

L53SRC/x SUPER BRIGHT RED

L53SRD/x SUPER BRIGHT RED

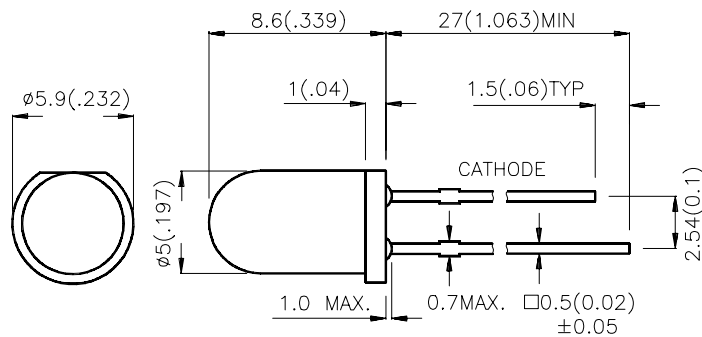
Features

- 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 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 |
| L53SRC/DU | SUPER BRIGHT RED (GaAlAs) | WATER CLEAR | 1000 | 1200 | 30° |
| L53SRC/DV | | | 1300 | 1500 | |
| L53SRC/DW | | | 1600 | 1800 | |
| L53SRC/E | | | 2000 | 2800 | |
| L53SRC/F | | | 3500 | 4000 | |
| L53SRD/D | SUPER BRIGHT RED (GaAlAs) | RED DIFFUSED | 200 | 250 | 60° |
| L53SRD/E | | | 300 | 400 | |
| L53SRD/F | | | 500 | 600 | |
| L53SRD/G | | | 700 | 900 | |
| L53SRD/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

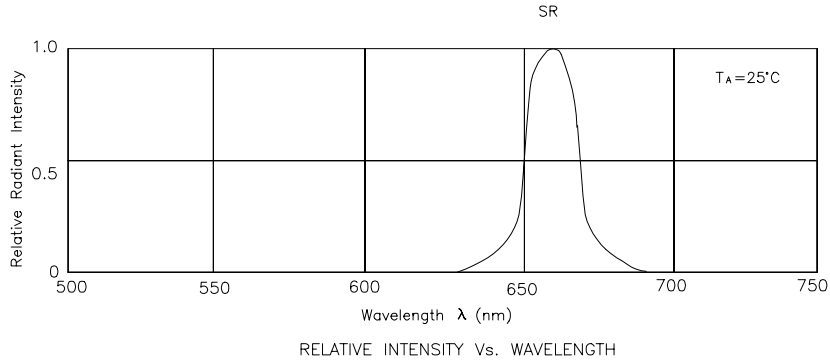
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|------------------|------|------|-------|-----------------|
| λ _{peak} | Peak Wavelength | Super Bright Red | 660 | | nm | IF=20mA |
| λ _D | Dominate Wavelength | Super Bright Red | 640 | | nm | IF=20mA |
| Δλ _{1/2} | Spectral Line Halfwidth | Super Bright Red | 20 | | nm | IF=20mA |
| C | Capacitance | Super Bright Red | 45 | | pF | VF=0V;f=1MHz |
| V _F | Forward Voltage | Super Bright Red | 1.85 | 2.5 | V | IF=20mA |
| I _R | Reverse Current | Super Bright Red | | 10 | μA | VR = 5V |

Absolute Maximum Ratings at T_A=25°C

| Parameter | Super Bright Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation | 100 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 155 | mA |
| Reverse Voltage | 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 Red L53SRD/x,L53SRC/x

