3.5x2.0mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

Part Number: KPK-3520ZGC

Green

Features

- 3.5mmX2.0mm SMT LED, 1.3mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 2000PCS/REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

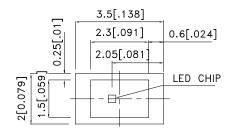
The Green source color devices are made with AllnGaN on Sapphire Light Emitting Diode.

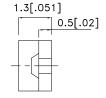
Static electricity and surge damage the LEDS.

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.

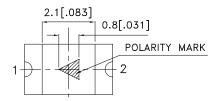
Package Dimensions

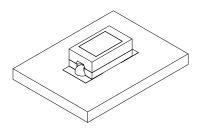












- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.2(0.008") unless otherwise noted.
- 3. Specifications are subject to change without notice.4. The device has a single mounting surface. The device must be mounted according to the specifications.





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Selection Guide

| Part No. Dice | | Lens Type | lv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|---------------|-----------------|-------------|------------------------|------|----------------------|
| | | | Min. | Тур. | 201/2 |
| KPK-3520ZGC | Green (AlInGaN) | WATER CLEAR | 110 | 200 | 120° |

Notes:

- 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous intensity/ luminous Flux: +/-15%.

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 | | 10 | uA | V _R =5V |

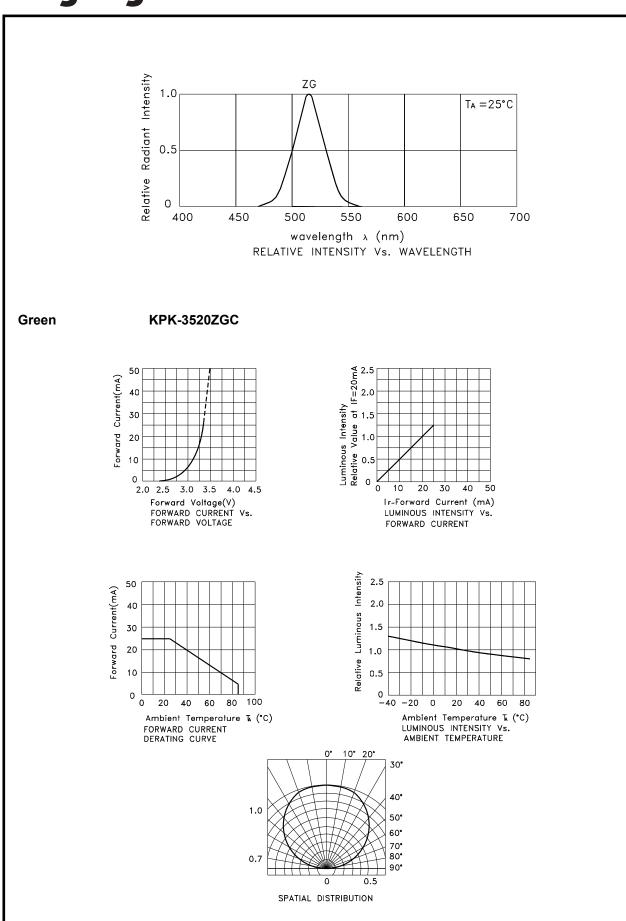
- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.

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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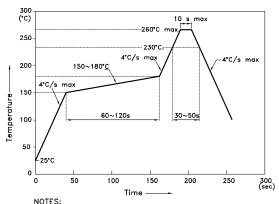


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KPK-3520ZGC

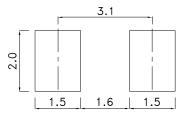
Reflow Soldering Profile For Lead-free SMT Process.



- 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 Specifications (Units: mm)

TAPE 4.0±0.1 2.0±0.05 4.0±0.1 ø1.55±0.05 0.25±0.1 1.55±0.1 5.5 ± 0.05 12 ± 0.3

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