

3.5x2.8 mm SMD CHIP LED LAMP

AA3528SRC

SUPER BRIGHT RED

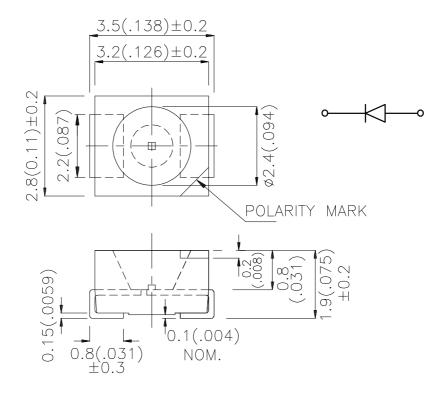
Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE: 1500PCS / 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. Specifications are subject to change without notice.

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Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) @ 20mA | | Viewing Angle |
|-----------|---------------------------|-------------|--------------------|------|------------------|
| | | | Min. | Тур. | 2 θ 1/2 |
| AA3528SRC | SUPER BRIGHT RED (GaAlAs) | WATER CLEAR | 50 | 150 | 120° |

Note:

Electrical / Optical Characteristics at Ta=25°C

| Symbol | Parameter | Device | Тур. | 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 |
| С | 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 | 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 | |

Note

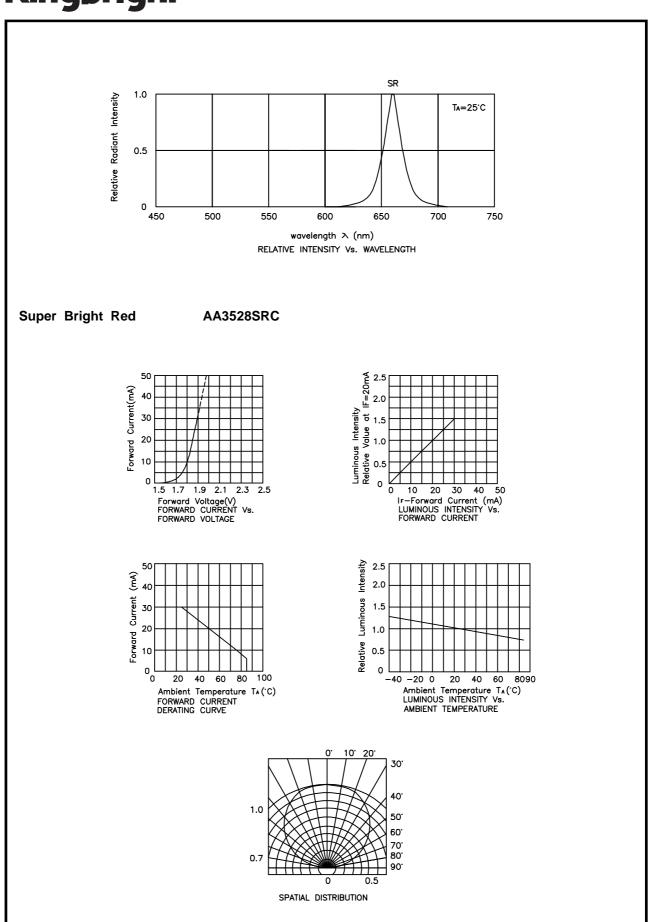
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^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

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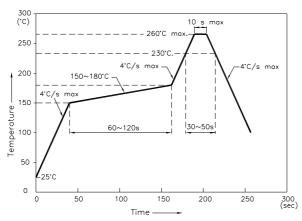


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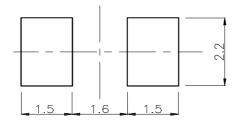
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Reflow Soldering Profile For Lead-free SMT Process.

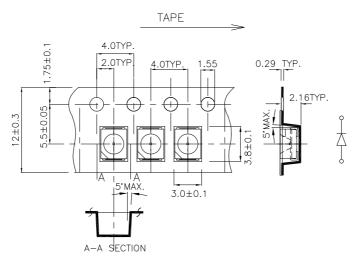


- NOTES: 1.We recommend the reflow temperature 245°C(\pm / \pm 5°C).The maximum soldering temperature should be limited to 260°C.
 - 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 - 3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units: mm)



Tape Specifications (Units: mm)



If special sorting is required (e.g. binning based on forward voltage,luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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