

Part Number: WP1503CB/SRD

Super Bright Red

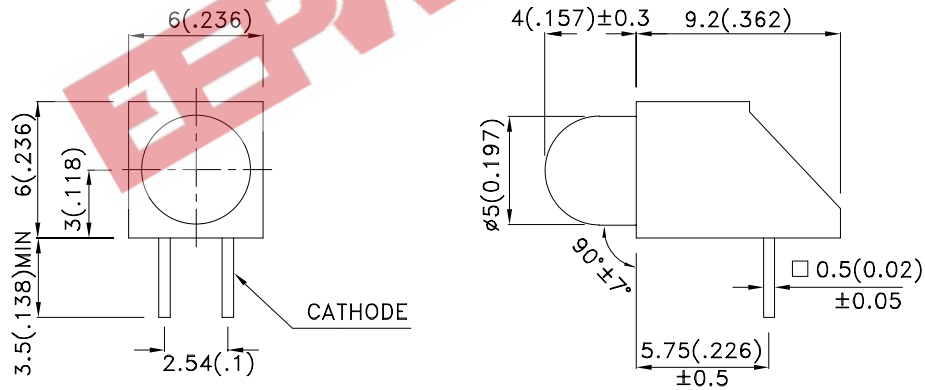
Features

- LOW POWER CONSUMPTION.
- VERSATILE MOUNTING ON P.C. BOARD OR PANEL.
- T-1 3/4 DIAMETER FLANGELESS PACKAGE.
- RELIABLE AND RUGGED.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.

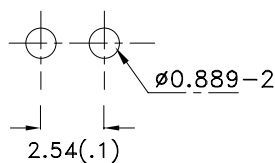
Description

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

Package Dimensions



RECOMMENDED PCB LAYOUT



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) [2] @ 20mA | | Viewing Angle [1] |
|--------------|---------------------------|--------------|------------------------|------|-------------------|
| | | | Min. | Typ. | 2θ1/2 |
| WP1503CB/SRD | Super Bright Red (GaAlAs) | RED DIFFUSED | 380 | 700 | 60° |

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 |
| Δλ _{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:

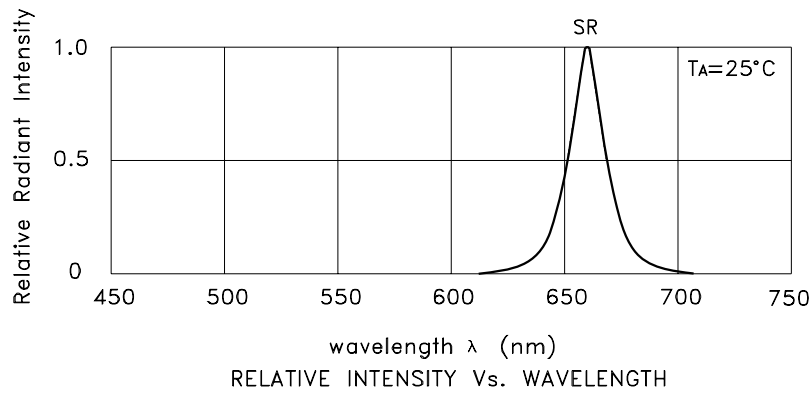
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

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 Seconds | |
| Lead Solder Temperature [3] | 260°C For 5 Seconds | |

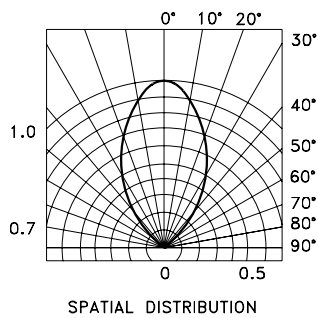
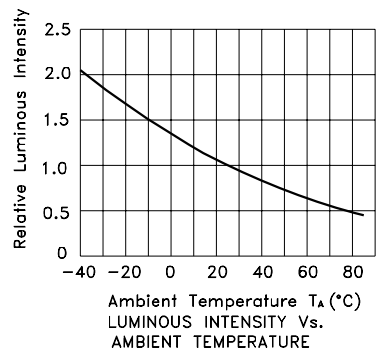
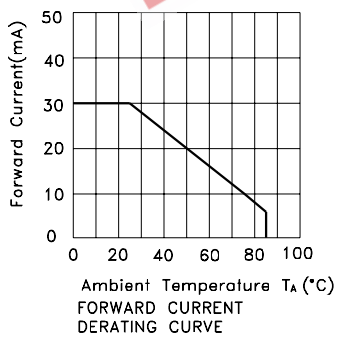
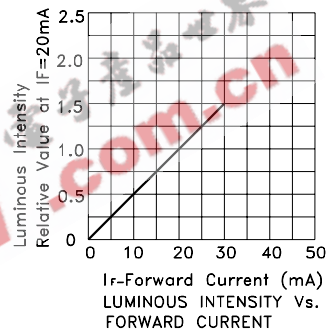
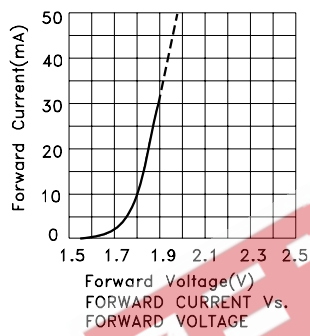
Notes:

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



Super Bright Red

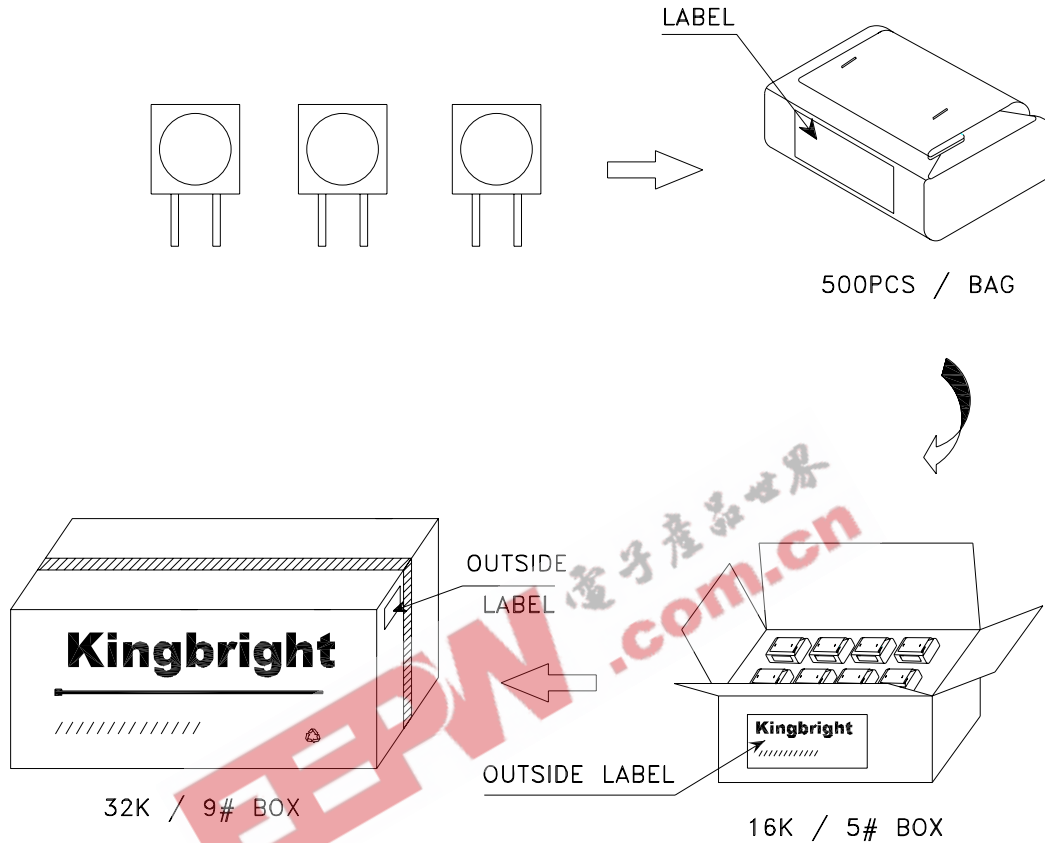
WP1503CB/SRD




Kingbright

PACKING & LABEL SPECIFICATIONS

WP1503CB/SRD



| | | | | |
|--|--|----|----------|--------|
| Kingbright | | | | |
| Q.C. | <table border="1"> <tr> <td>QC</td> </tr> <tr> <td>XX XX XX</td> </tr> <tr> <td>PASSED</td> </tr> </table> | QC | XX XX XX | PASSED |
| QC | | | | |
| XX XX XX | | | | |
| PASSED | | | | |
| TYPE NO : WP1503CBxxx | | | | |
| QUANTITY : 500 pcs | | | | |
| S/N : XX | CODE: XX | | | |
| LOT NO :  | | | | |
| RoHS Compliant | | | | |