

3.2x2.8mm SURFACE MOUNT LED LAMP

Part Number: KA-3528ZGCKT-09 Green



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

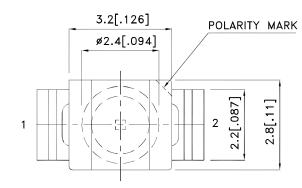
Features

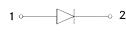
- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

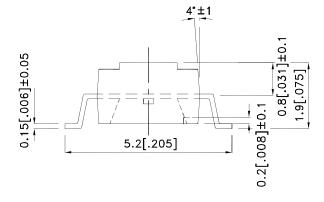
Descriptions

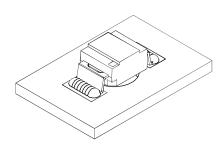
- The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or antielectrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

Package Dimensions









Notes:

- All dimensions are in millimeters (inches).
 Tolerance is ±0.25(0.01") 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 |
| KA-3528ZGCKT-09 | Green (InGaN) | Water Clear | 300 | 500 | 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 | 515 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Green | 525 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Green | 35 | | 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 | VR=5V |

Notes:

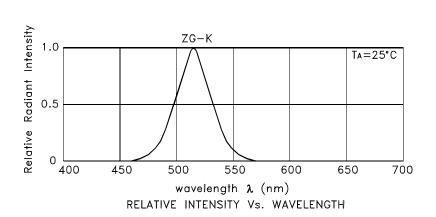
- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

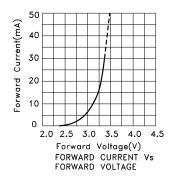
| Parameter | Green | Units | | |
|--------------------------|----------------|----------------|--|--|
| Power dissipation | 123 | mW | | |
| DC Forward Current | 30 | mA | | |
| Peak Forward Current [1] | 150 | mA | | |
| Reverse Voltage | 5 | V | | |
| Operating Temperature | -40°C To +85°C | -40°C To +85°C | | |
| Storage Temperature | -40°C To +85°C | -40°C To +85°C | | |

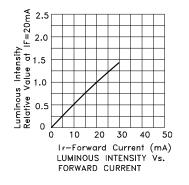
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

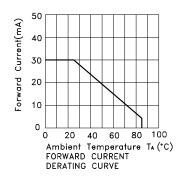
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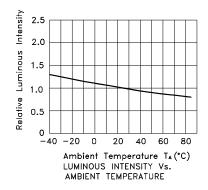


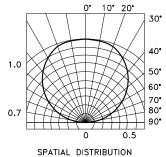
Green KA-3528ZGCKT-09











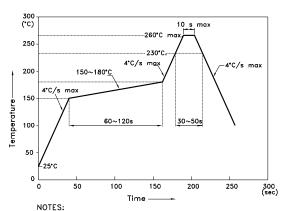
STATIAL DISTRIBUTION

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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.

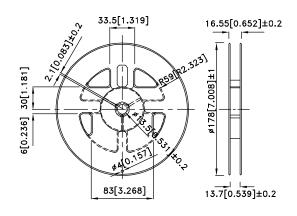
 3.Number of reflow process shall be 2 times or less.

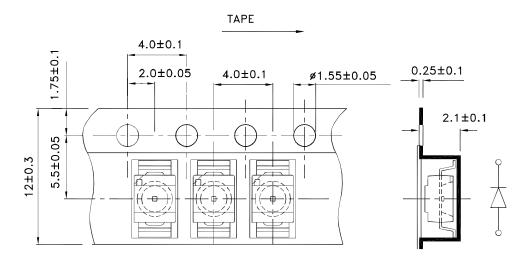
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

5.2 9 ø3.2±0.1 1.4 HOLE

Tape Dimensions (Units : mm)

Reel Dimension





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PACKING & LABEL SPECIFICATIONS USER DIRECTION OF FEED LABEL 2,000pcs / Reel 1 Reel / Bag OUTSIDE LABEL Kingbright Kingbright



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