

# 3.2mmx1.6mm SMD CHIP LED LAMP

Part Number: KPT-3216ZGC Green



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

**DEVICES** 

## **Features**

- 3.2mmx1.6mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

# Description

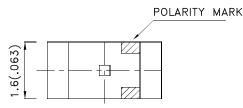
The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.

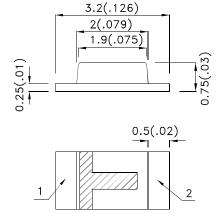
Static electricity and surge damage the LEDS.

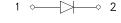
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

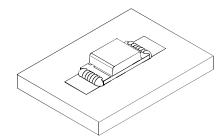
All devices, equipment and machinery must be electrically grounded.

# **Package Dimensions**









SPEC NO: DSAF1153

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- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2(0.008")$  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.

**REV NO: V.7A** 

CHECKED: Allen Liu

**DATE: DEC/20/2011** PAGE: 1 OF 5 DRAWN: C.H.Han ERP: 1203003551

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KPT-3216ZGC	Crean (In CaN)	Matan Class	280	450	120°
	Green (InGaN)	Water Clear	*200 *40	*400	

## Notes:

- 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- Luminous intensity/ luminous Flux: +/-15%.
   Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

# 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	IF=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	IF=20mA
lR	Reverse Current	Green		50	uA	VR=5V

# Notes:

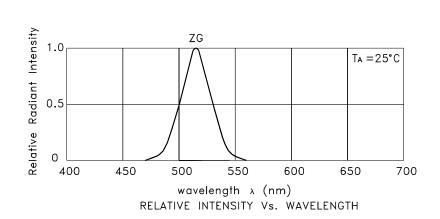
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

## Absolute Maximum Ratings at TA=25°C

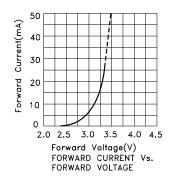
Parameter	Green	Units	
rarameter	Green	Units	
Power dissipation	102.5	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

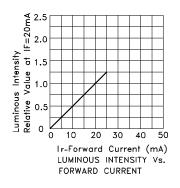
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

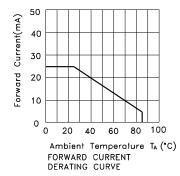
SPEC NO: DSAF1153 **REV NO: V.7A DATE: DEC/20/2011** PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: C.H.Han ERP: 1203003551

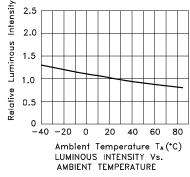


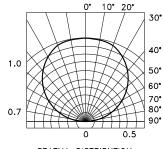
Green KPT-3216ZGC











SPATIAL DISTRIBUTION

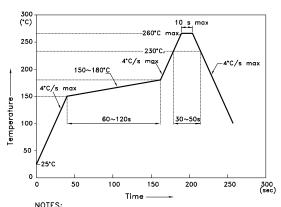
 SPEC NO: DSAF1153
 REV NO: V.7A
 DATE: DEC/20/2011
 PAGE: 3 OF 5

 APPROVED: WYNEC
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## **KPT-3216ZGC**

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.

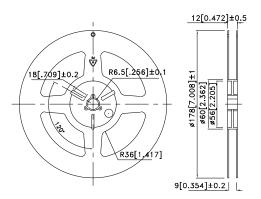
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
  - to high temperature.

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

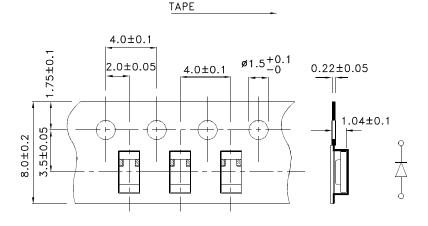
# Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

# 1.75 2.0 1.75

# **Reel Dimension**



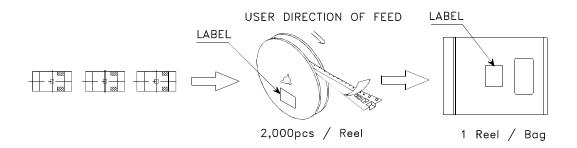
Tape Dimensions (Units : mm)

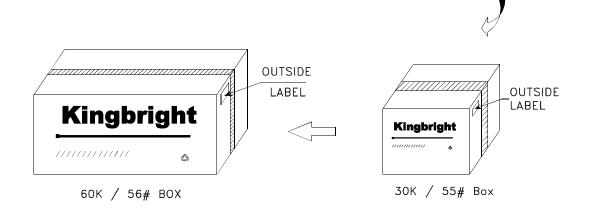


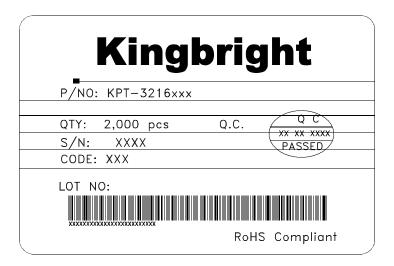
 SPEC NO: DSAF1153
 REV NO: V.7A
 DATE: DEC/20/2011
 PAGE: 4 OF 5

 APPROVED: WYNEC
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### **PACKING & LABEL SPECIFICATIONS KPT-3216ZGC**







SPEC NO: DSAF1153 APPROVED: WYNEC

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PAGE: 5 OF 5 ERP: 1203003551