

5mm LEDs

| Order code | Manufacturer code | Description |
|-------------------|--------------------------|---------------------------------|
| 55-0136 | L-7113SRD-D | 5MM 300MCD SUPERBRIGHT RED (RC) |

| | |
|--|--------------------------|
| 5mm LEDs | Page 1 of 4 |
| The enclosed information is believed to be correct, Information may change 'without notice' due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E. | Revision A 12/12/2006 |

P/N: L-7113SRD-D

SUPER BRIGHT RED

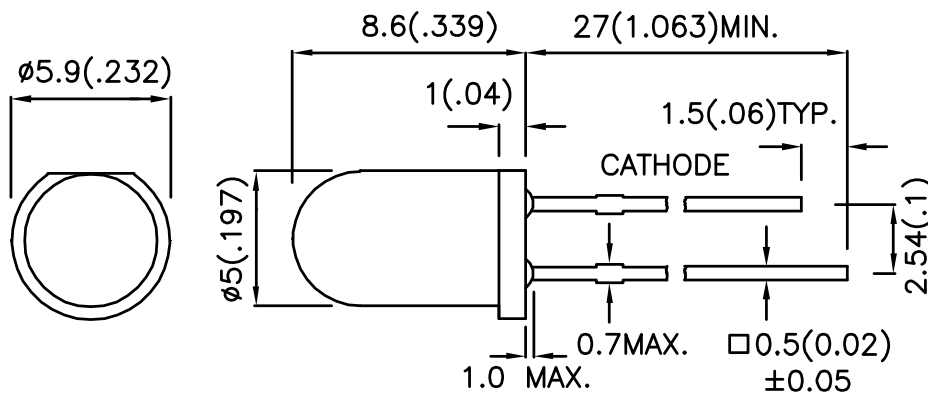
Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 3/4 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- 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 $\pm 0.25 (0.01)$ 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 | Iv (mcd) @ 20mA | | Viewing Angle |
|-------------|---------------------------|--------------|--------------------|------|------------------|
| | | | Min. | Typ. | 2 θ 1/2 |
| L-7113SRD-D | SUPER BRIGHT RED (GaAlAs) | RED DIFFUSED | 180 | 250 | 30° |

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 TA=25°C

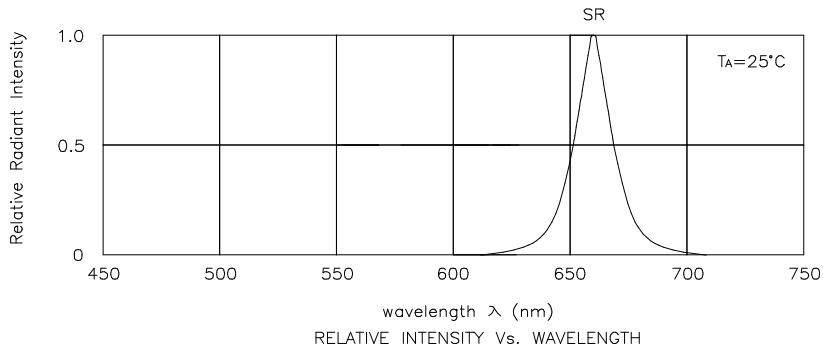
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|------------------|------|------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | Super Bright Red | 660 | | nm | I _F =20mA |
| λ_D | Dominant Wavelength | Super Bright Red | 640 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | 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 TA=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 | |

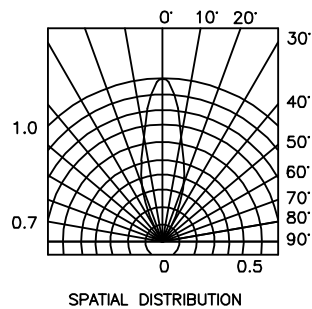
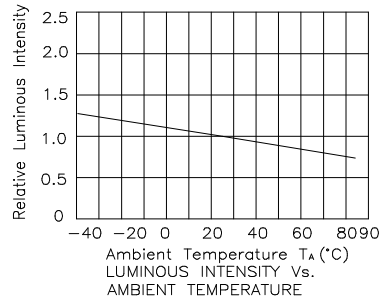
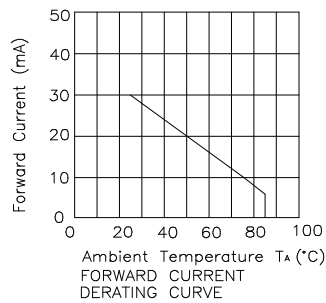
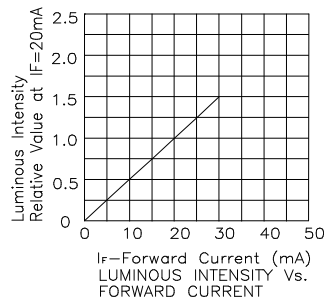
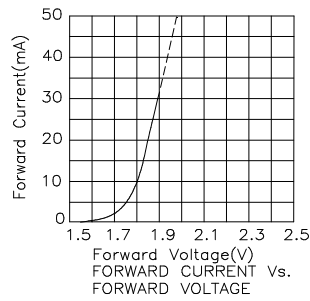
Notes:

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



Super Bright Red

L-7113SRD-D



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.