

W161TSR SRC

SUPER BRIGHT RED

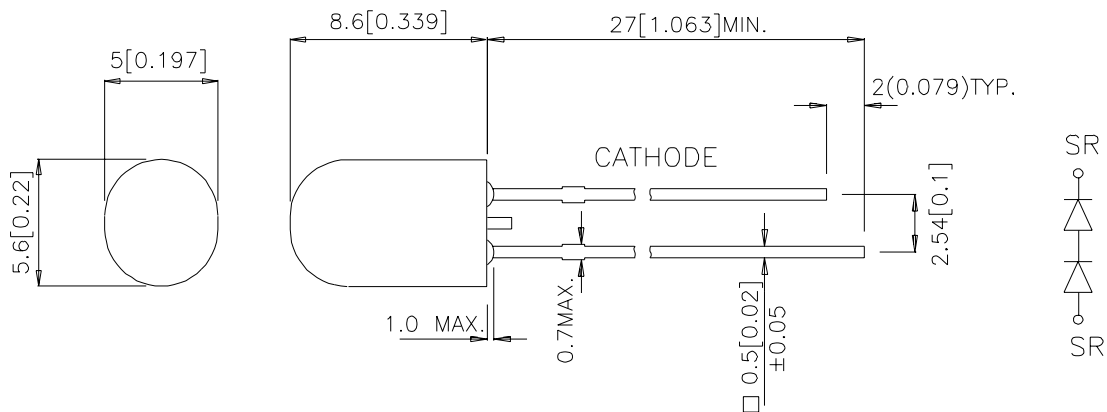
### Features

- OVAL SHAPE. WIDER VIEWING ANGLE IN HORIZONTAL DIRECTION.
- TWO CHIPS IN SERIES CONNECTION.
- 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.

## Selection Guide

| Part No.    | Dice                      | Lens Type   | Iv (mcd)<br>@ 20 mA |      | Viewing<br>Angle |
|-------------|---------------------------|-------------|---------------------|------|------------------|
|             |                           |             | Min.                | Typ. | 2θ1/2            |
| W161TSR SRC | SUPER BRIGHT RED (GaAlAs) | WATER CLEAR | 480                 | 1300 | 45°(H)<br>25°(V) |
|             | SUPER BRIGHT RED (GaAlAs) |             | 480                 | 1300 |                  |

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 T<sub>A</sub>=25°C

| Symbol            | Parameter                | Device           | Typ. | Max. | Units | Test Conditions            |
|-------------------|--------------------------|------------------|------|------|-------|----------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | Super Bright Red | 660  |      | nm    | I <sub>F</sub> =20mA       |
| λ <sub>D</sub>    | Dominate Wavelength      | Super Bright Red | 640  |      | nm    | I <sub>F</sub> =20mA       |
| Δλ <sub>1/2</sub> | Spectral Line Half-width | Super Bright Red | 20   |      | nm    | I <sub>F</sub> =20mA       |
| C                 | Capacitance              | Super Bright Red | 45   |      | pF    | V <sub>F</sub> =0V; f=1MHz |
| V <sub>F</sub>    | Forward Voltage          | Super Bright Red | 3.7  | 5    | V     | I <sub>F</sub> =20mA       |
| I <sub>R</sub>    | Reverse Current          | Super Bright Red |      | 10   | uA    | V <sub>R</sub> = 5V        |

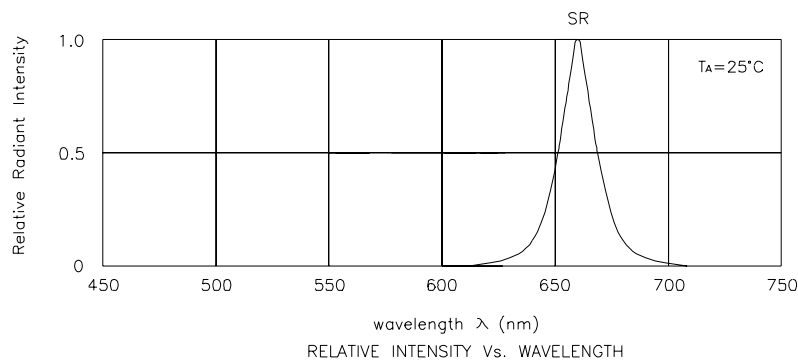
## Absolute Maximum Ratings at T<sub>A</sub>=25°C

| 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 5 Seconds |       |

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.



## Super Bright Red W161TSR SRC

