

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

Part Number: KPA-3010CGCK Green

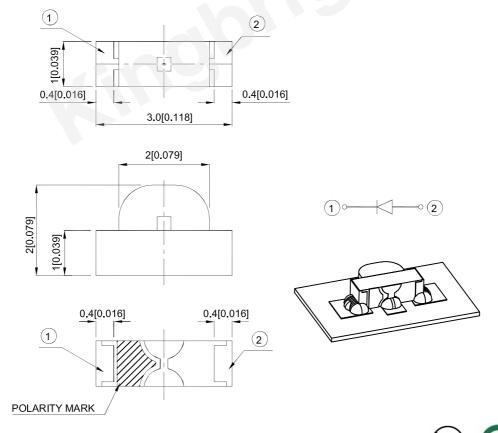
#### **Features**

- 3.0mmx2.0mmx1.0mm right angle SMD LED, 1.0mm 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.	Emitting Color (Material)	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		-	Min.	Тур.	201/2
KPA-3010CGCK	PA-3010CGCK Green (AlGaInP)		20	50	120°

#### 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 CIE127-2007 standards.

#### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	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	VR=5V

- Notes:
  1. Wavelength: +/-1nm.
  2. Forward Voltage: +/-0.1V.
  3. Wavelength value is traceable to CIE127-2007 standards.
- Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

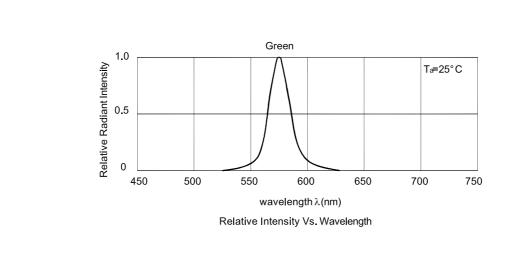
#### Absolute Maximum Ratings at TA=25°C

Parameter	Values	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	-40°C To +85°C		
Storage Temperature	-40°C To +85°C			

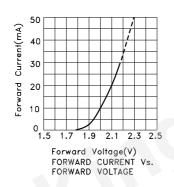
- 1.1/10 Duty Cycle, 0.1ms Pulse Width.
   Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity Ref JEDEC/JESD625-A and JEDEC/J-STD-033.

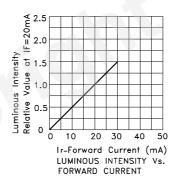
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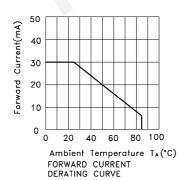
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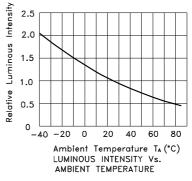


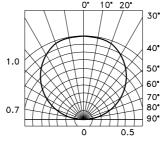
### Green KPA-3010CGCK











SPATIAL DISTRIBUTION

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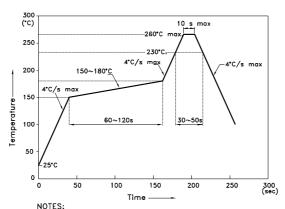
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#### **KPA-3010CGCK**

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.

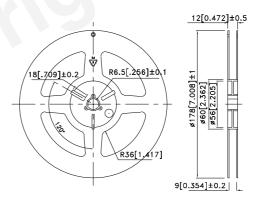
  3.Number of reflow process shall be 2 times or less.

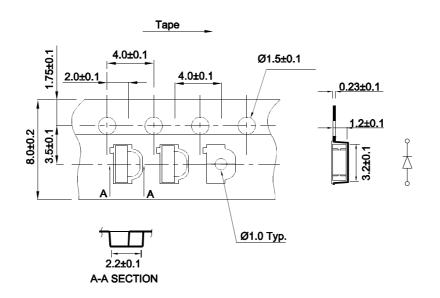
**Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)

# 0.9

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

#### **Reel Dimension**





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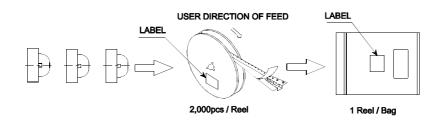
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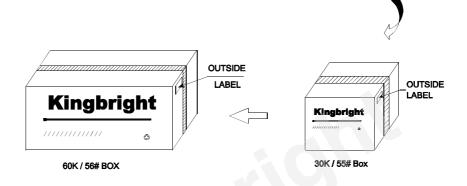
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#### **PACKING & LABEL SPECIFICATIONS**

#### **KPA-3010CGCK**







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