

L7113SGx SUPER BRIGHT GREEN

L7113SRx SUPER BRIGHT RED

Features

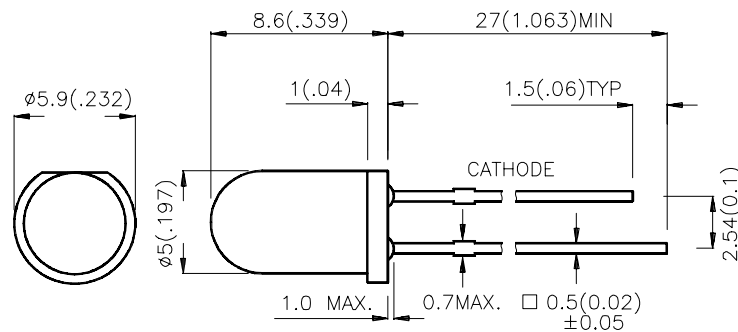
- ULTRA BRIGHTNESS.
- BOTH DIFFUSED AND WATER CLEAR LENS ARE AVAILABLE.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.

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_A=25°C

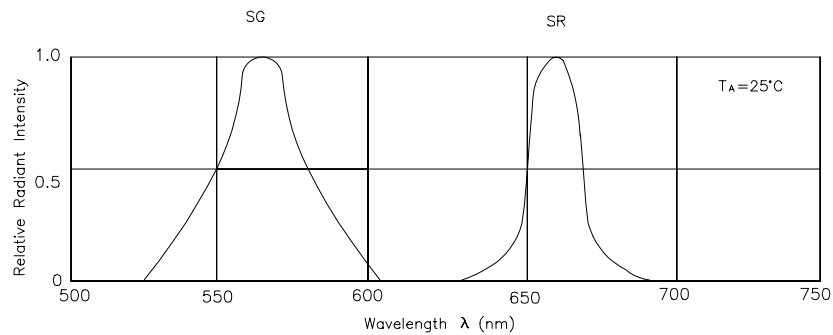
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|--|-------------|------------|-------|-----------------|
| λ _{peak} | Peak Wavelength | Super Bright Red Super Bright Green | 660 565 | | nm | IF=20mA |
| λ _D | Dominate Wavelength | Super Bright Red Super Bright Green | 640 568 | | nm | IF=20mA |
| Δλ _{1/2} | 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 _F | Forward Voltage | Super Bright Red Super Bright Green | 1.85 2.2 | 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 | 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 | | |

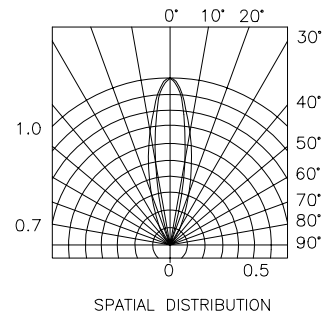
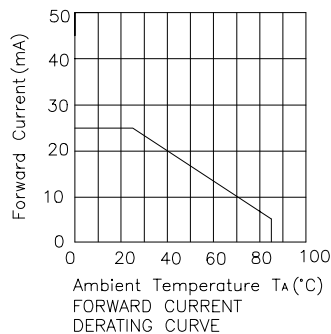
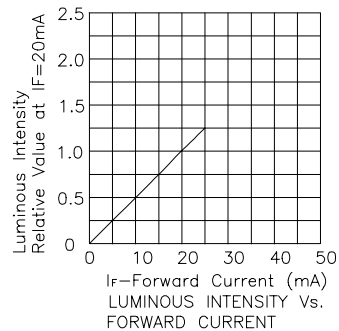
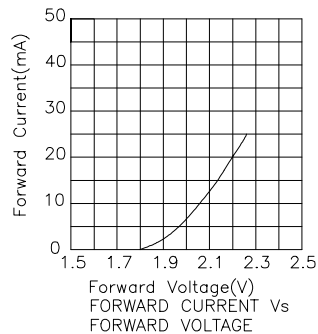
Notes:

- 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

