

L21ID HIGH EFFICIENCY RED	L21ED ORANGE
L21GD GREEN	L21YD YELLOW
L21SGD SUPERBRIGHT GREEN	

Features

- LOW POWER CONSUMPTION.
- SUITABLE FOR AUDIO PANEL INDICATOR.
- LONG LIFE-SOLID STATE RELIABILITY.

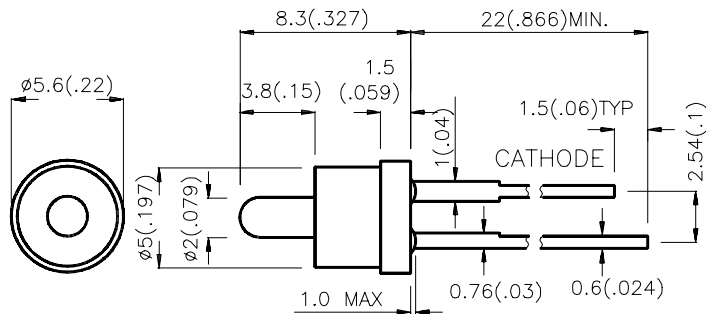
Description

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

The Green and Super Bright 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.

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 subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA*20mA		Viewing Angle
			Min.	Typ.	2θ1/2
L21ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	1.8	4	60°
L21ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	1.8	4	60°
L21GD	GREEN (GaP)	GREEN DIFFUSED	1.2	3	60°
L21YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	1.2	3	60°
L21SGD	SUPER BRIGHT GREEN (GaP)	GREEN DIFFUSED	*5	*6	60°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. * Luminous intensity with asterisk is measured at 20mA.

Electrical / Optical Characteristics at T_A=25°C

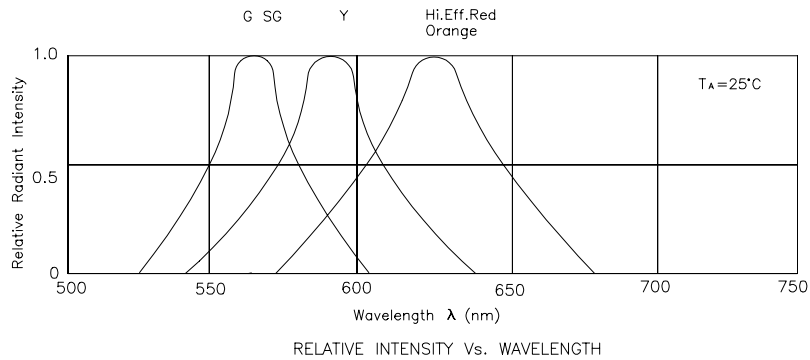
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red Orange Green Yellow Super Bright Green	627 627 565 590 565		nm	IF=20mA
λ _D	Dominate Wavelength	High Efficiency Red Orange Green Yellow Super Bright Green	625 625 568 588 568		nm	IF=20mA
Δλ _{1/2}	Spectral Line Halfwidth	High Efficiency Red Orange Green Yellow Super Bright Green	45 45 30 35 30		nm	IF=20mA
C	Capacitance	High Efficiency Red Orange Green Yellow Super Bright Green	15 15 15 20 15		pF	VF=0V;f=1MHz
V _F	Forward Voltage	High Efficiency Red Orange Green Yellow Super Bright Green	2.0 2.0 2.2 2.1 2.2	2.5 2.5 2.5 2.5 2.5	V	IF=20mA
I _R	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

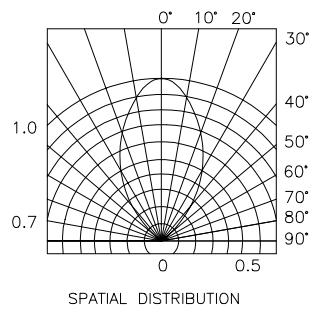
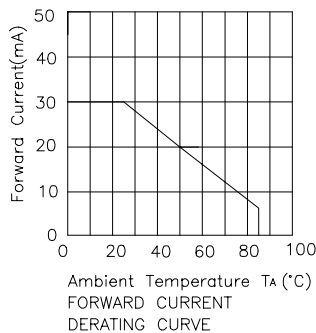
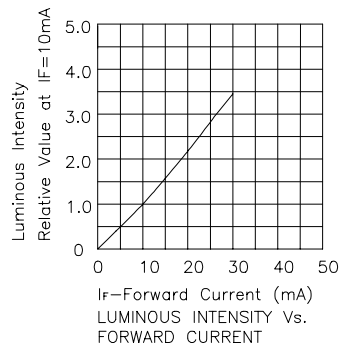
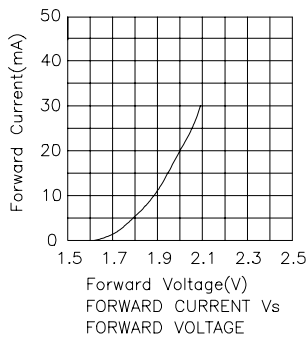
Parameter	High Efficiency Red	Orange	Green	Yellow	Super Bright Green	Units
Power dissipation	105	105	105	105	105	mW
DC Forward Current	30	30	25	30	25	mA
Peak Forward Current [1]	160	160	140	140	140	mA
Reverse Voltage	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C					
Lead Solder Temperature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

Notes:

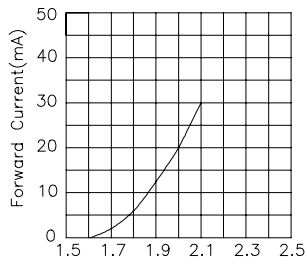
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



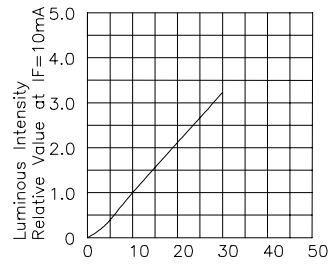
High Efficiency Red L211D



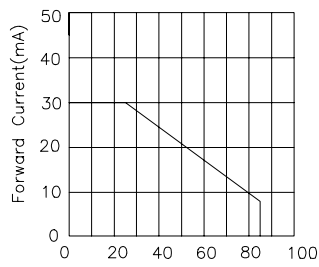
Orange L21ED



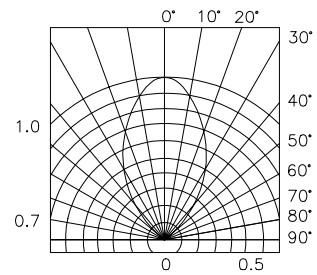
Forward Voltage(V)
FORWARD CURRENT Vs
FORWARD VOLTAGE



IF-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT

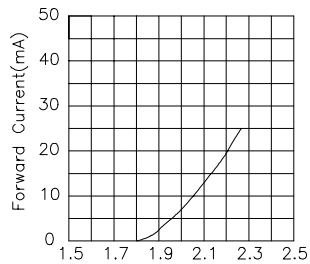


Ambient Temperature TA (°C)
FORWARD CURRENT
DERATING CURVE

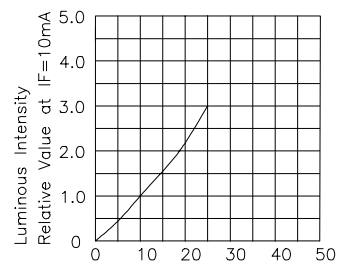


SPATIAL DISTRIBUTION

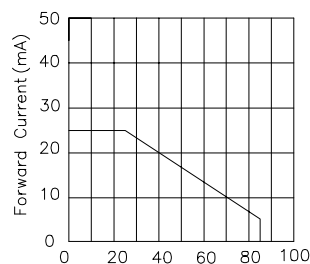
Green L21GD



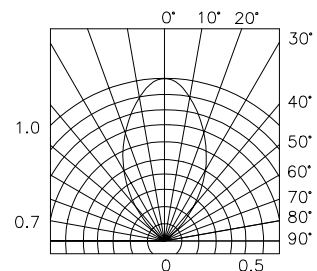
Forward Voltage(V)
FORWARD CURRENT Vs
FORWARD VOLTAGE



IF-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT

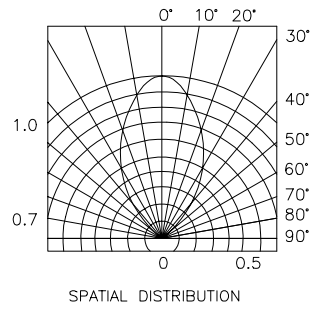
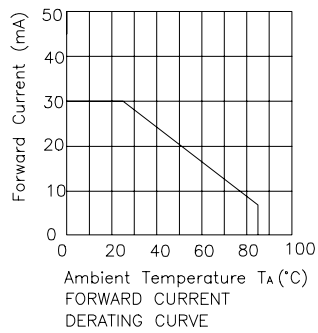
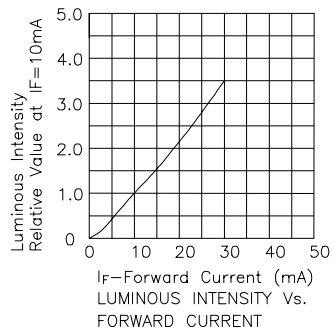
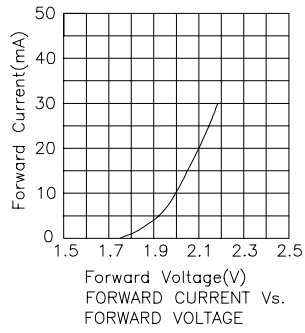


Ambient Temperature TA (°C)
FORWARD CURRENT
DERATING CURVE



SPATIAL DISTRIBUTION

Yellow L21YD



Super Bright Green L21SGD

