

### 1.6x0.6mm RIGHT ANGLE SMD CHIP LED **LAMP**

PRELIMINARY SPEC



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

**DEVICES** 

Part Number: KPA-1606VGC-Z

Green

#### **Features**

- 1.6mmx0.6mm RIGHT ANGLE SMT LED,1.2mm 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

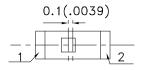
The Green source color devices are made with InGaN Light Emitting Diode.

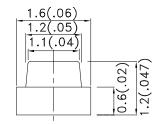
Static electricity and surge damage the LEDS.

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

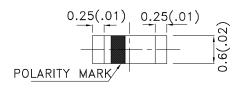
All devices, equipment and machinery must be electrically grounded.

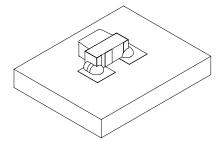
### **Package Dimensions**











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1 (0.004")$  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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# **Kingbright**

# **Selection Guide**

Part No.	Dice Lens Type		lv (mcd) [2] Dice Lens Type @ 20mA		Viewing Angle [1]
		7,1	Min.	Тур.	201/2
KPA-1606VGC-Z	Green (InGaN)	WATER CLEAR	380	800	110°

#### Notes:

- 1. θ1/2 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

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

# Absolute Maximum Ratings at TA=25°C

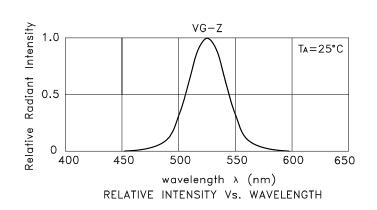
Parameter	Green	Units		
Power dissipation	111	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	100	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

### Note:

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

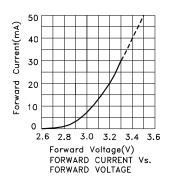
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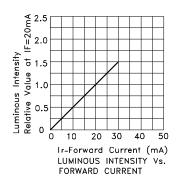
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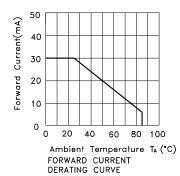


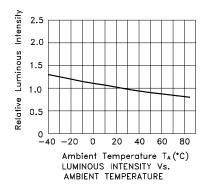
Green

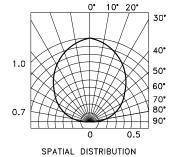
#### KPA-1606VGC-Z











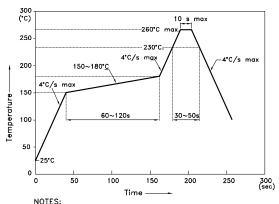
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# KPA-1606VGC-Z

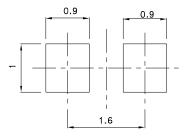
Reflow Soldering Profile For Lead-free SMT Process.



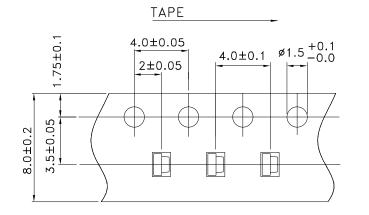
- NOTES:

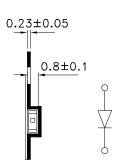
  1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
   3.Number of reflow process shall be 2 times or less.

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



**Tape Specifications** (Units: mm)





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