

L-793SRC-x SUPER BRIGHT RED

L-793SRD-x SUPER BRIGHT RED

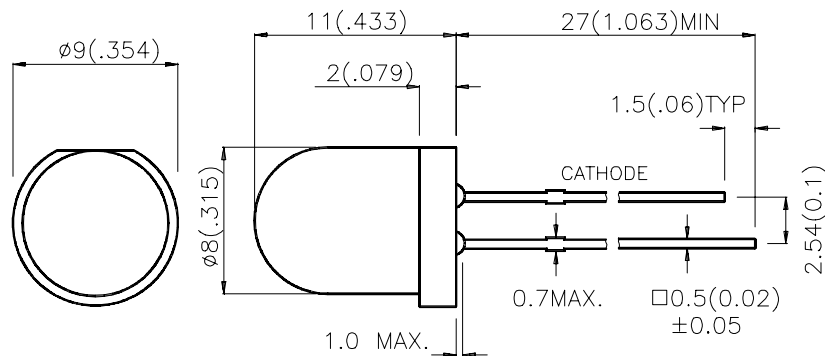
### Features

- ULTRA BRIGHTNESS.
- 8mm 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)<br>@ 20 mA |      | Viewing<br>Angle |
|------------|---------------------------|--------------|---------------------|------|------------------|
|            |                           |              | Min.                | Typ. |                  |
| L-793SRC-C | SUPER BRIGHT RED (GaAlAs) | WATER CLEAR  | 1000                | 1500 | 40°              |
| L-793SRC-D |                           |              | 1600                | 1800 | 40°              |
| L-793SRC-E |                           |              | 2000                | 2800 | 40°              |
| L-793SRC-F |                           |              | 3000                | 3800 | 40°              |
| L-793SRD-C | SUPER BRIGHT RED (GaAlAs) | RED DIFFUSED | 200                 | 300  | 60°              |
| L-793SRD-D |                           |              | 350                 | 400  | 60°              |
| L-793SRD-E |                           |              | 450                 | 500  | 60°              |
| L-793SRD-F |                           |              | 550                 | 600  | 60°              |
| L-793SRD-G |                           |              | 650                 | 700  | 60°              |
| L-793SRD-H |                           |              | 800                 | 1200 | 60°              |

Note:

1.  $\theta_{1/2}$  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

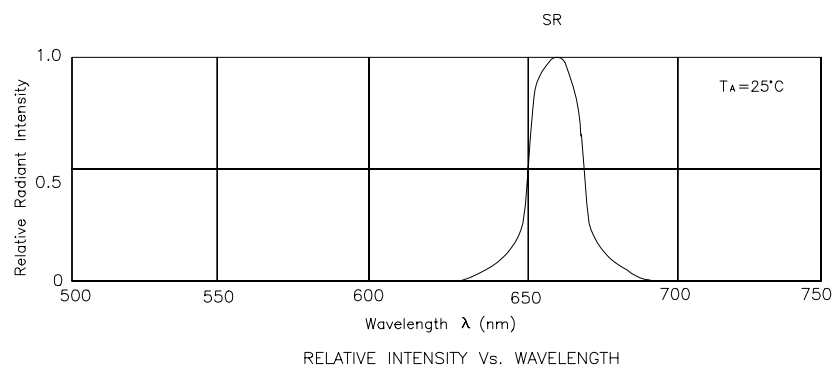
| Symbol                | Parameter               | Device           | Typ. | Max. | Units | Test Conditions |
|-----------------------|-------------------------|------------------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength         | Super Bright Red | 660  |      | nm    | IF=20mA         |
| $\lambda_D$           | Dominate Wavelength     | Super Bright Red | 640  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | Super Bright Red | 20   |      | nm    | IF=20mA         |
| C                     | Capacitance             | Super Bright Red | 45   |      | pF    | VF=0V;f=1MHz    |
| V <sub>F</sub>        | Forward Voltage         | Super Bright Red | 1.85 | 2.5  | V     | IF=20mA         |
| I <sub>R</sub>        | Reverse Current         | Super Bright Red |      | 10   | uA    | VR = 5V         |

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

