

KAA-3528EMBSGC

HIGH EFFICIENCY RED

BLUE

SUPER BRIGHT 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.

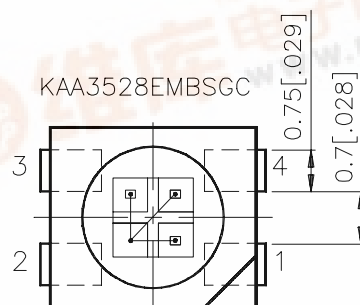
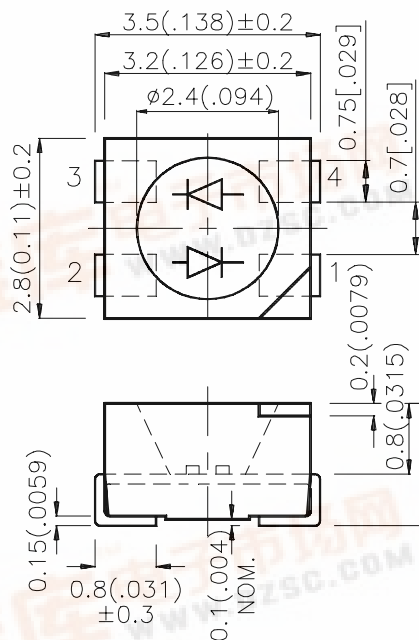
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

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



KAA3528EMBSGC	
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. 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<sub>A</sub>=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red Super Bright Green Blue	627 565 430		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red Super Bright Green Blue	625 568 455		nm	IF=20mA
Δλ <sub>1/2</sub>	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 <sub>F</sub>	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 <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

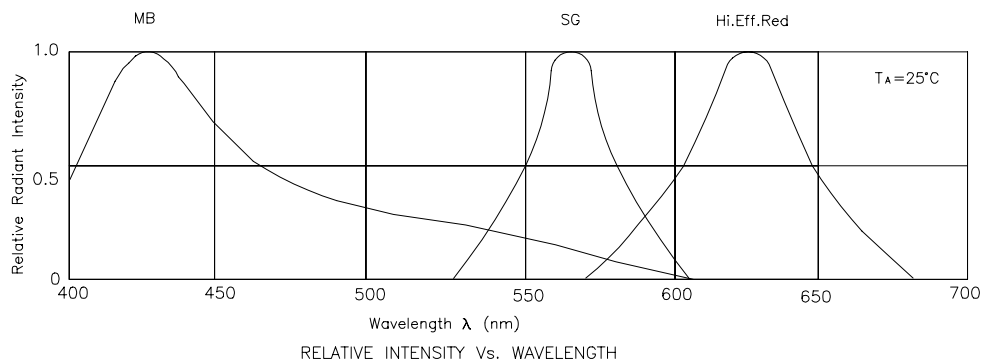
## Absolute Maximum Ratings at T<sub>A</sub>=25°C

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:

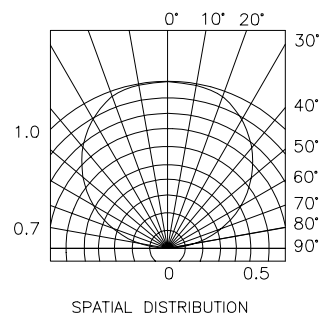
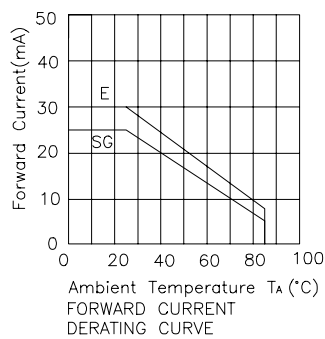
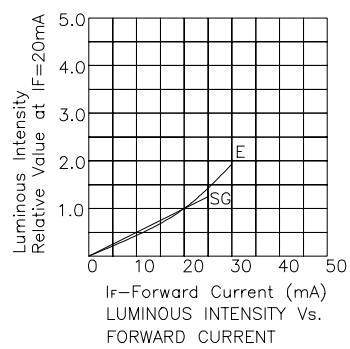
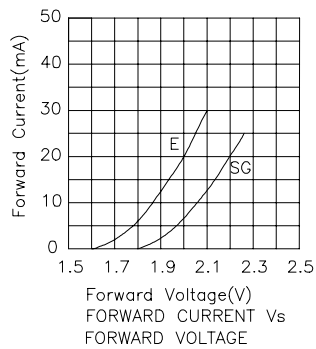
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

# Kingbright



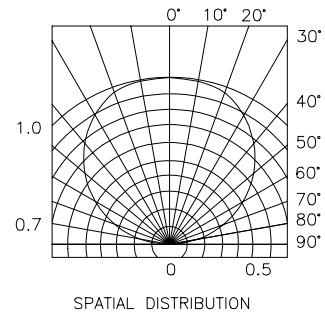
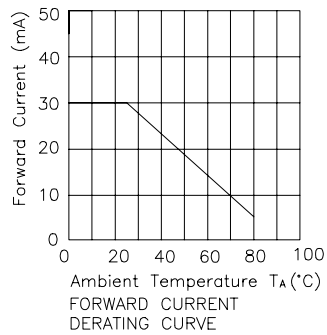
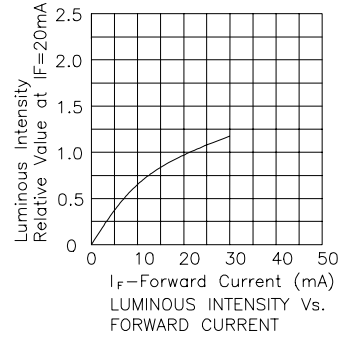
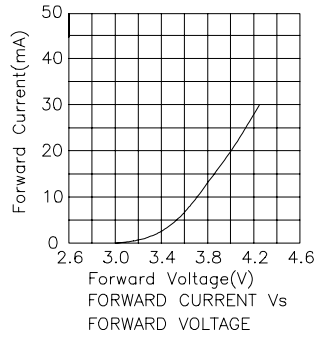
## KAA-3528EMBSGC

### High Efficiency Red / Super Bright Green



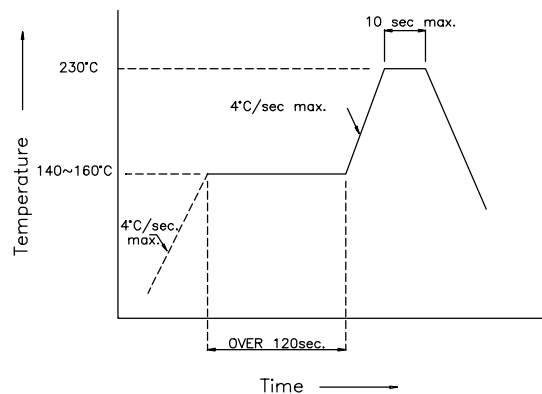
# Kingbright

## Blue

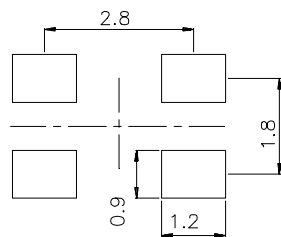


## KAA-3528EMBSGC SMT Reflow Soldering Instruction

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)

