

KAA-3528EMB5GC

HIGH EFFICIENCY RED
BLUE
SUPERBRIGHT GREEN

Features

- HIGH EFFICIENCY.
- HIGH LUMINOUS INTENSITY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDERING PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE: 1500PCS / REEL.

Description

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

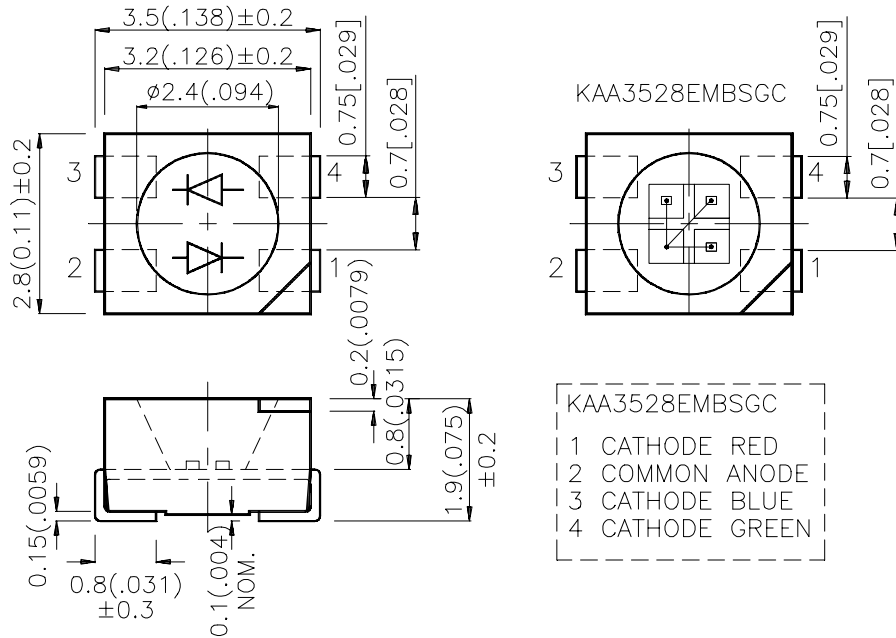
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

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



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) @ 20 mA | | Viewing Angle |
|----------------|---------------------------------|-------------|---------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| KAA-3528EMBSGC | HIGH EFFICIENCY RED (GaAsP/GaP) | WATER CLEAR | 12 | 30 | 120° |
| | SUPER BRIGHT GREEN (GaP) | | 12 | 30 | |
| | BLUE (GaN) | | 5 | 20 | |

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_A=25°C

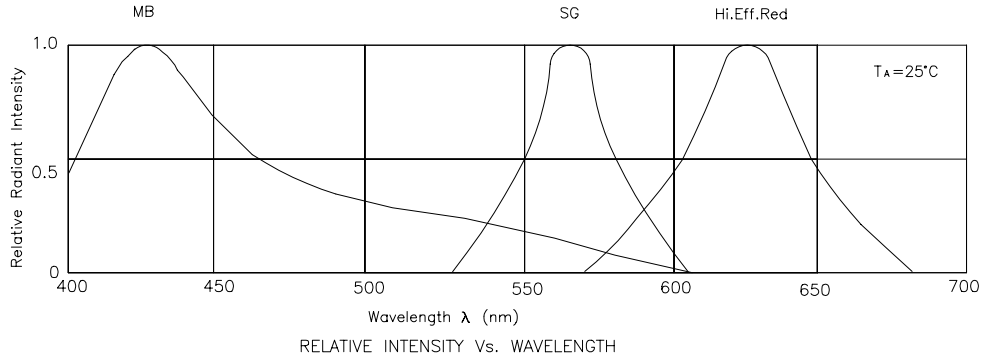
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|---|-------------------|-------------------|-------|-----------------|
| λ _{peak} | Peak Wavelength | High Efficiency Red Super Bright Green Blue | 627 565 430 | | nm | IF=20mA |
| λ _D | Dominate Wavelength | High Efficiency Red Super Bright Green Blue | 625 568 455 | | nm | IF=20mA |
| Δλ _{1/2} | Spectral Line Halfwidth | High Efficiency Red Super Bright Green Blue | 45 30 60 | | nm | IF=20mA |
| C | Capacitance | High Efficiency Red Super Bright Green Blue | 15 15 65 | | pF | VF=0V;f=1MHz |
| V _F | Forward Voltage | High Efficiency Red Super Bright Green Blue | 2.0 2.2 4.0 | 2.5 2.5 4.5 | V | IF=20mA |
| I _R | Reverse Current | All | | 10 | μA | VR = 5V |

Absolute Maximum Ratings at T_A=25°C

| Parameter | High Efficiency Red | Super Bright Green | Blue | Units |
|--------------------------|---------------------|--------------------|----------------|-------|
| Power dissipation | 105 | 105 | 105 | mW |
| DC Forward Current | 30 | 25 | 30 | mA |
| Peak Forward Current [1] | 160 | 140 | 150 | mA |
| Reverse Voltage | 5 | 5 | 5 | V |
| Operating Temperature | -40°C To +85°C | | -40°C To +80°C | |
| Storage Temperature | -40°C To +85°C | | | |

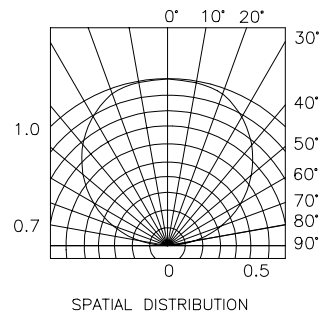
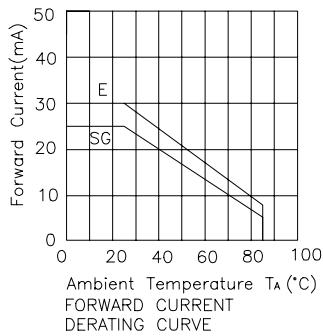
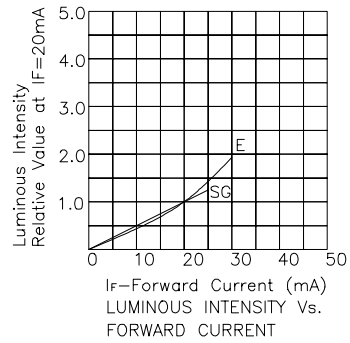
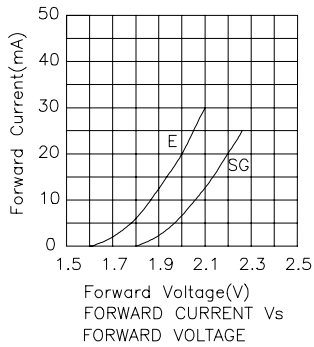
Note:

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

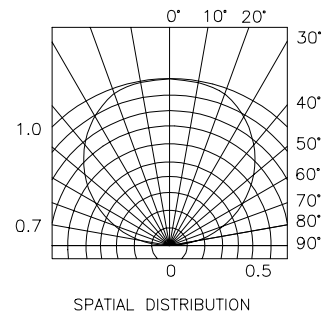
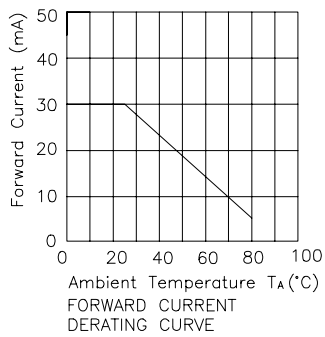
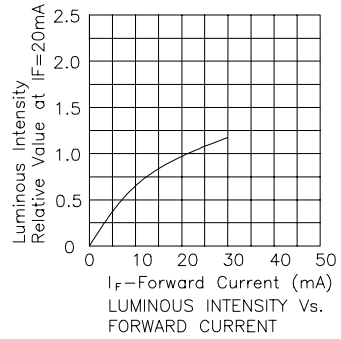
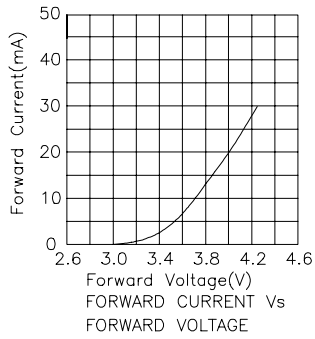


KAA-3528EMBSGC

High Efficiency Red / Super Bright Green

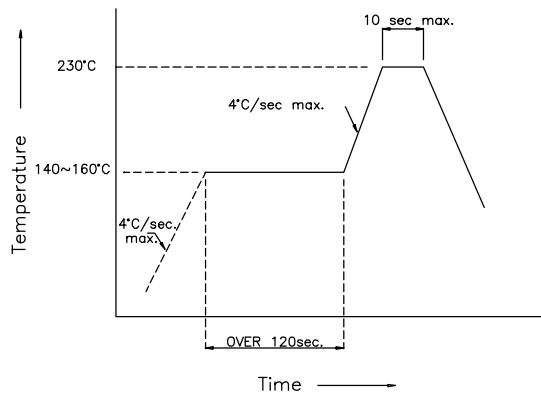


Blue

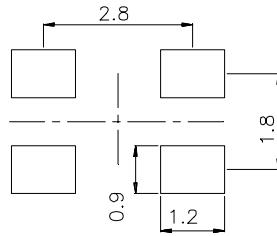


KAA-3528EMBSGC SMT Reflow Soldering Instruction

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)

