

L1543SGC SUPER BRIGHT GREEN

L1543SRC/x SUPER BRIGHT RED

### Features

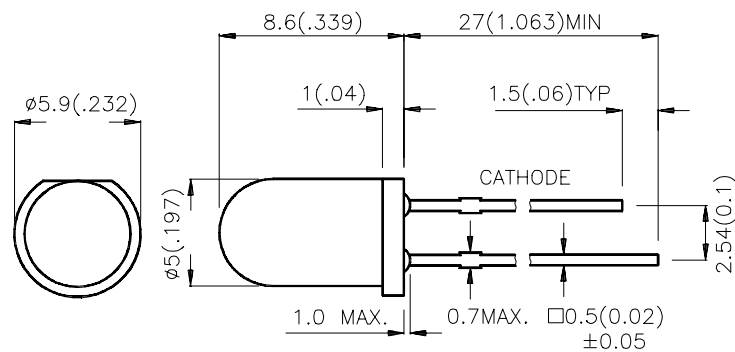
- ULTRA BRIGHTNESS.
- WIDE VIEWING ANGLE.
- WATER CLEAR LENS.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.

### 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.	θ1/2
L1543SGC	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	70	150	50°
L1543SRC/C	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	400	600	50°
L1543SRC/D			700	900	50°
L1543SRC/E			1000	2000	50°

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

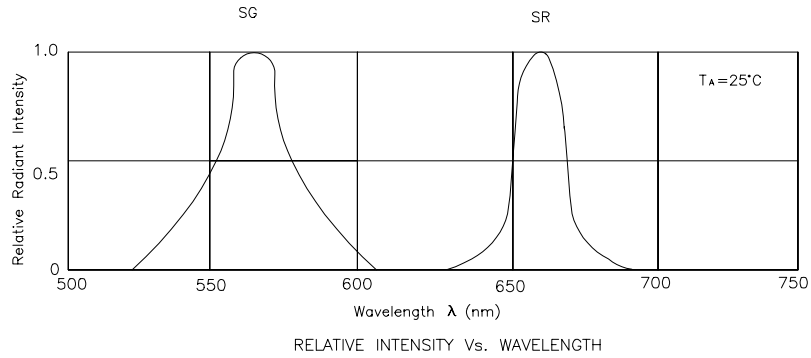
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Super Bright Red Super Bright Green	660 565		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	Super Bright Red Super Bright Green	640 568		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	Super Bright Red Super Bright Green	20 30		nm	IF=20mA
C	Capacitance	Super Bright Red Super Bright Green	45 15		pF	V <sub>F</sub> =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	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

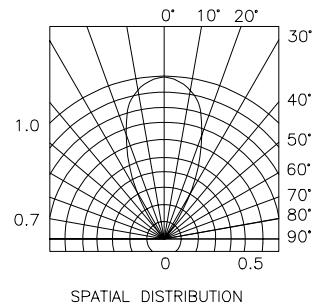
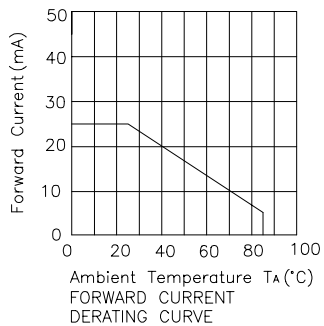
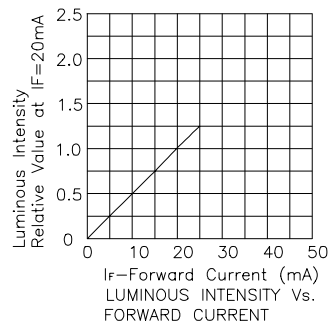
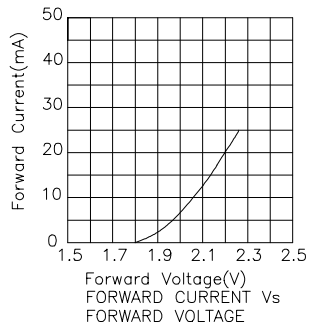
Parameter	Super Bright Red	Super Bright Green	Units
Power dissipation	100	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	155	140	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 5 Seconds		

Notes:

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



## Super Bright Green L1543SGC



## Super Bright Red L1543SRC/x

