

T-1 (3mm) SUPER BRIGHT LED LAMPS

L934SRC/x SUPER BRIGHT RED L934SRD/x SUPER BRIGHT RED L934SGx SUPER BRIGHT GREEN

Features

- •ULTRA BRIGHTNESS.
- •BOTH DIFFUSED AND WATER CLEAR LENS ARE AVAILABLE.
- •OUTSTANDING MATERIAL EFFICIENCY.
- •RELIABLE AND RUGGED.
- •IC COMPATIBLE/LOW CURRENT CAPABILITY.

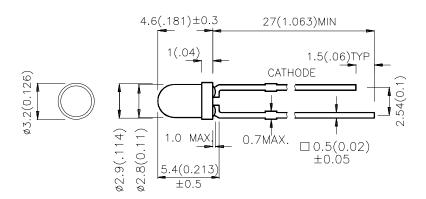
Description

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

The Super Bright Green source color devices are made

with Gallium Phosphide Green 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 | lv (mcd) @ 20 mA | | Viewing Angle |
|-----------|-----------------------------|----------------|---------------------|------|------------------|
| | | | Min. | Тур. | 201/2 |
| L934SGC | CLIDED DDICLIT CDEEN(C-D) | WATER CLEAR | 80 | 150 | 50° |
| L934SGD | SUPER BRIGHT GREEN(GaP) | GREEN DIFFUSED | 20 | 40 | 60° |
| L934SRC/D | | | 500 | 600 | - 50° |
| L934SRC/E | 7 | | 700 | 900 | |
| L934SRC/F | CLIDED DDICLIT DED (C-ALA-) | WATER CLEAR | 1000 | 1100 | |
| L934SRC/G | SUPER BRIGHT RED (GaAlAs) | | 1200 | 1300 | |
| L934SRC/H | | | 1400 | 1700 | |
| L934SRC/J | | | 1800 | 2300 | |
| L934SRD/D | | | 100 | 150 | - 60° |
| L934SRD/E | | | 200 | 250 | |
| L934SRDF | | RED DIFFUSED | 300 | 350 | |
| L934SRD/G | SUPER BRIGHT RED (GaAlAs) | | 400 | 500 | |
| L934SRD/H | | | 600 | 900 | |
| L934SRD/J | | | 1000 | 1200 | |

Electrical / Optical Characteristics at T_A=25°C

| Symbol | Parameter | Device | Тур. | Max. | Units | Test Conditions | |
|----------------|-------------------------|--|-------------|------------|-------|-----------------|--|
| λpeak | Peak Wavelength | Super Bright Red Super Bright Green | 660 565 | | nm | IF=20mA | |
| λD | Dominate Wavelength | Super Bright Red Super Bright Green | 640 568 | | nm | IF=20mA | |
| Δλ1/2 | Spectral Line Halfwidth | Super Bright Red Super Bright Green | 20 30 | | nm | IF=20mA | |
| С | Capacitance | Super Bright Red Super Bright Green | 45 15 | | pF | VF=0V;f=1MHz | |
| V _F | Forward Voltage | Super Bright Red Super Bright Green | 1.85 2.2 | 2.5 2.5 | V | IF=20mA | |
| I _R | Reverse Current | All | | 10 | uA | VR = 5V | |

SPEC NO: CDA0754 APPROVED: J.LU

REV NO: V.1 CHECKED:

DATE: NOV/12/2001 DRAWN: S.H.CHEN

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Note: 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

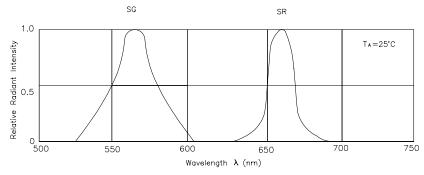


Absolute Maximum Ratings at T_A=25°C

| Parameter | Super Bright Red | Super Bright Green | Units | | |
|-------------------------------|-------------------------------|--------------------|-------|--|--|
| Power dissipation | 100 | 105 | mW | | |
| DC Forward Current | 30 | 25 | mA | | |
| Peak Forward Current [1] | 155 | 140 | mA | | |
| Reverse Voltage | 5 | 5 | V | | |
| Operating/Storage Temperature | -40°C To +85°C | | | | |
| Lead Solder Temperature [2] | ature [2] 260°C For 5 Seconds | | | | |

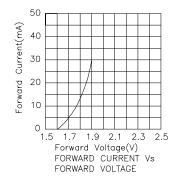
Notes

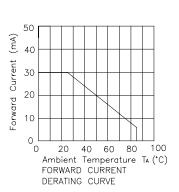
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 4mm below package base.

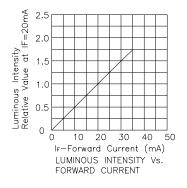


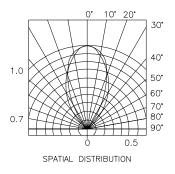
RELATIVE INTENSITY Vs. WAVELENGTH

Super Bright Red L934SRC/x,L934SRD/x





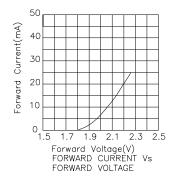


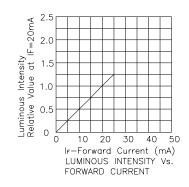


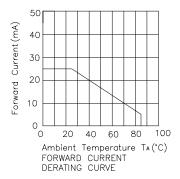
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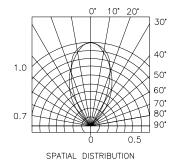
Kingbright

Super Bright Green L934SGC,L934SGD









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