

AAA3528EMBSGC

HIGH EFFICIENCY RED
BLUE
SUPER BRIGHT GREEN

Features

- CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 1500PCS / REEL.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

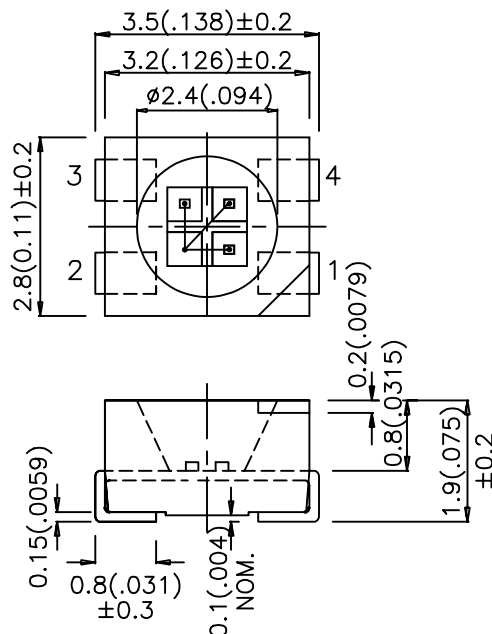
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDS. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDS.

All devices, equipment and machinery must be electrically grounded.

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



- 1 CATHODE RED
- 2 COMMON ANODE
- 3 CATHODE BLUE
- 4 CATHODE GREEN

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subjected to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
|---------------|---------------------------------|-------------|---------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| AAA3528EMBSGC | HIGH EFFICIENCY RED (GaAsP/GaP) | WATER CLEAR | 10 | 30 | 120° |
| | BLUE(GaN) | | 4 | 20 | |
| | SUPER BRIGHT GREEN (GaP) | | 4 | 20 | |

Note:

1. $\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

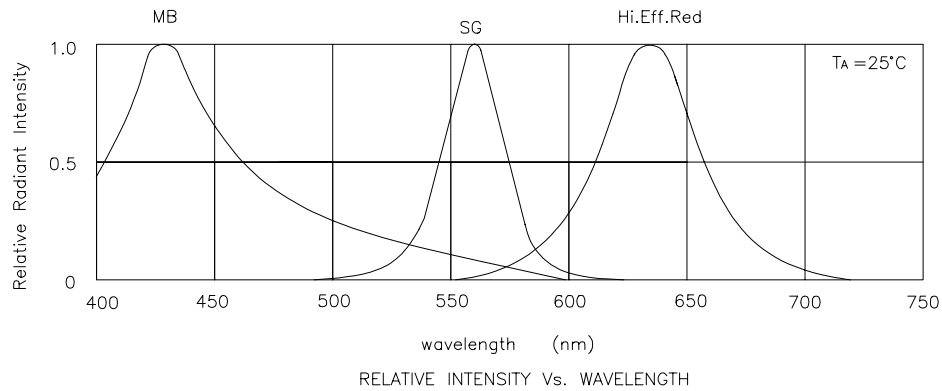
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---|-------------------|-------------------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red Blue Super Bright Green | 627 430 565 | | nm | I _F =20mA |
| λ_D | Dominate Wavelength | High Efficiency Red Blue Super Bright Green | 625 466 568 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | High Efficiency Red Blue Super Bright Green | 45 60 30 | | nm | I _F =20mA |
| C | Capacitance | High Efficiency Red Blue Super Bright Green | 15 100 15 | | pF | V _F =0V;f=1MHz |
| V _F | Forward Voltage | High Efficiency Red Blue Super Bright Green | 2.0 3.8 2.2 | 2.5 4.5 2.5 | V | I _F =20mA |
| I _R | Reverse Current | All | | 10 | uA | V _R = 5V |

Absolute Maximum Ratings at T_A=25°C

| Parameter | High Efficiency Red | Blue | Super Bright Green | Units |
|-------------------------------|---------------------|------|--------------------|-------|
| Power dissipation | 105 | 105 | 105 | mW |
| DC Forward Current | 30 | 30 | 25 | mA |
| Peak Forward Current [1] | 160 | 150 | 140 | mA |
| Reverse Voltage | 5 | 5 | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | | | |

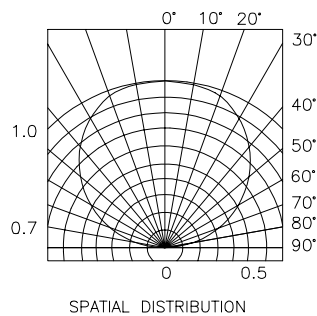
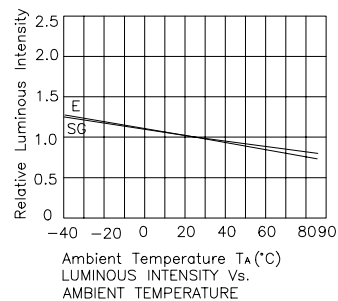
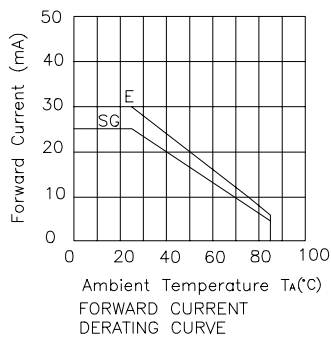
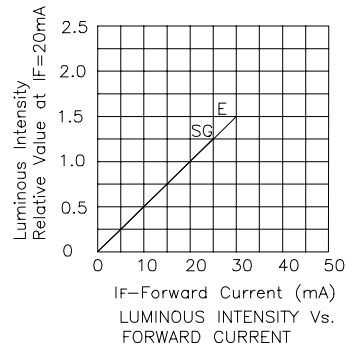
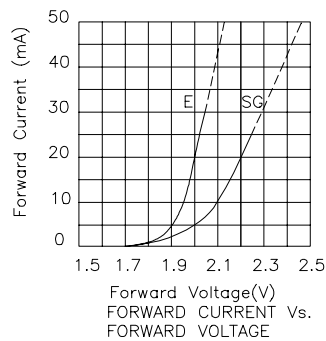
Note:

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

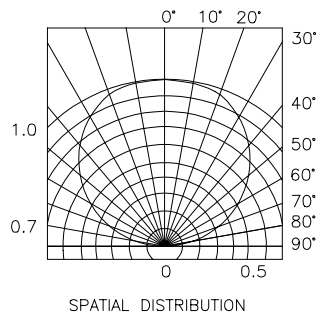
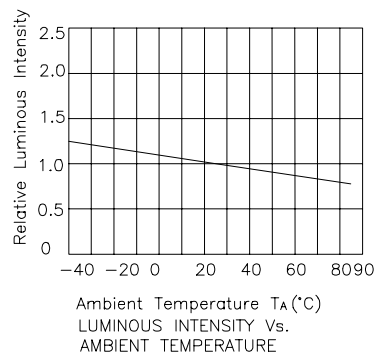
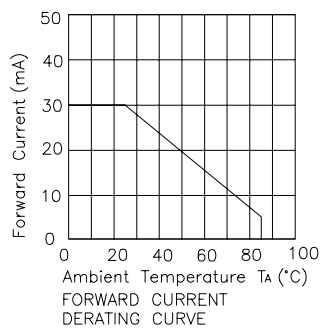
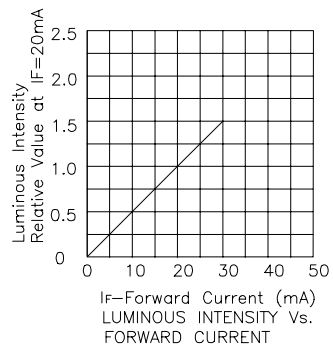
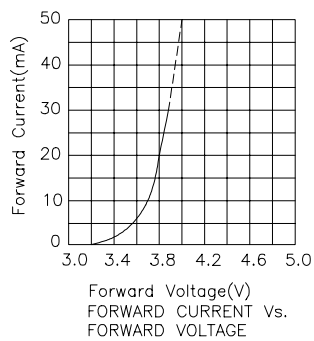


AAA3528EMBSCG

High Efficiency Red / Super Bright Green



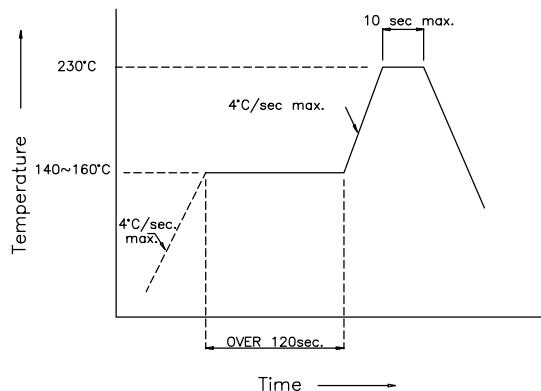
Blue



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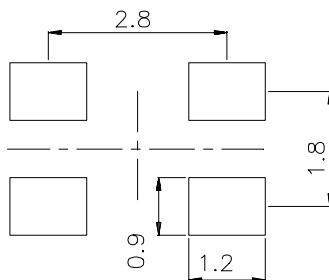
SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



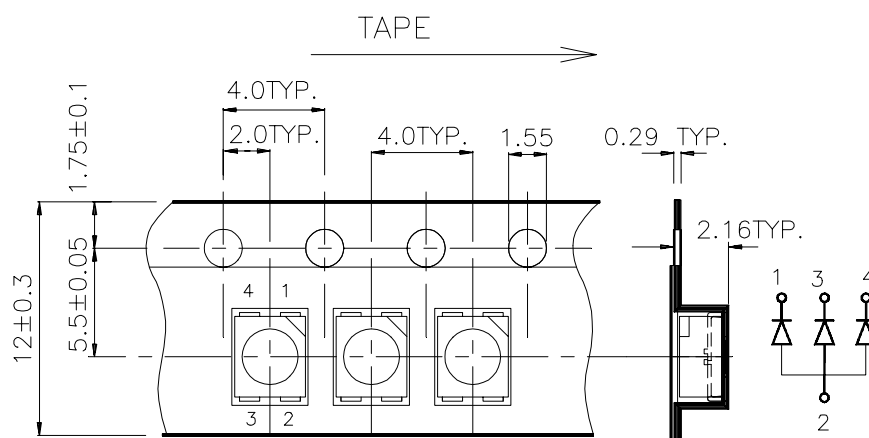
Recommended Soldering Pattern

(Units : mm)



Tape Specifications

(Units : mm)



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