

L-813SRC-x SUPER BRIGHT RED

L-813SRD-x SUPER BRIGHT RED

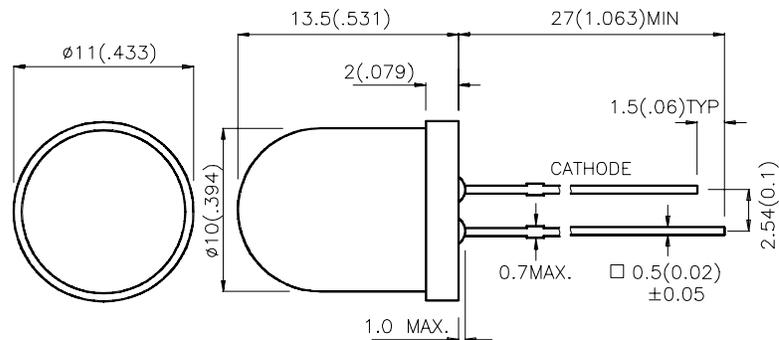
Features

- ULTRA BRIGHTNESS.
- 10mm DIAMETER BIG LAMP.
- WIDE VIEWING ANGLE.
- I.C. COMPATIBLE.
- BOTH DIFFUSED AND WATER CLEAR LENS ARE AVAILABLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.

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 |
| L-813SRC-C | SUPER BRIGHT RED (GaAIAs) | WATER CLEAR | 1000 | 1500 | 40° |
| L-813SRC-D | | | 1600 | 1800 | 40° |
| L-813SRC-E | | | 2000 | 2800 | 40° |
| L-813SRC-F | | | 3000 | 3800 | 40° |
| L-813SRD-C | SUPER BRIGHT RED (GaAIAs) | RED DIFFUSED | 200 | 300 | 60° |
| L-813SRD-D | | | 350 | 400 | 60° |
| L-813SRD-E | | | 450 | 500 | 60° |
| L-813SRD-F | | | 550 | 600 | 60° |
| L-813SRD-G | | | 650 | 700 | 60° |
| L-813SRD-H | | | 800 | 1200 | 60° |

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

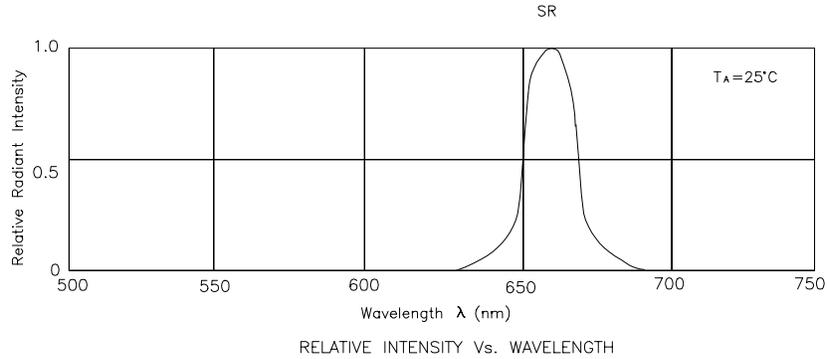
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|------------------|------|------|-------|-----------------|
| λ _{peak} | Peak Wavelength | Super Bright Red | 660 | | nm | IF=20mA |
| λ _D | Dominant Wavelength | Super Bright Red | 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:

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



Super Bright Red L-793SRC-x, L-793SRD-x

