

### 3.0x2.0mm SURFACE MOUNT LED LAMP

Part Number: KA-3021ZGCT-E

Green



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

### **Features**

- 3.0mm x 2.0mm, 1.3mm high, only minimum space required.
- Suitable for compact optoelectronic applications.
- Low power consumption.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

## Description

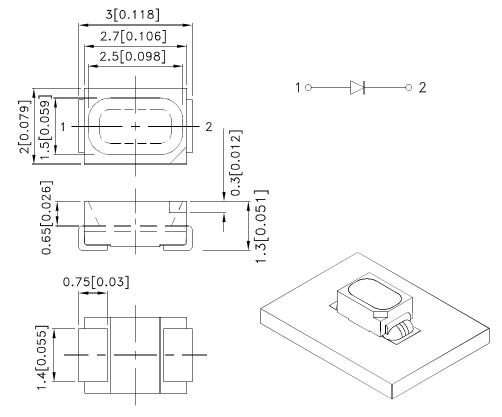
The Green source color devices are made with InGaN Light Emitting Diode.

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 ±0.2(0.008") unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.

SPEC NO: DSAK1351 **REV NO: V.2** DATE: APR/29/2010 PAGE: 1 OF 5 APPROVED: WYNEC CHECKED: Allen Liu **DRAWN: SHANW** ERP: 1201005798

## **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KA-3021ZGCT-E	Green (InGaN)	WATER CLEAR	900	1500	125°

- 1. θ1/2 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

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Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	520		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	35		nm	IF=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		50	uA	V <sub>R</sub> =5V

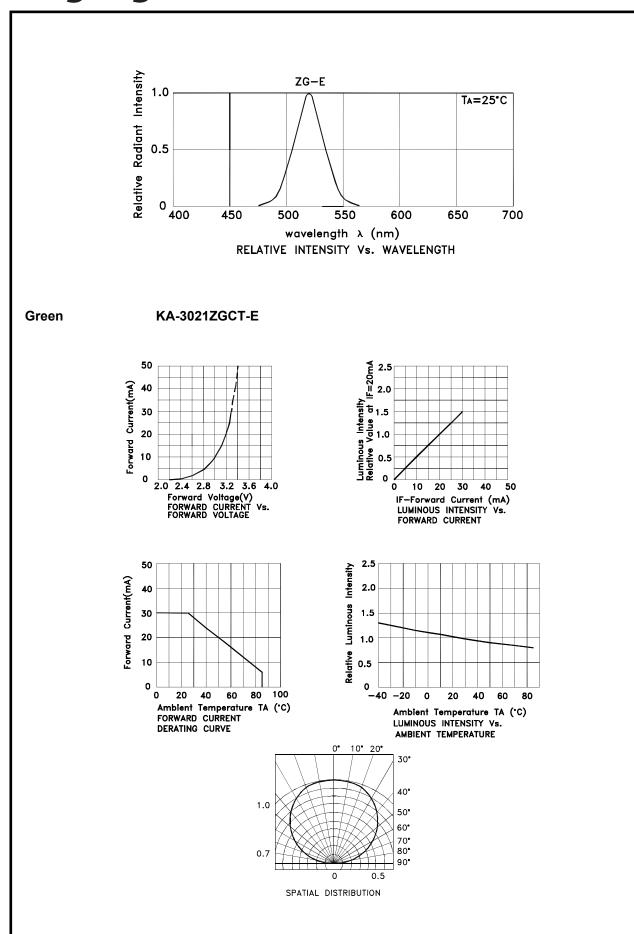
- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.

### Absolute Maximum Ratings at TA=25°C

Parameter Green Un				
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.

SPEC NO: DSAK1351 REV NO: V.2 DATE: APR/29/2010 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu DRAWN: SHANW** ERP: 1201005798

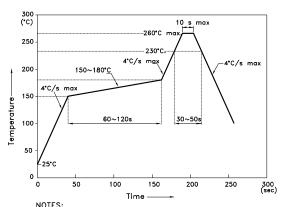


SPEC NO: DSAK1351 REV NO: V.2 DATE: APR/29/2010 PAGE: 3 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: SHANW ERP: 1201005798

### KA-3021ZGCT-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.



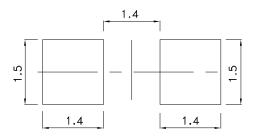
NOTES:

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.

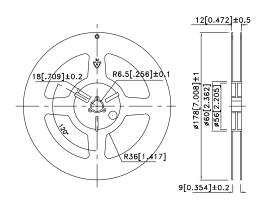
3.Number of reflow process shall be 2 times or less.

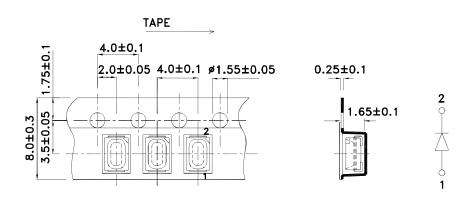
# **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



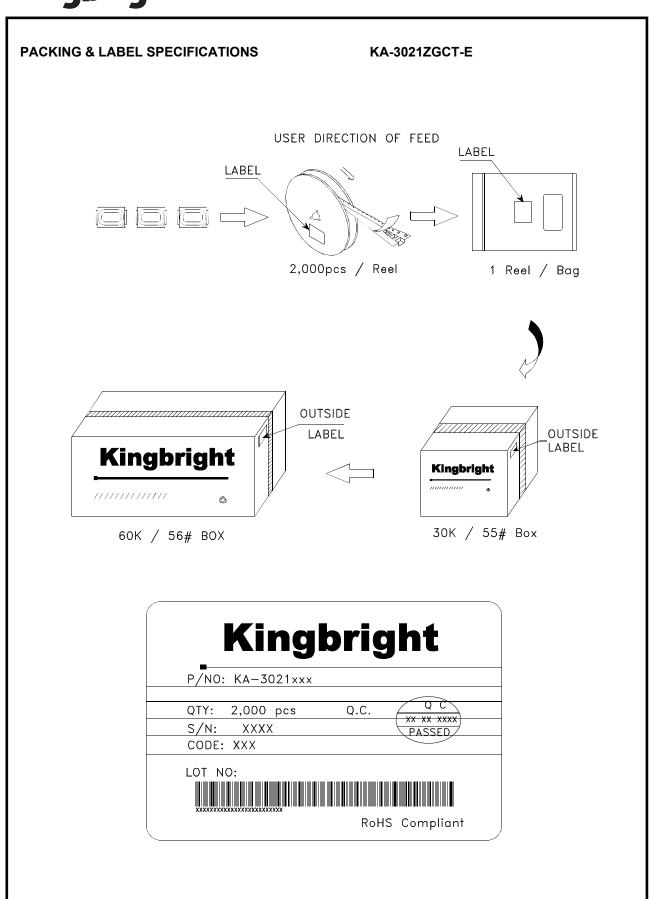
# **Tape Dimensions** (Units : mm)

## **Reel Dimension**





SPEC NO: DSAK1351 **REV NO: V.2** DATE: APR/29/2010 PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu DRAWN: SHANW** ERP: 1201005798



SPEC NO: DSAK1351 APPROVED: WYNEC REV NO: V.2 CHECKED: Allen Liu DATE: APR/29/2010 DRAWN: SHANW PAGE: 5 OF 5 ERP: 1201005798