

L53SRC/x SUPER BRIGHT RED

L53SRD/x SUPER BRIGHT RED

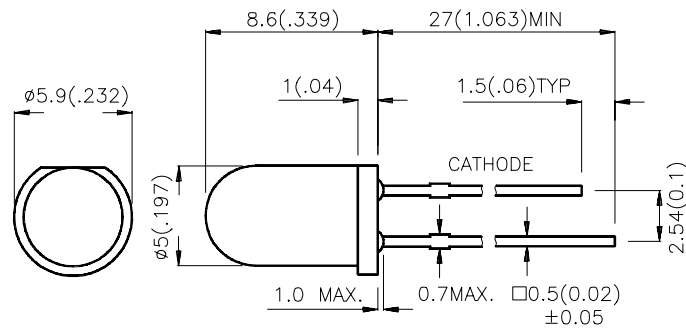
### Features

- 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.	θ1/2
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<sub>A</sub>=25°C

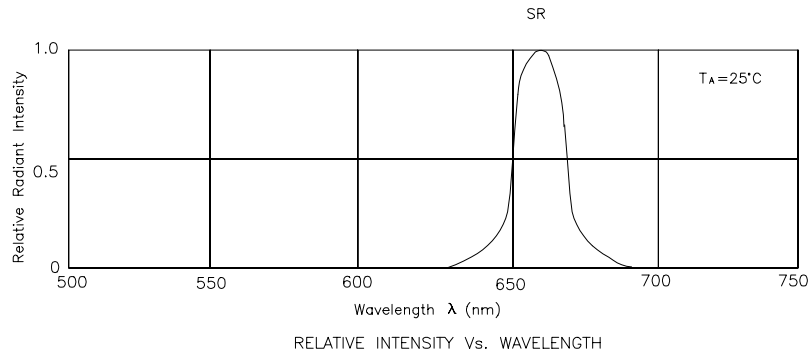
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Super Bright Red	660		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	Super Bright Red	640		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	Super Bright Red	20		nm	IF=20mA
C	Capacitance	Super Bright Red	45		pF	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. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



## Super Bright Red L53SRD/x, L53SRC/x

