

### 1.6X0.8mm SMD CHIP LED LAMP (0.25mm Height)

Part Number: APG1608CGKC/T Green

#### **Features**

- 1.6mmX0.8mm SMT LED, 0.25mm thickness.
- Low power consumption.
- Wide viewing angle.
- Compatible with automatic placement equipment.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

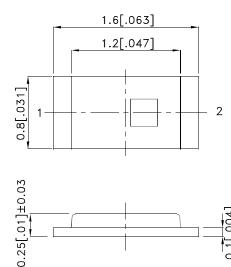
### Description

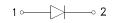
The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

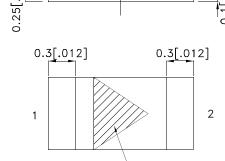
### **Applications**

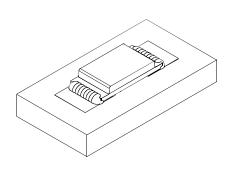
- 1. Mobile phone Keypad indicator and backlight.
- 2.Flat backlight for LCD, switch and symbol.
- 3.Toys.

### **Package Dimensions**









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

**POLARITY** 

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### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APG1608CGKC/T	Green (AlGalnP)	Water Clear	20	50	120°

#### Notes:

- 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%.
- 3. 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	574		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	570		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Green	15		nm	IF=20mA
С	Capacitance	Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	2.1	2.6	V	IF=20mA
lR	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

### Notes:

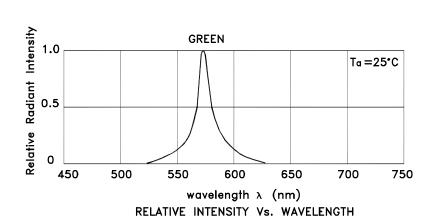
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

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

Parameter Construction (Authority of the Construction of the Const				
Parameter	Green	Units		
Power dissipation	78	mW		
DC Forward Current	30	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			

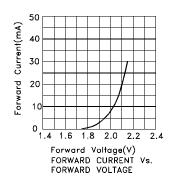
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

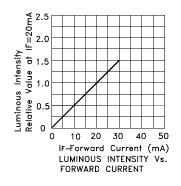
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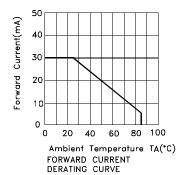


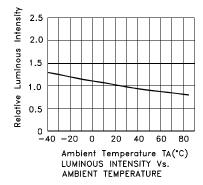
Green

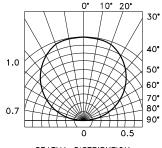
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SPATIAL DISTRIBUTION

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### APG1608CGKC/T

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.



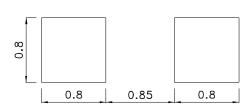
- NOTES:

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

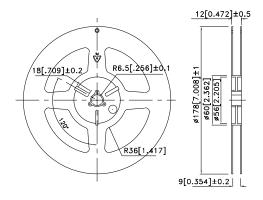
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

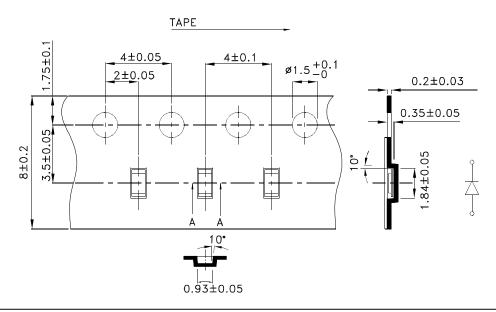
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



### **Reel Dimension**



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

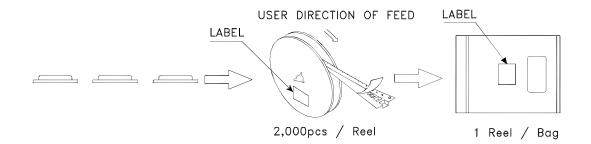


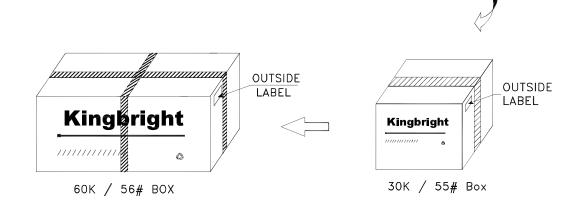
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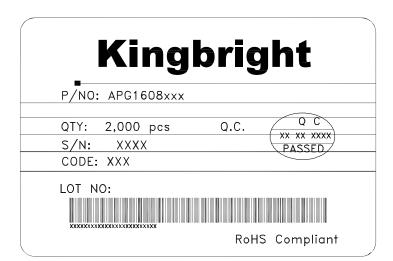
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### **PACKING & LABEL SPECIFICATIONS**

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All design applications should refer to Kingbright application notes available at <a href="http://www.KingbrightUSA.com/ApplicationNotes">http://www.KingbrightUSA.com/ApplicationNotes</a>

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