

L-21ID HIGH EFFICIENCY RED	L-21ED ORANGE
L-21GD GREEN	L-21YD YELLOW
L-21SGD SUPER BRIGHT GREEN	

### Features

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

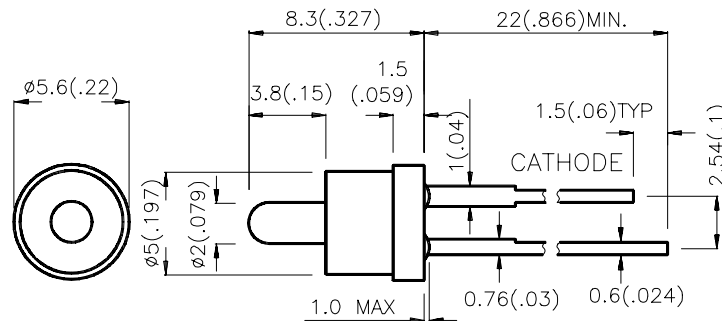
### Description

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
L-21ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	1.8	4	60°
L-21ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	1.8	4	60°
L-21GD	GREEN (GaP)	GREEN DIFFUSED	1.2	3	60°
L-21YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	1.2	3	60°
L-21SGD	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<sub>A</sub>=25°C

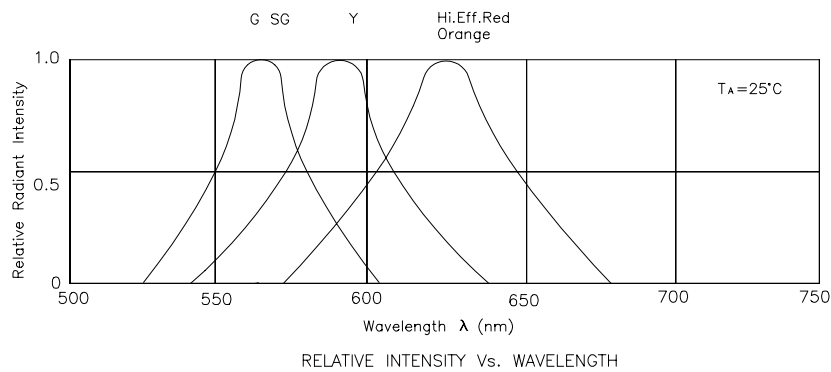
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red Orange Green Yellow Super Bright Green	627 627 565 590 565		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red Orange Green Yellow Super Bright Green	625 625 568 588 568		nm	IF=20mA
Δλ <sub>1/2</sub>	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 <sub>F</sub>	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 <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

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

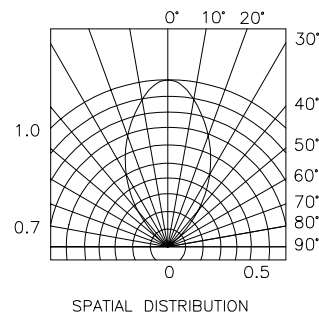
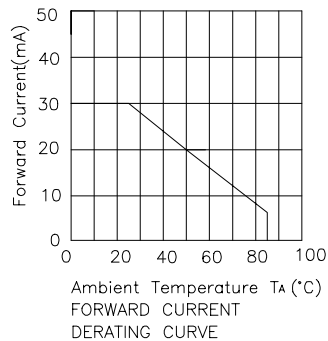
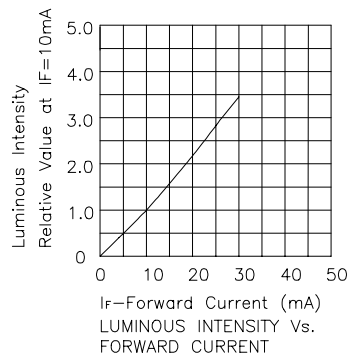
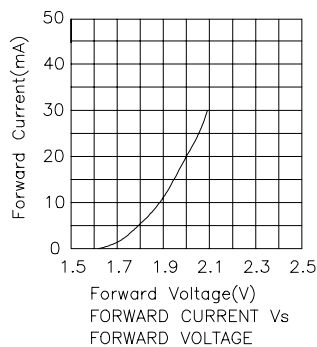
Parameter	High Efficiency Red	Orange	Green	Yellow	Super Bright Green	Units
Power dissipation	105	105	105	105	105	mW
DC Forward Current	30	30	25	30	25	mA
Peak Forward Current [1]	160	160	140	140	140	mA
Reverse Voltage	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C					
Lead Solder Temperature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

Notes:

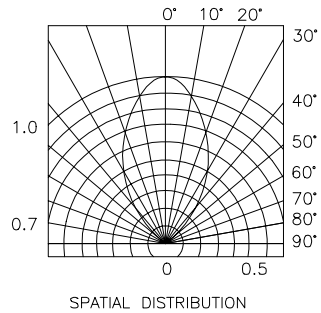
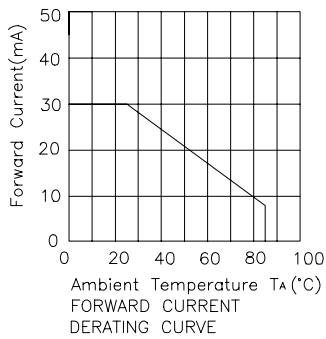
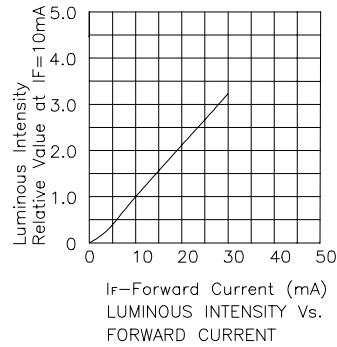
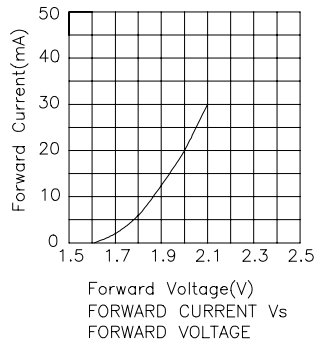
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



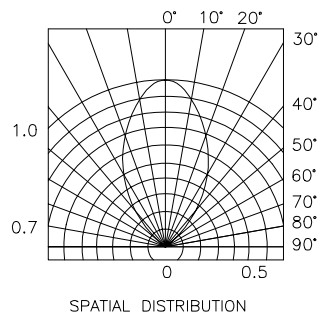
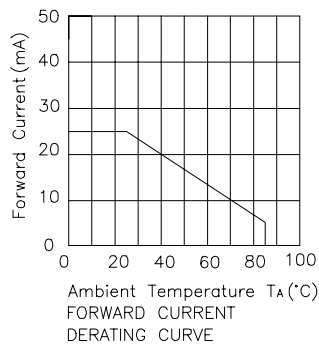
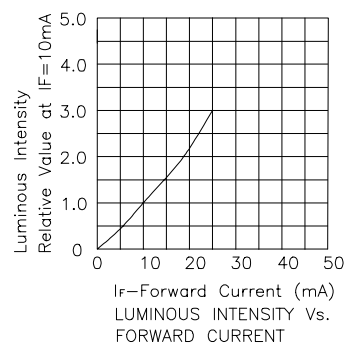
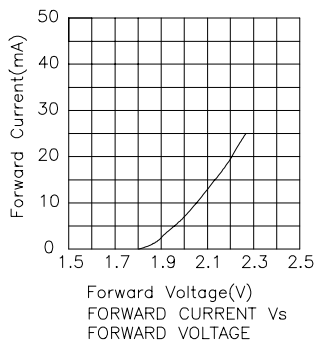
## High Efficiency Red L-21ID



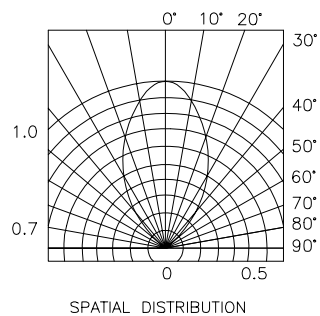
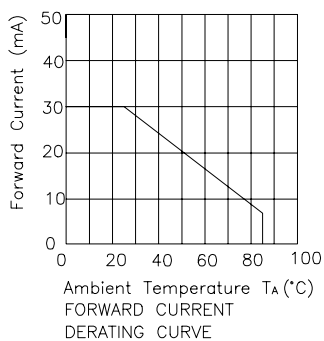
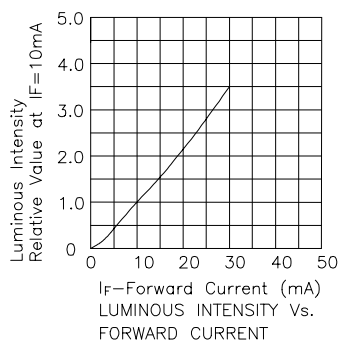
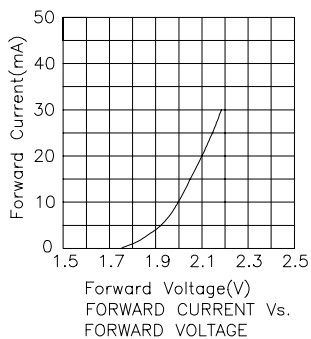
## Orange L-21ED



## Green L-21GD



## Yellow L-21YD



## Super Bright Green L-21SGD

