

3. 0mmx1.0 mm RIGHT ANGLE SMD CHIP LED **LAMP**

Part Number: KPPA-3010ZGC Green



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

Features

- 3.0mm x 1.0mm right angle SMT LED, 2.5mm thick-
- Low power consumption.
- Ideal for back light and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

Description

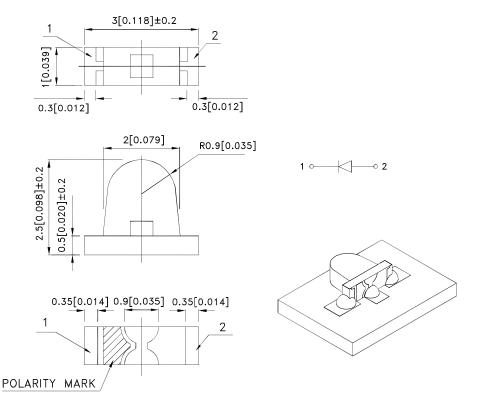
The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.

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 ±0.15(0.006") 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.

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Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|--------------|---------------|-------------|------------------------|------|----------------------|
| | | | Min. | Тур. | 201/2 |
| KPPA-3010ZGC | Green (InGaN) | Water Clear | 500 800 | | 30° |

Notes:

- 1. θ 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 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 | 515 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Green | 525 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Green | 30 | | nm | IF=20mA |
| С | Capacitance | Green | 45 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Green | 3.3 | 4.1 | V | IF=20mA |
| lR | Reverse Current | Green | | 50 | uA | V _R =5V |

Notes:

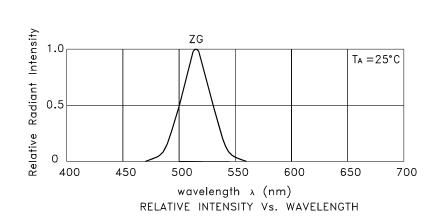
- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

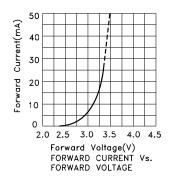
| Parameter | Green | Units | |
|--------------------------|----------------|-------|--|
| Power dissipation | 102.5 | mW | |
| DC Forward Current | 25 | mA | |
| Peak Forward Current [1] | 150 | mA | |
| Reverse Voltage | 5 | V | |
| Operating Temperature | -40°C To +85°C | | |
| Storage Temperature | -40°C To +85°C | | |

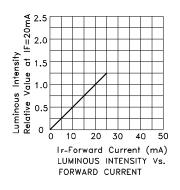
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

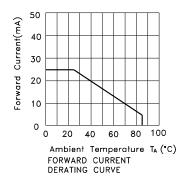
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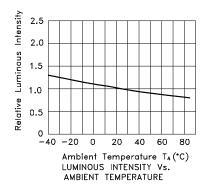


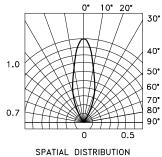
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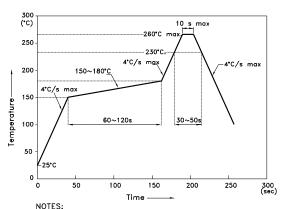


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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



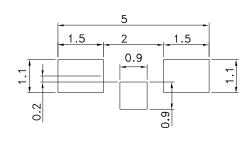
- NOTES:

 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.

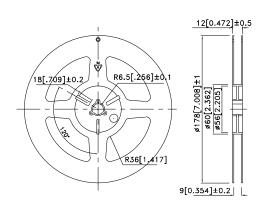
 3.Number of reflow process shall be 2 times or less.

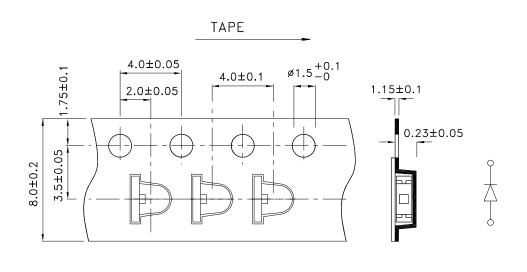
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)

Reel Dimension





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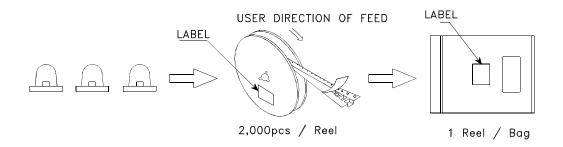
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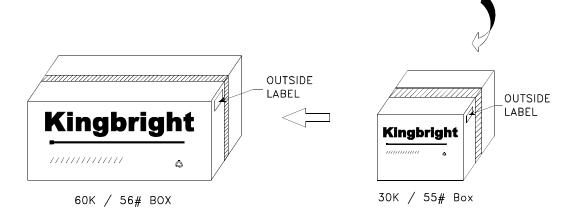
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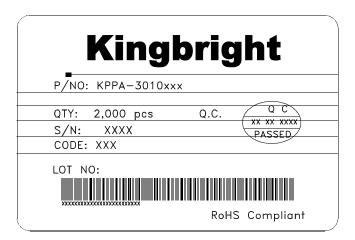
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PACKING & LABEL SPECIFICATIONS

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Detailed application notes are listed on our website. http://www.kingbright.com/application_notes

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