## 3.5x2.8 mm SMD CHIP LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

KA-3528VGC-E

**GREEN** 

### **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**

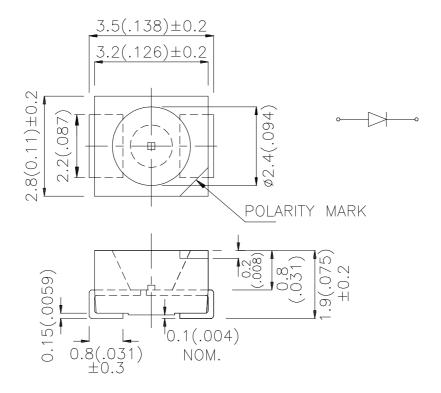
The Green source color devices are made with InGaN on SiC Light Emitting Diode.

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.

## **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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APPROVED: J. Lu CHECKED: Allen Liu DRAWN: W.J.ZHU

### **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
KA-3528VGC-E	GREEN (InGaN)	WATER CLEAR	110	280	120°

## Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	518		nm	IF=20mA
λD	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	36		nm	IF=20mA
С	Capacitance	Green	50		pF	VF=0V;f=1MHz
VF	Forward Voltage	Green	3.5	4.5	V	IF=20mA
IR	Reverse Current	Green		10	uA	VR = 5V

## Absolute Maximum Ratings at Ta=25°C

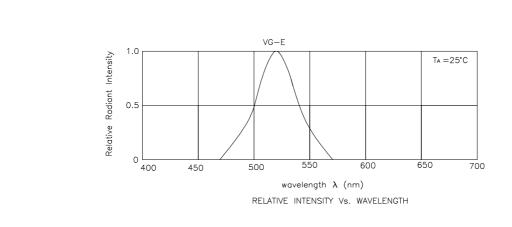
Parameter	Green	Units
Power dissipation	135	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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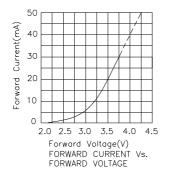
APPROVED: J. Lu **CHECKED: Allen Liu** 

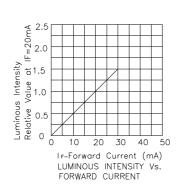
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

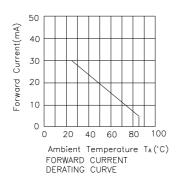
<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.

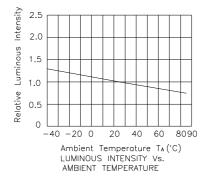


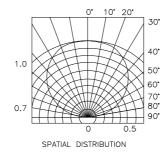
#### Green KA-3528VGC-E









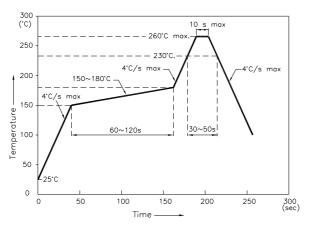


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## KA-3528VGC-E

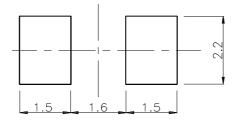
Reflow Soldering Profile For Lead-free SMT Process.



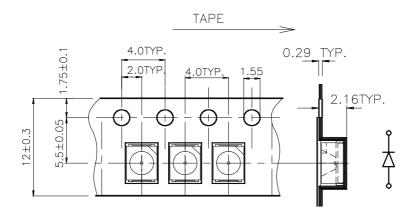
#### NOTES:

- 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)



## Tape Specifications (Units: mm)



### Remarks:

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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