

### 3.5x2.8mm SURFACE MOUNT LED LAMP

PRELIMINARY SPEC



**ATTENTION** OBSERVE PRECAUTIONS FOR HANDLING **ELECTROSTATIC** DISCHARGE SENSITIVE **DEVICES** 

Part Number: KA-3528ZGCT-E

Green

### **Features**

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 1500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

## **Description**

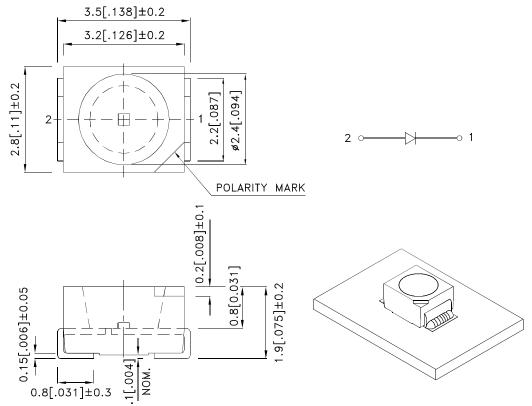
The Green source color devices are made with InGaN Light Emitting Diode.

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**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- Specifications are subject to change without notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.





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## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		21	Min.	Тур.	201/2
KA-3528ZGCT-E	Green (InGaN)	WATER CLEAR	480	900	120°

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak 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	Green	520		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Green	35		nm	I=20mA
С	Capacitance	Green	100		pF	V <sub>F</sub> =0V;f=1MHz
VF [2]	Forward Voltage	Green	3.2	4	V	IF=20mA
lr	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

## Notes:

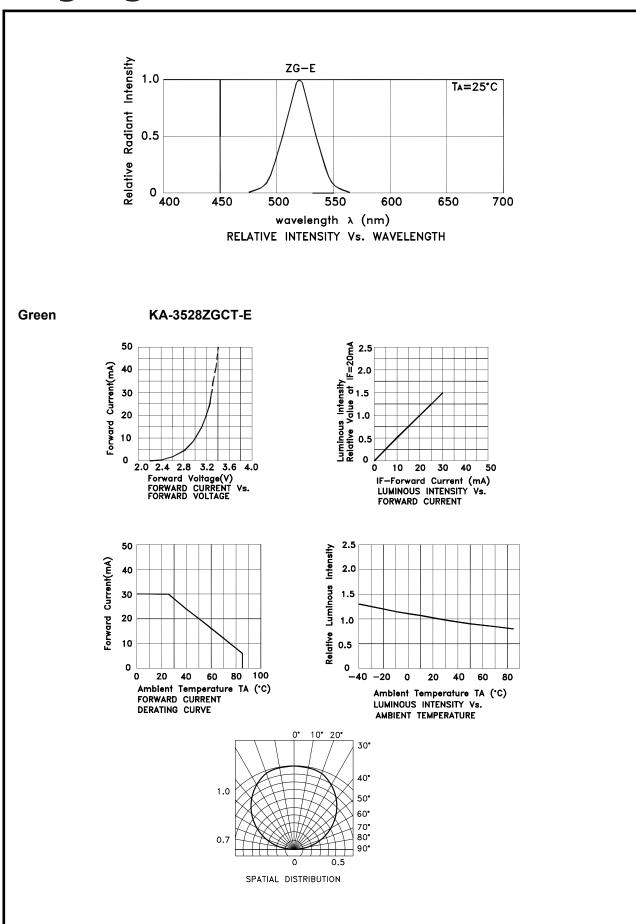
1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

A too o tate maximum reasings at 17. 20 c					
Parameter	Green				
Power dissipation	120	mW			
DC Forward Current	30	mA			
Peak Forward Current [1]	100	mA			
Reverse Voltage	5	V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

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

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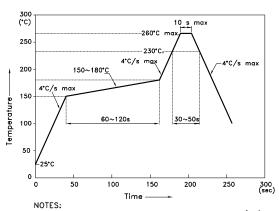
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### KA-3528ZGCT-E

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

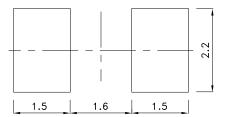
Reflow Soldering Profile For Lead-free SMT Process.



- 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)



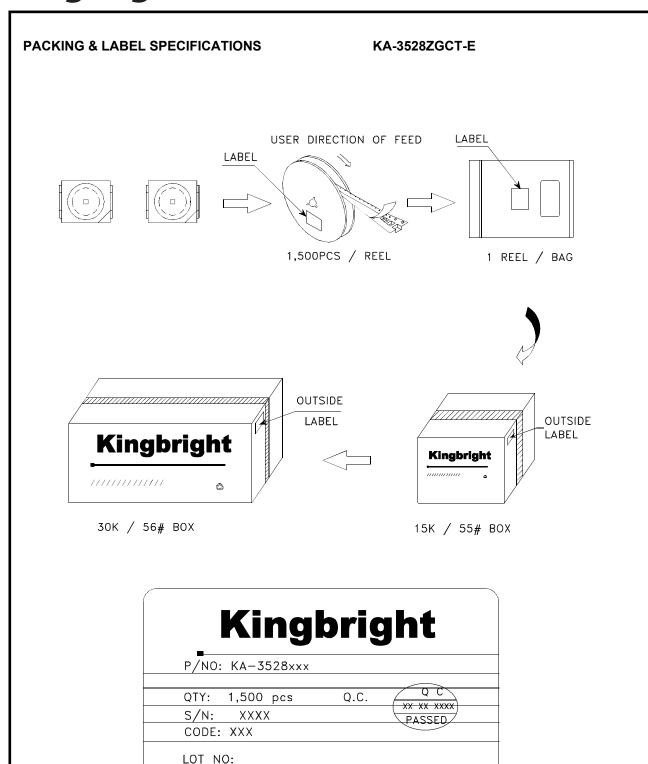
Tape Dimensions (Units: mm)

TAPE

4.0±0.1
2±0.05
4.0±0.1
Ø1.55±0.05
0.25±0.1
2.15±0.1

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RoHS Compliant

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