

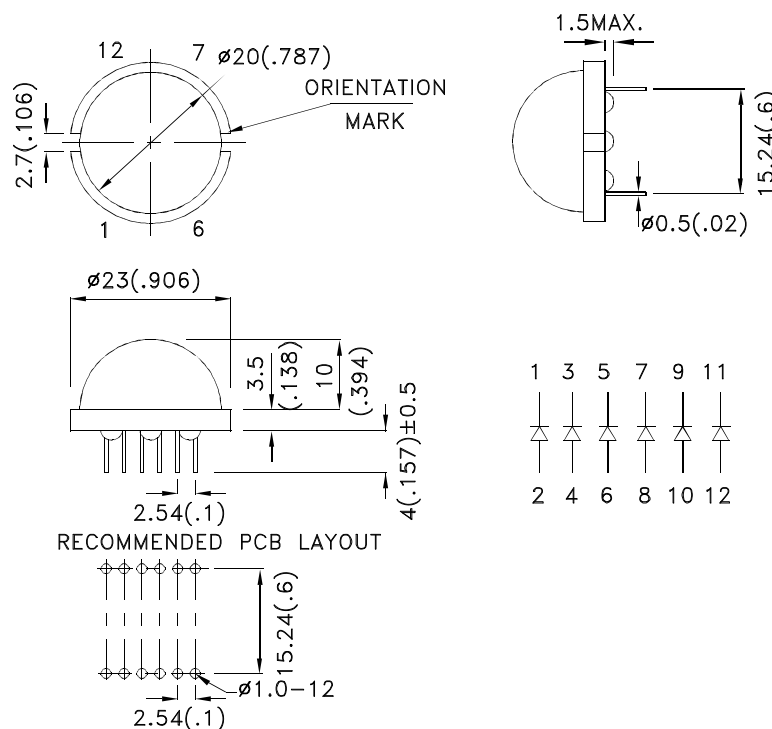
Features

- 12 pins.
- High luminous intensity.
- Low power consumption.
- Wide viewing angle.
- Categorized for luminous intensity.
- Excellent on / off contrast.
- Easy mounting on P.C. board or sockets.
- Solid state reliability.
- RoHS compliant.

Description

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

Package Dimensions



Notes:

- 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. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.



Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|----------|---------------------------|--------------|------------------------|------|----------------------|
| | | | Min. | Typ. | 2θ1/2 |
| DLC/6SRD | Super Bright Red (GaAlAs) | RED DIFFUSED | 300 | 470 | 120° |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

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 [1] | 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 [2] | 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 |

Notes:

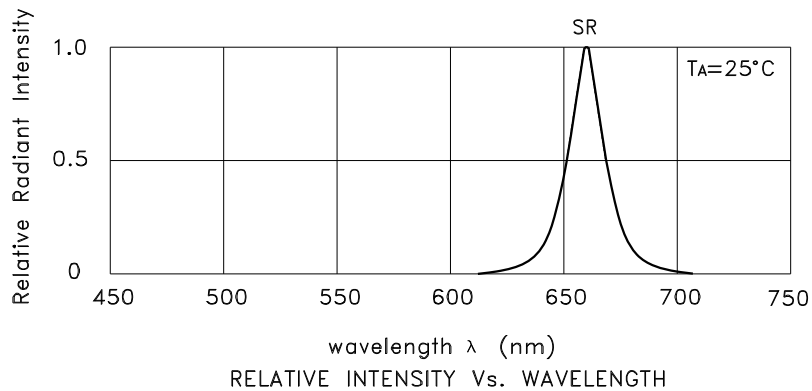
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

| Parameter | Super Bright Red | Units |
|-------------------------------|-----------------------|-------|
| Power dissipation | 75 | 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 3-5 Seconds | |

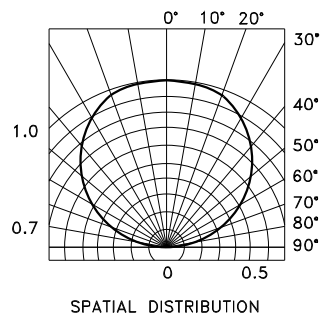
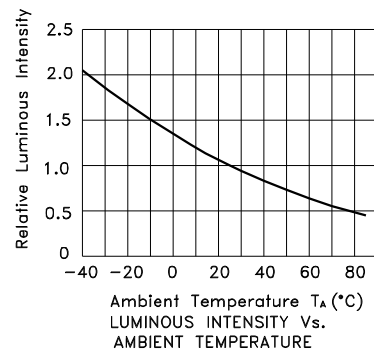
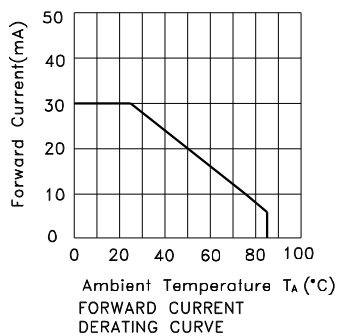
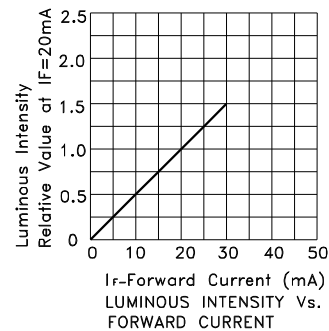
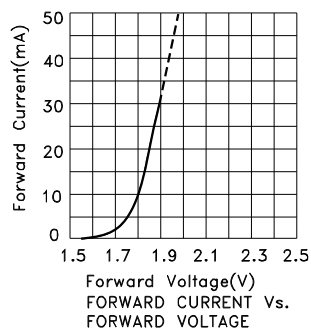
Notes:

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



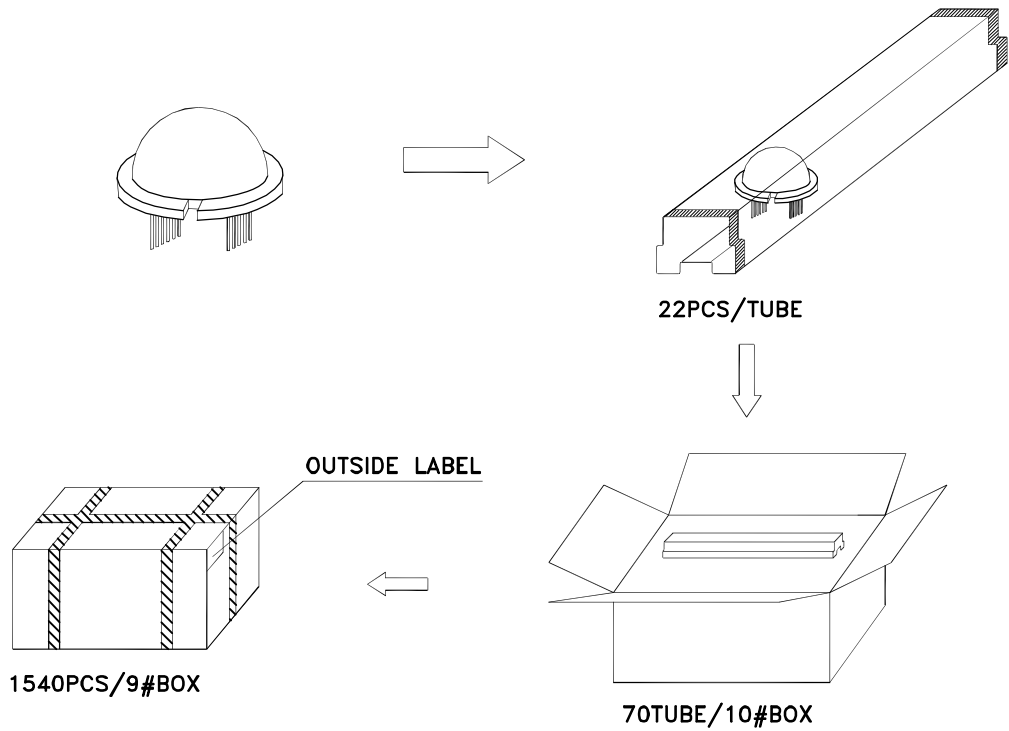
Super Bright Red

DLC/6SRD





PACKING & LABEL SPECIFICATIONS

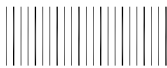

DLC/6SRD



Inside Label On IC-tube

| | | |
|---|---|---------------|
| Kingbright | TYPE: DLxxx | Date |
| | QTY: 22 PCS CODE: xx | |
|  |  | Number OF FQC |
| XXXXXXXXXX-XXXX | RoHS Compliant | |
| LOT NO. | | |

Outside Label On 9#BOX

| | | |
|----------|---|--------------|
| XXXXXX |  | |
| DLxxx | Bin Code | Number OF QA |
| 1540 PCS | XX | Date |
| |  | |
| | RoHS Compliant | |