

P/N: L-1533BQ/1SRD SUPER BRIGHT RED

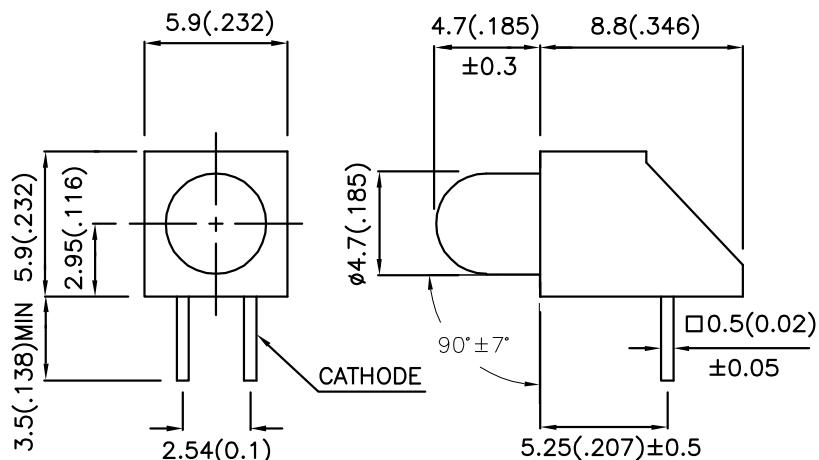
Features

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY - LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.

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 ±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	I _v (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	
L-1533BQ/1SRD	SUPER BRIGHT RED (GaAlAs)	RED DIFFUSED	110	400	60°

Note:

1. 01/2 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

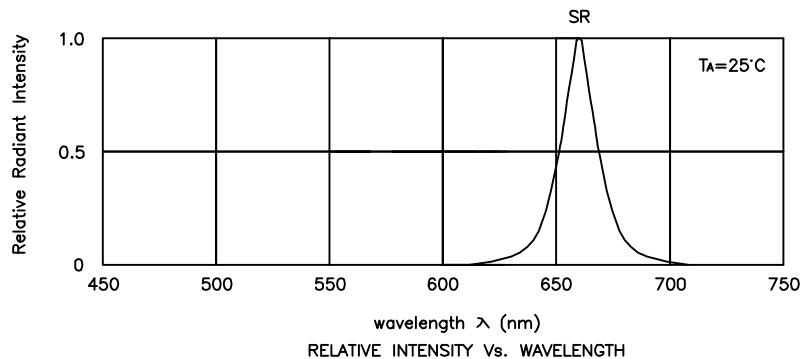
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	660		nm	I _F =20mA
λD	Dominant Wavelength	Super Bright Red	640		nm	I _F =20mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	I _F =20mA
C	Capacitance	Super Bright Red	45		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Super Bright Red	1.85	2.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Red		10	uA	V _R = 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 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

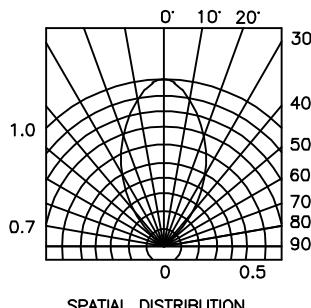
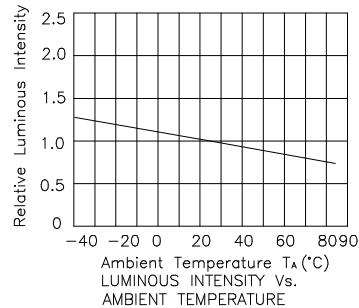
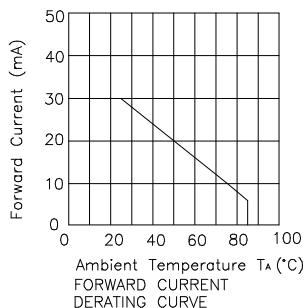
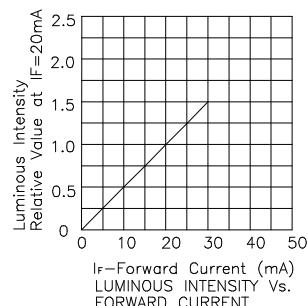
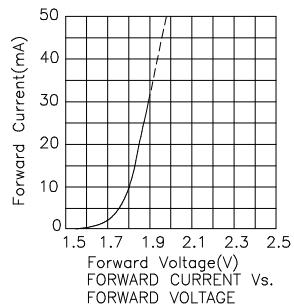
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



Super Bright Red

L-1533BQ/1SRD



Remarks:

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

1. Wavelength: +/-1nm
2. Luminous Intensity/ luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.