yellow L914AD,L914AT



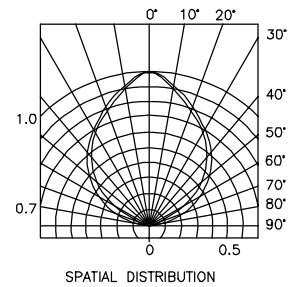
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

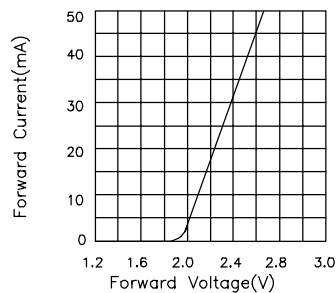


LUMINOUS INTENSITY Vs. FORWARD CURRENT

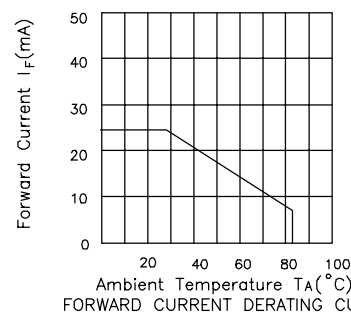


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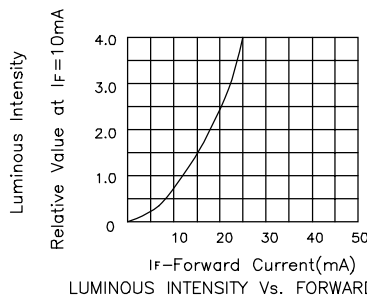
Pure Green L914PGT



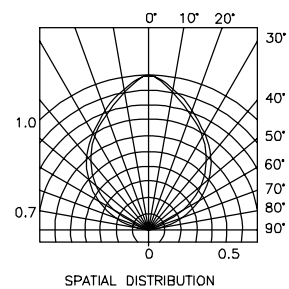
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION