

3.5x2.8mm SURFACE MOUNT LED LAMP

Part Number: KAA-3528ESGC HIGH EFFICIENCY RED

SUPER BRIGHT GREEN

Features

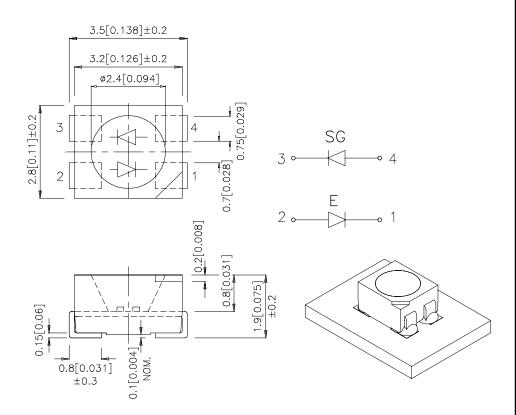
- •BOTH CHIPS CAN BE CONTROLLED SEPARATELY.
- •SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- •AVAILABLE ON TAPE AND REEL.
- •PACKAGE: 1500PCS / REEL.
- •MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- •RoHS COMPLIANT.

Description

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

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

Package Dimensions



Notes:

- 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.
- 4. The device has a single mounting surface. The device must be mounted according to the specifications.





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APPROVED: WYNEC CHECKED: Allen Liu DRAWN: W.J.ZHU

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KAA-3528ESGC	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	10	30	120°
	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	4	20	

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous Intensity / Luminous Flux: +/-15%.

Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Super Bright Green	627 565		nm	IF=20mA
λD [1]	Dominant Wavelength	High Efficiency Red Super Bright Green	625 568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Super Bright Green	45 30		nm	IF=20mA
С	Capacitance	High Efficiency Red Super Bright Green	15 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red Super Bright Green	2.0 2.2	2.5 2.5	V	IF=20mA
lR	Reverse Current	High Efficiency Red Super Bright Green		10 10	uA	VR = 5V

Notes:

- 1. Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.

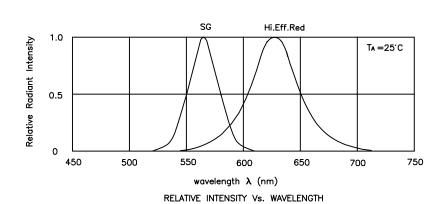
Absolute Maximum Ratings at Ta=25°C

Parameter	High Efficiency Red	Super Bright Green	Units	
Power dissipation	75	62.5	mW	
DC Forward Current	30	25	mA	
Peak Forward Current [1]	160	140	mA	
Reverse Voltage	verse Voltage 5			
Operating/Storage Temperature	-40°C To +85°C			

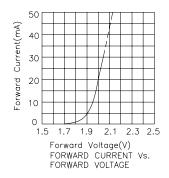
Note:

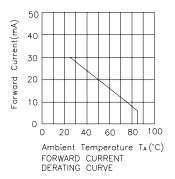
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

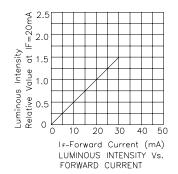
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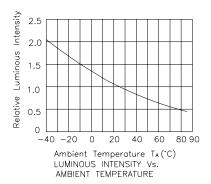


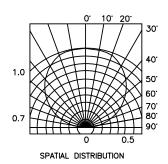
KAA-3528ESGC High Efficiency Red







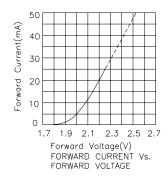


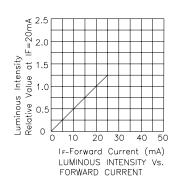


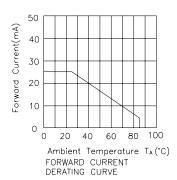
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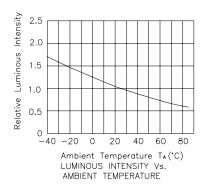
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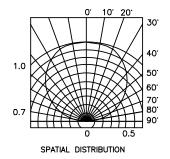
Super Bright Green











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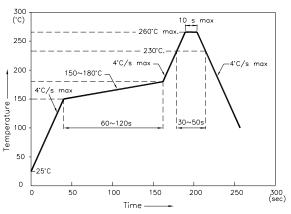
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KAA-3528ESGC

Reflow Soldering Profile For Lead-free SMT Process.

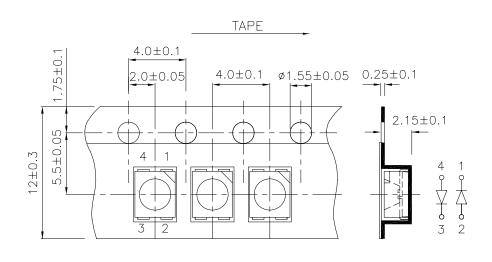


- NOTES: 1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
 - 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 - 3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units: mm; Tolerance: ±0.1)

2.8 ∞ 0 1.2

Tape Specifications (Units: mm)



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