

10mm SOLID STATE LAMP

L-813SRD-E

SUPER BRIGHT RED

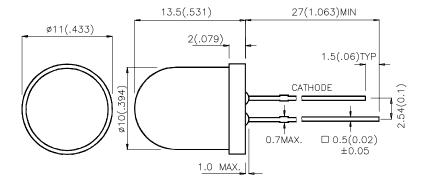
Features

- •10mm DIAMETER BIG LAMP.
- •WIDE VIEWING ANGLE.
- •I.C. COMPATIBLE.
- •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.

SPEC NO: DSAC3948 APPROVED: J.LU

REV NO: V.1 CHECKED: Allen Liu DATE: FEB/21/2003

PAGE: 1 OF 3

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Selection Guide

Part No.	Dice Lens Type		lv (mcd) @ 20 mA		Viewing Angle
		, , ,	Min.	Тур.	201/2
L-813SRD-E	SUPER BRIGHT RED(GaAIAs)	RED DIFFUSED	380	450	40°

Note:

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	660		nm	IF=20mA
λD	Dominate Wavelength	Super Bright Red	640		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	IF=20mA
С	Capacitance	Super Bright Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Red	1.85	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Red		10	uA	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	perating/Storage Temperature -40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

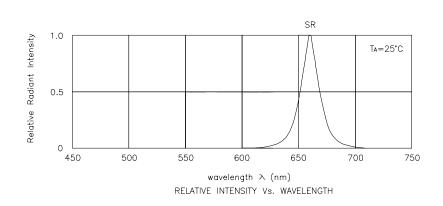
Notes

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

SPEC NO: DSAC3948 REV NO: V.1 DATE: FEB/21/2003 PAGE: 2 OF 3
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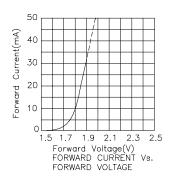
^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

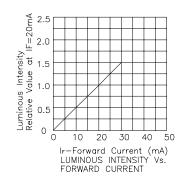
Kingbright

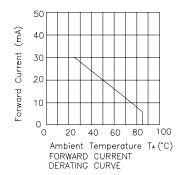


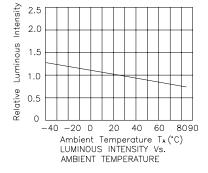
Super Bright Red

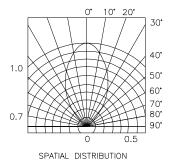
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PAGE: 3 OF 3

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