

P/N: L-4060XH/111Y1GD

HIGH EFFICIENCY RED
YELLOW / GREEN

Features

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.

Description

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

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

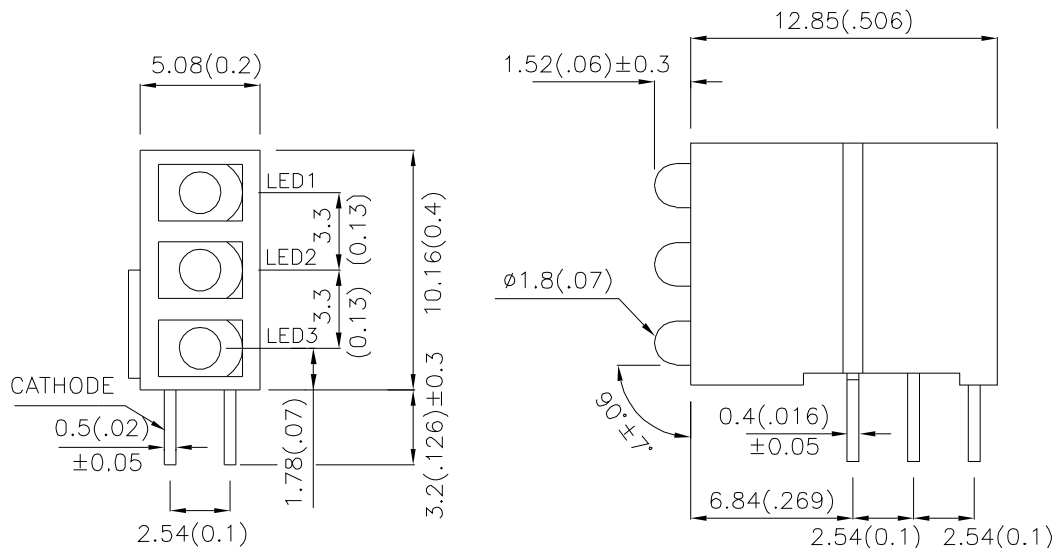
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions

LED1: L-4060ID(RED)

LED2: L-4060YD(YELLOW)

LED3: L-4060GD(GREEN)



Notes:

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

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 10 mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
L-4060XH/111Y1GD	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	15	70°
	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	1.8	5	70°
	GREEN (GaP)	GREEN DIFFUSED	5	10	70°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous Intensity / Luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red Yellow Green	627 590 565		nm	I _F =20mA
λ _D [1]	Dominant Wavelength	High Efficiency Red Yellow Green	625 588 568		nm	I _F =20mA
Δλ 1/2	Spectral Line Half-width	High Efficiency Red Yellow Green	45 35 30		nm	I _F =20mA
C	Capacitance	High Efficiency Red Yellow Green	15 20 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	High Efficiency Red Yellow Green	2.0 2.1 2.2	2.5 2.5 2.5	V	I _F =20mA
I _R	Reverse Current	High Efficiency Red Yellow Green		10 10 10	μA	V _R = 5V

Notes:

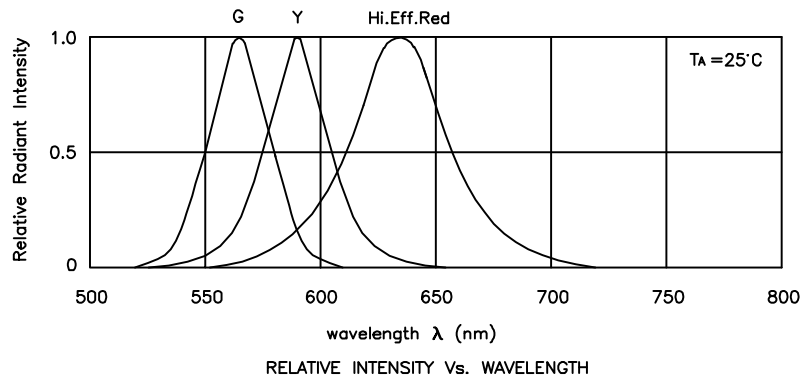
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

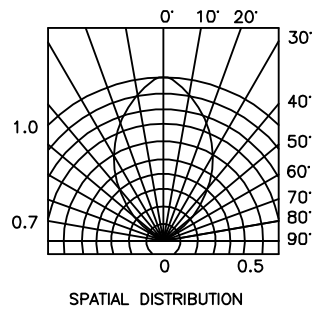
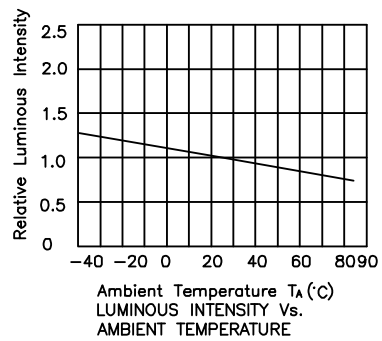
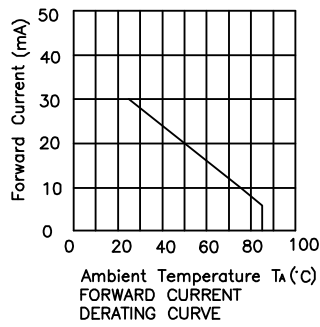
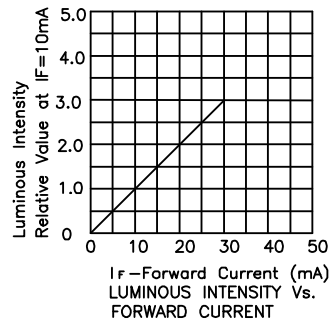
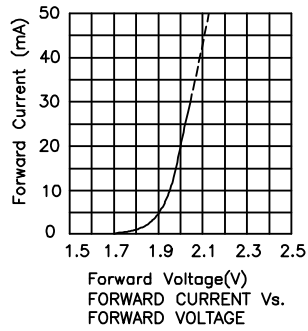
Parameter	High Efficiency Red	Yellow	Green	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	30	25	mA
Peak Forward Current [1]	160	140	140	mA
Reverse Voltage	5			V
Operating/storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

Notes:

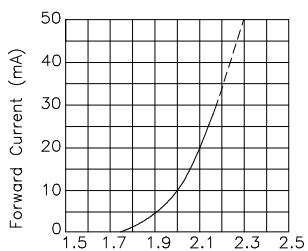
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



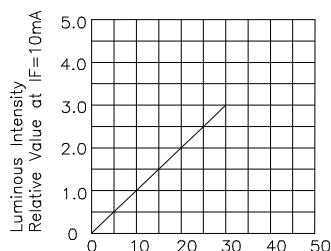
L-4060XH/111Y1GD High Efficiency Red



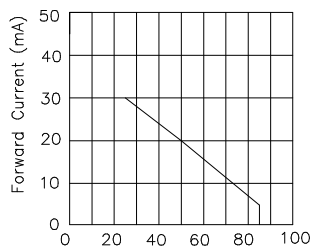
Yellow



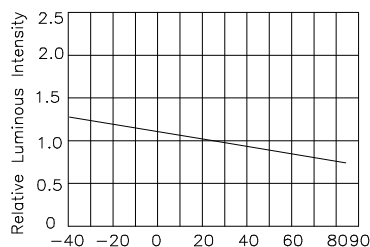
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



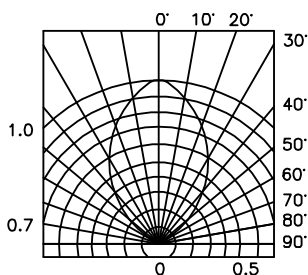
Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature T_A (°C)
FORWARD CURRENT
DERATING CURVE



Ambient Temperature T_A (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Green

