

### 3.0mmx1.0 mm RIGHT ANGLE SMD **CHIP LED LAMP**

Part Number: KPA-3010CGCK Green

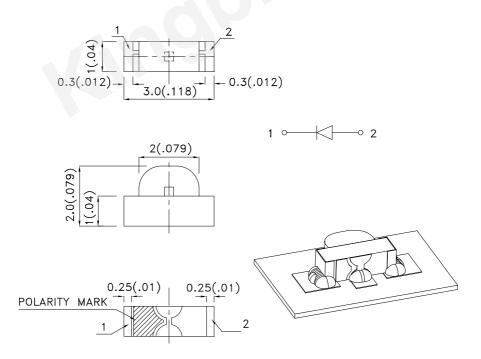
#### **Features**

- 3.0mmx1.0mm right angle 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.
- Tinned pads for improved solderability.
- RoHS compliant.

### **Description**

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

### **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.





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### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
KPA-3010CGCK	Green (AlGaInP)	Water Clear	20	50	120°

#### Notes:

- 1. θ1/2 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	IF=20mA			
Δλ1/2	Spectral Line Half-width	Green	20		nm	IF=20mA			
С	Capacitance	Green	15		pF	VF=0V;f=1MHz			
VF [2]	Forward Voltage	Green	2.1	2.5	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.

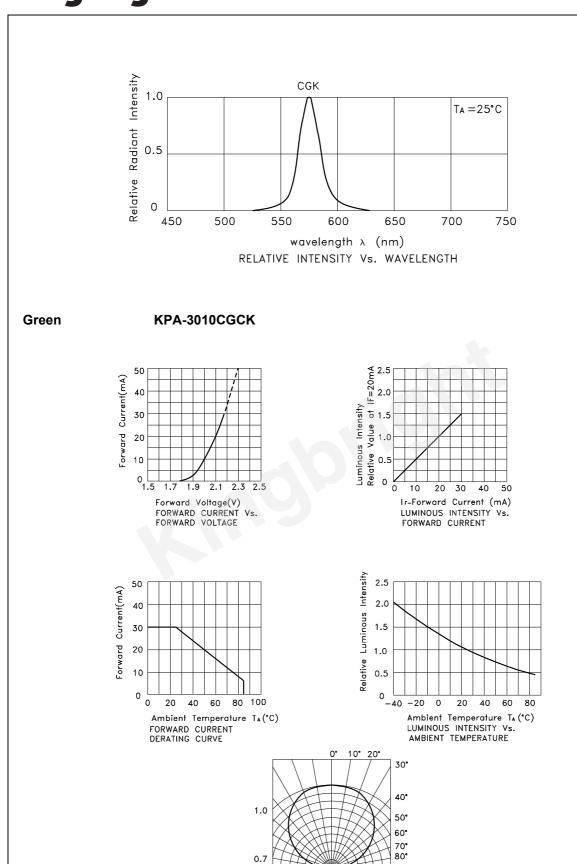
### Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units	
Power dissipation	75	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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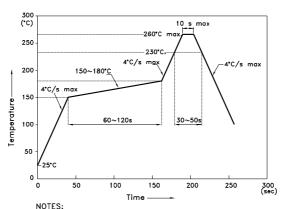
SPATIAL DISTRIBUTION

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### KPA-3010CGCK

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.

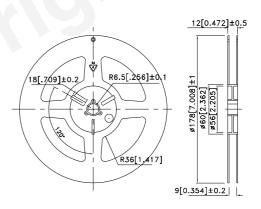
  3.Number of reflow process shall be 2 times or less.

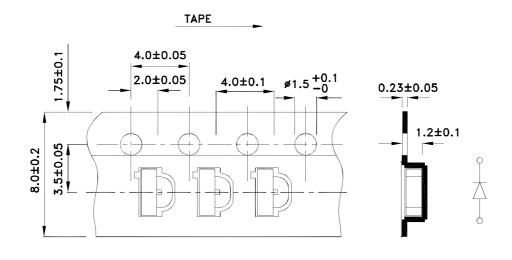
**Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)

# 1.5 1.5 5.0

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

### **Reel Dimension**





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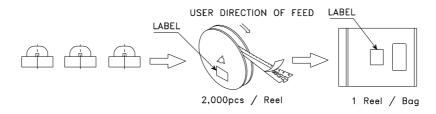
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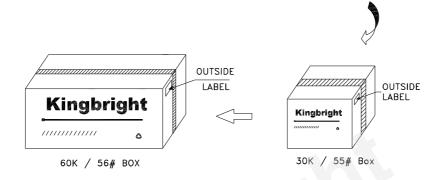
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### PACKING & LABEL SPECIFICATIONS

### KPA-3010CGCK







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