

L-819SRSGC-CC

SUPER BRIGHT RED  
SUPER BRIGHT GREEN

### Features

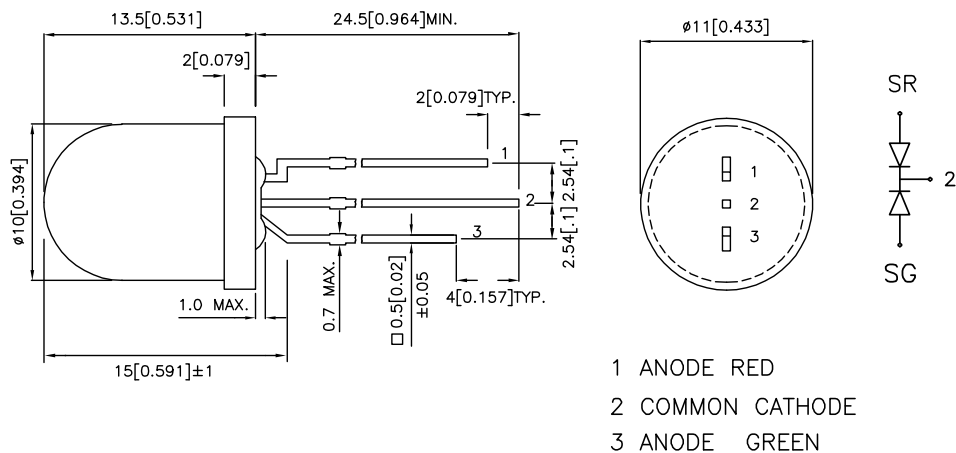
- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- 3 LEADS WITH ONE COMMON CATHODE LEAD.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

### Description

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

The Super Bright Green source color devices are made with Gallium Phosphide Green 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 leads emerge from the package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
L-819SRSGC-CC	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	280	600	40°
	SUPER BRIGHT GREEN (GaP)		70	150	

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 TA=25°C

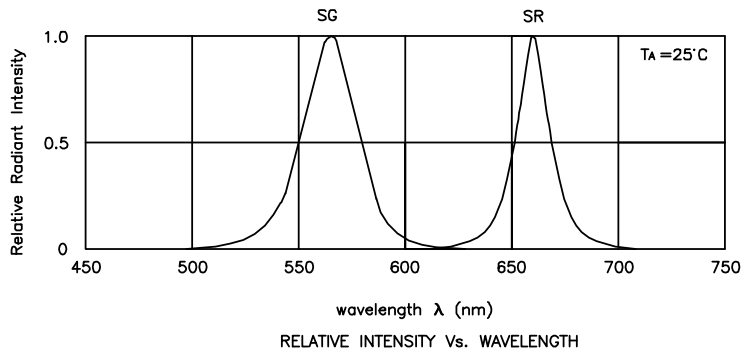
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Super Bright Red Super Bright Green	660 565		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominant Wavelength	Super Bright Red Super Bright Green	640 568		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Super Bright Red Super Bright Green	20 30		nm	I <sub>F</sub> =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	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	All		10	uA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at TA=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		V
Operating / Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

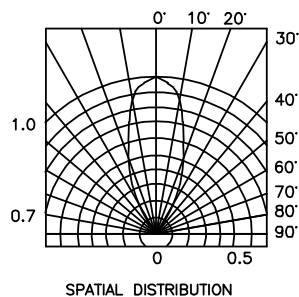
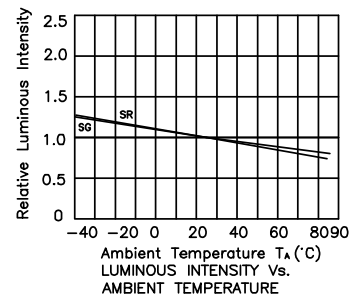
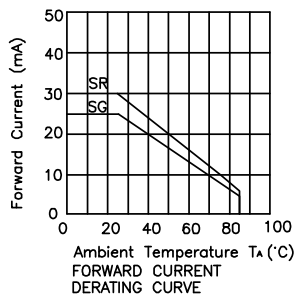
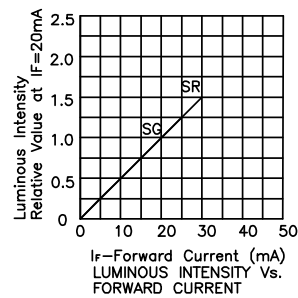
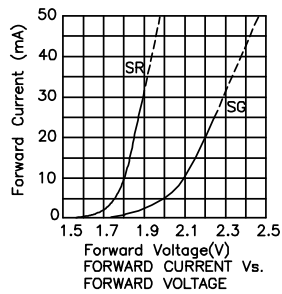
Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.
- 5mm below package base.



## Super Bright Red /Super Bright Green

## L-819SRSGC-CC



### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength:  $\pm 1\text{nm}$
2. Luminous Intensity:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.