

KP-3216SRD

SUPER BRIGHT RED

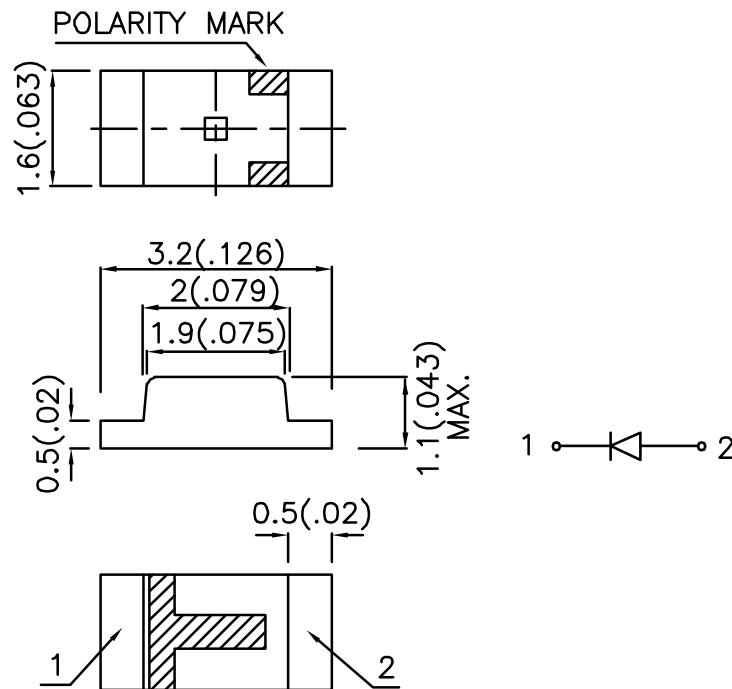
### Features

- 3.2mmx1.6mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / 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  $\pm 0.2$  (0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

| Part No.   | Dice                      | Lens Type    | Iv (mcd)<br>@ 20mA |      | Viewing<br>Angle |
|------------|---------------------------|--------------|--------------------|------|------------------|
|            |                           |              | Min.               | Typ. | θ1/2             |
| KP-3216SRD | SUPER BRIGHT RED (GaAlAs) | RED DIFFUSED | 36                 | 80   | 120°             |

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

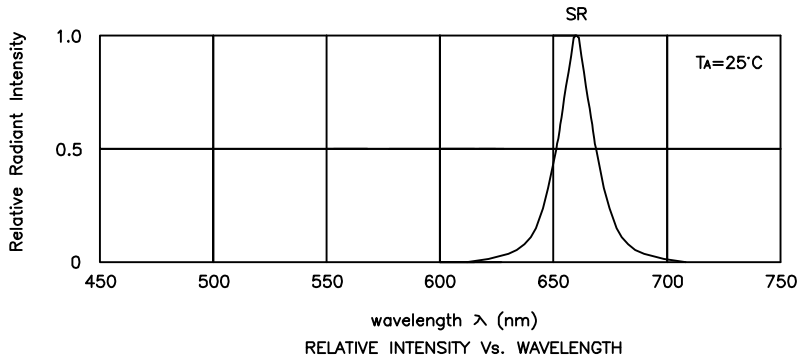
| Symbol | Parameter                | Device           | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|------------------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | Super Bright Red | 660  |      | nm    | IF=20mA         |
| λD     | Dominant Wavelength      | Super Bright Red | 640  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Super Bright Red | 20   |      | nm    | IF=20mA         |
| C      | Capacitance              | Super Bright Red | 45   |      | pF    | VF=0V;f=1MHz    |
| VF     | Forward Voltage          | Super Bright Red | 1.85 | 2.5  | V     | IF=20mA         |
| IR     | Reverse Current          | Super Bright Red |      | 10   | uA    | VR = 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   |       |

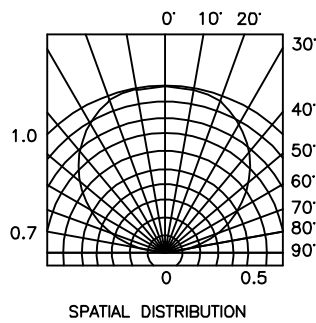
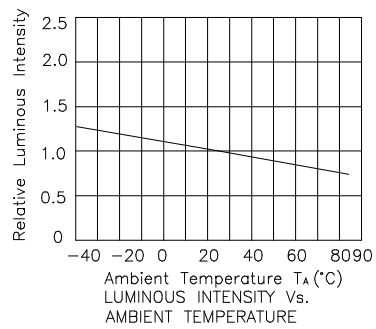
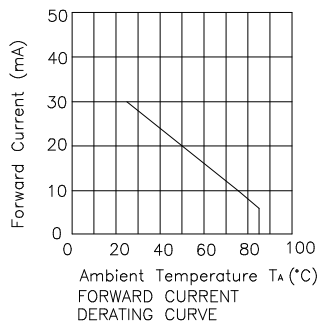
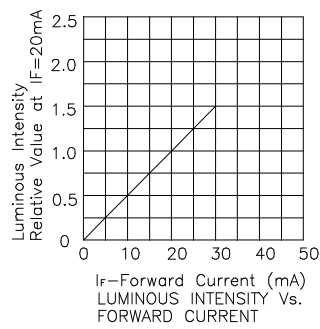
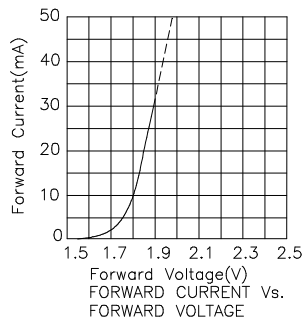
Note:

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



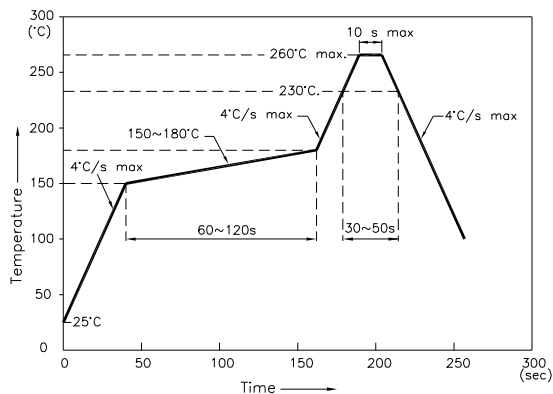
## Super Bright Red

## KP-3216SRD



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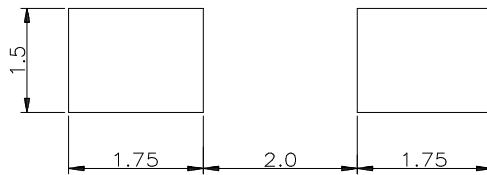
Reflow Soldering Profile For Lead-free SMT Process.



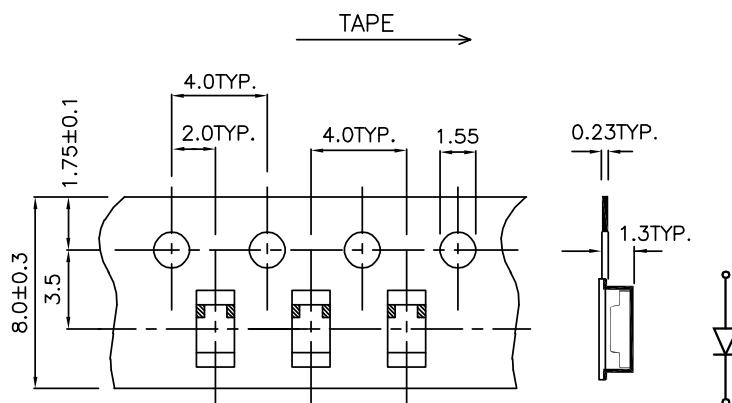
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)



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.