

L7113SGx SUPER BRIGHT GREEN

L7113SRx SUPER BRIGHT RED

### Features

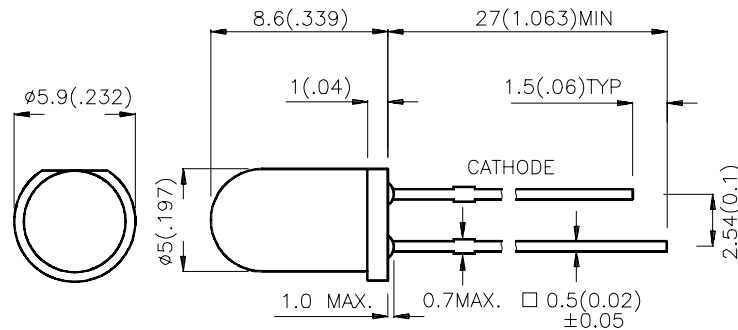
- ULTRA BRIGHTNESS.
- BOTH DIFFUSED AND WATER CLEAR LENS ARE AVAILABLE.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.

### Description

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

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red 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) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L7113SGC	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	70	200	20°
L7113SGD	SUPER BRIGHT GREEN (GaP)	GREEN DIFFUSED	20	40	30°
L7113SRC/DU	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	1000	1200	20°
L7113SRC/DV			1300	1500	
L7113SRC/DW			1600	1800	
L7113SRC/E			2000	2800	
L7113SRC/F			3500	4000	
L7113SRD/D	SUPER BRIGHT RED (GaAlAs)	RED DIFFUSED	200	250	30°
L7113SRD/E			300	400	
L7113SRD/F			500	600	
L7113SRD/G			700	900	
L7113SRD/H			1000	1500	

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

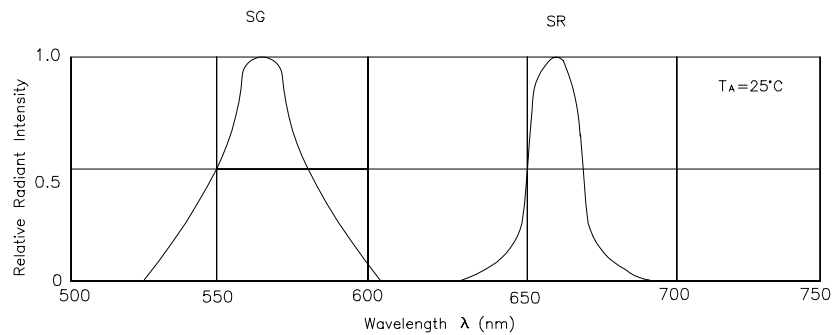
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Super Bright Red Super Bright Green	660 565		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	Super Bright Red Super Bright Green	640 568		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	Super Bright Red Super Bright Green	20 30		nm	IF=20mA
C	Capacitance	Super Bright Red Super Bright Green	45 15		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Red Super Bright Green	1.85 2.2	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	Super Bright Red	Super Bright Green	Units
Power dissipation	100	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	155	140	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 5 Seconds		

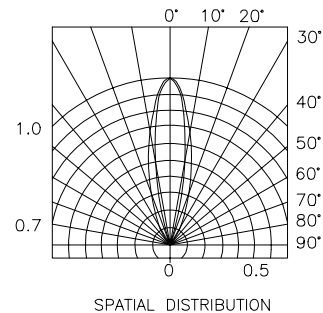
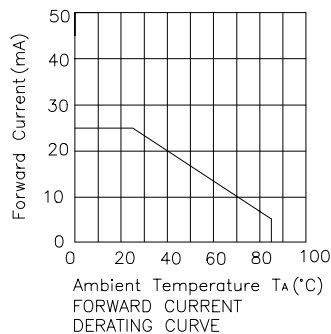
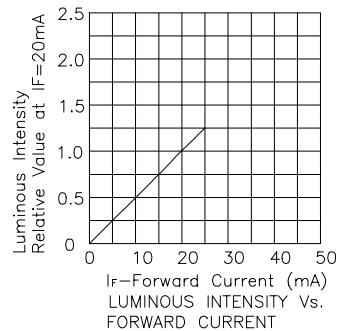
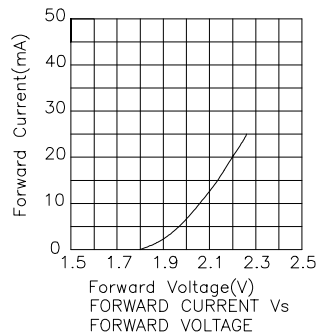
**Notes:**

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



RELATIVE INTENSITY Vs. WAVELENGTH

## Super Bright Green L7113SGD,L7113SGC



## Super Bright Red L7113SRD/x,L7113SRC/x

