3.2x1.6mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

Part Number: APTD3216VGC/Z

Description

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

Green

Static electricity and surge damage the LEDS.

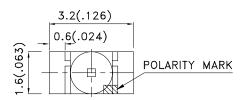
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

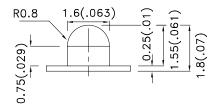
All devices, equipment and machinery must be electrically grounded.

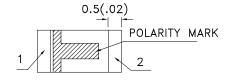
Features

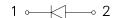
- 3.2mmX1.6mm SMT LED, 1.8mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 2000PCS / REEL .
- MOISTURE SENSITIVITY LEVEL: LEVEL 3.
- RoHS COMPLIANT.

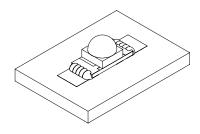
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2 (0.008")$ 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.





SPEC NO: DSAH0988 **REV NO: V.2** DATE: MAY/07/2007 PAGE: 1 OF 5 APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Y.L.LI ERP: 1203006179

Selection Guide

| Part No. | Dice | Dice Lens Type Iv (mcd) [2] @ 20mA | | , | Viewing Angle [1] |
|---------------|---------------|------------------------------------|------|------|----------------------|
| | | 2. | Min. | Тур. | 201/2 |
| APTD3216VGC/Z | Green (InGaN) | WATER CLEAR | 2200 | 5000 | 50° |

- 1. θ1/2 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 | 525 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Green | 535 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Green | 39 | | nm | IF=20mA |
| С | Capacitance | Green | 65 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Green | 3.2 | 3.7 | V | I=20mA |
| lR | Reverse Current | Green | | 10 | uA | V _R =5V |

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

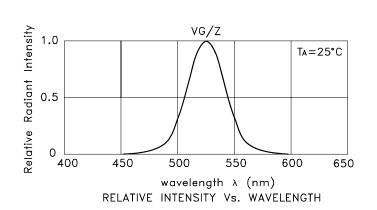
Absolute Maximum Ratings at TA=25°C

| Green | | | | | |
|----------------|---|--|--|--|--|
| 111 | mW | | | | |
| 30 | mA | | | | |
| 100 | mA | | | | |
| 5 | V | | | | |
| -40°C To +85°C | | | | | |
| -40°C To +85°C | | | | | |
| | 111 30 100 5 -40°C To +85°C | | | | |

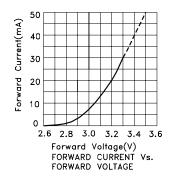
Note:

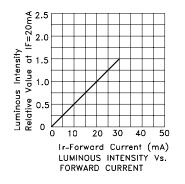
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

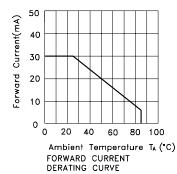
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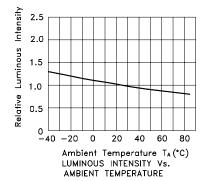


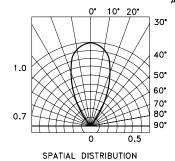
Green APTD3216VGC/Z









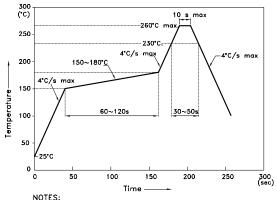


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APTD3216VGC/Z

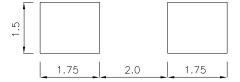
Reflow Soldering Profile For Lead-free SMT Process.



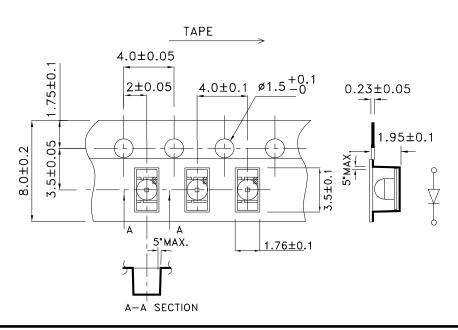
- NOTES:

 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)



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PACKING & LABEL SPECIFICATIONS APTD3216VGC/Z USER DIRECTION OF FEED LABEL LABEL 2,000pcs / Reel 1 Reel / Bag OUTSIDE LABEL OUTSIDE LABEL Kingbright Kingbright 30K / 55# Box 60K / 20# BOX



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