

#### 3.2x1.6mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

Part Number: KP-3216VGC-Z

#### **Features**

- 3.2mmx1.6mm SMT LED, 1.1mm 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 Light Emitting Diode.

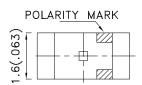
Green

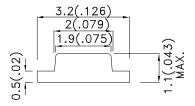
Static electricity and surge damage the LEDS.

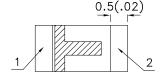
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

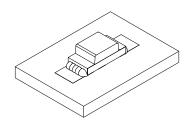
### **Package Dimensions**











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2 (0.0079")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.4.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]
		,	Min.	Тур.	201/2
KP-3216VGC-Z	Green (InGaN)	WATER CLEAR	380	800	120°

#### Notes:

- $1. \theta 1/2$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline 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	525		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	535		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	39		nm	IF=20mA
С	Capacitance	Green	65		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	3.2	3.7	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

Parameter	Green	Units	
Power dissipation	111	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		

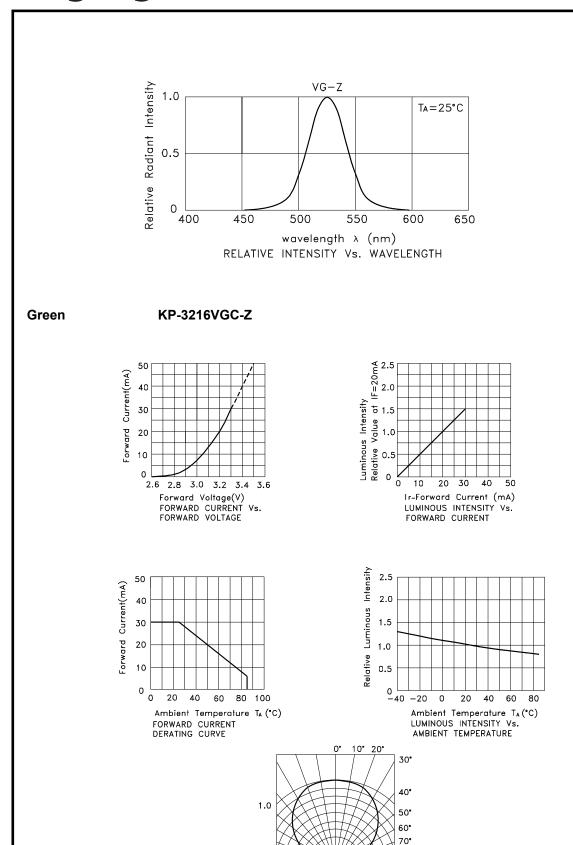
#### Note:

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

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SPATIAL DISTRIBUTION

0.7

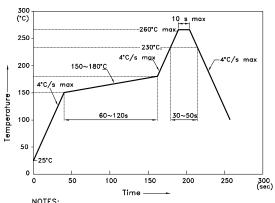
80°

90°

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## KP-3216VGC-Z

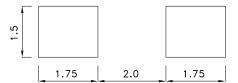
Reflow Soldering Profile For Lead-free SMT Process.



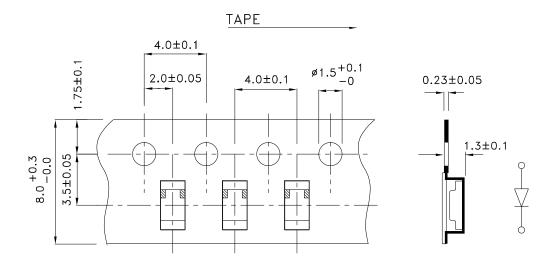
- NOTES:

  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 Specifications** (Units: mm)



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