

### 3.0x1.0 mm SMD CHIP LED LAMP

Part Number: APECVA3010ZGC

Green



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

### **Features**

- 3.0mmx1.0mm SMT LED, 2.0mm thickness.
- Low power consumption.
- · Wide viewing angle.
- Ideal for back light and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

## Description

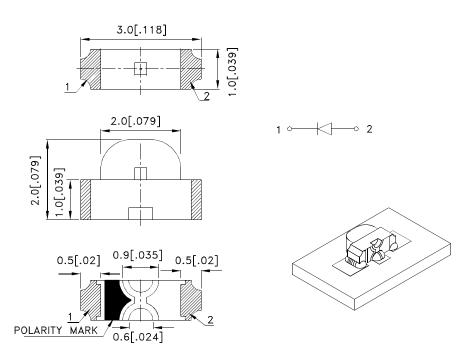
The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.

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 ±0.15(0.006") unless otherwise noted.
- 3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

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

SPEC NO: DSAJ1868 **REV NO: V.2** APPROVED: WYNEC CHECKED: Allen Liu DATE: MAR/02/2010 DRAWN: Z.Q.NI

PAGE: 1 OF 5 ERP: 1203009113

# **Selection Guide**

Part No.	Dice	Iv (mcd) [2]   Dice   Lens Type   @ 20mA			Viewing Angle [1]
			Min.	Тур.	201/2
APECVA3010ZGC	Green (InGaN)	WATER CLEAR	110	350	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	515		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Green	30		nm	IF=20mA
С	Capacitance	Green	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	3.3	4.1	V	I=20mA
lr	Reverse Current	Green		50	uA	V <sub>R</sub> =5V

## Notes:

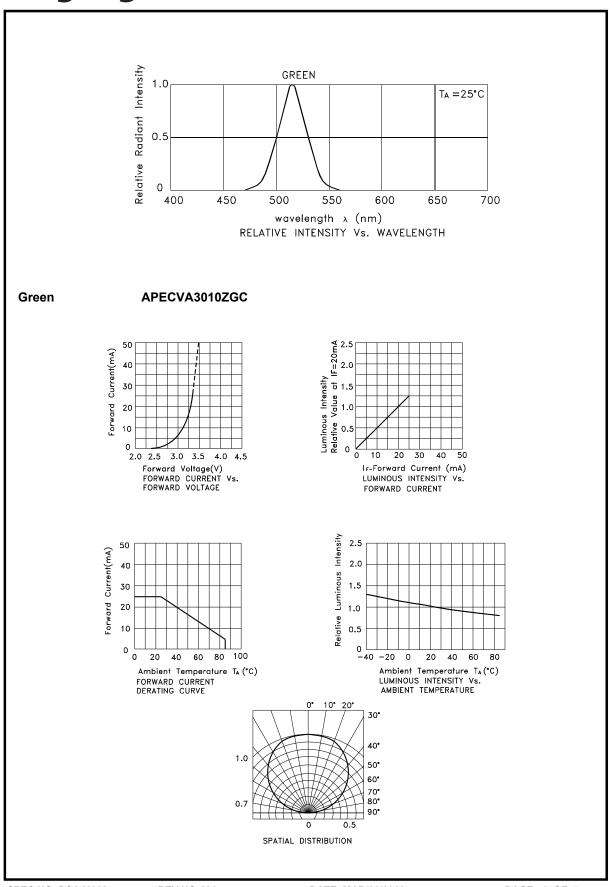
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

# Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units	
Power dissipation	102.5	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	150	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.

REV NO: V.2 SPEC NO: DSAJ1868 DATE: MAR/02/2010 PAGE: 2 OF 5 APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Z.Q.NI ERP: 1203009113



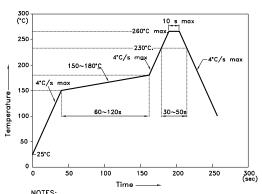
 SPEC NO: DSAJ1868
 REV NO: V.2
 DATE: MAR/02/2010
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: Z.Q.NI
 ERP: 1203009113

## APECVA3010ZGC

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:

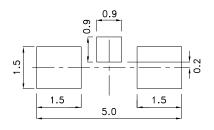
1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

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.

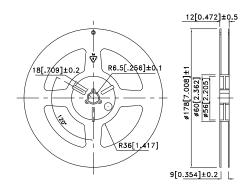
# Recommended Soldering Pattern

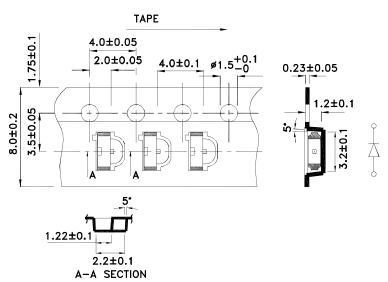
# (Units : mm; Tolerance: ± 0.1)



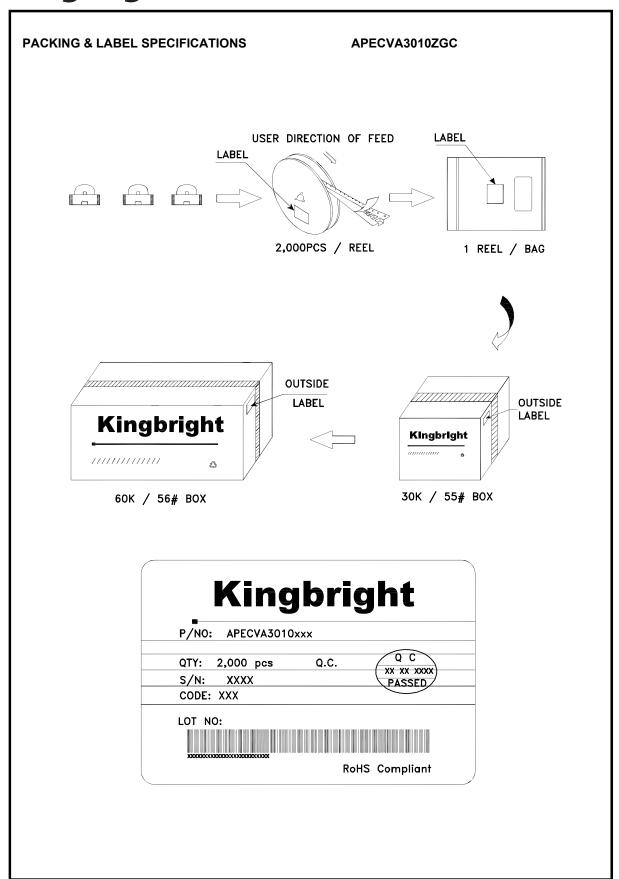
# Tape Dimensions (Units : mm)

# **Reel Dimension**





SPEC NO: DSAJ1868 APPROVED: WYNEC REV NO: V.2 CHECKED: Allen Liu DATE: MAR/02/2010 DRAWN: Z.Q.NI PAGE: 4 OF 5 ERP: 1203009113



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REV NO: V.2 CHECKED: Allen Liu DATE: MAR/02/2010 DRAWN: Z.Q.NI PAGE: 5 OF 5 ERP: 1203009113