



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

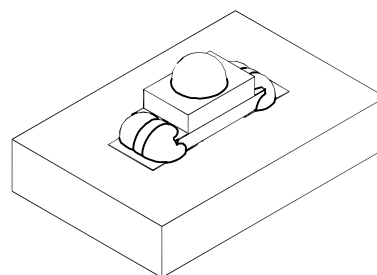
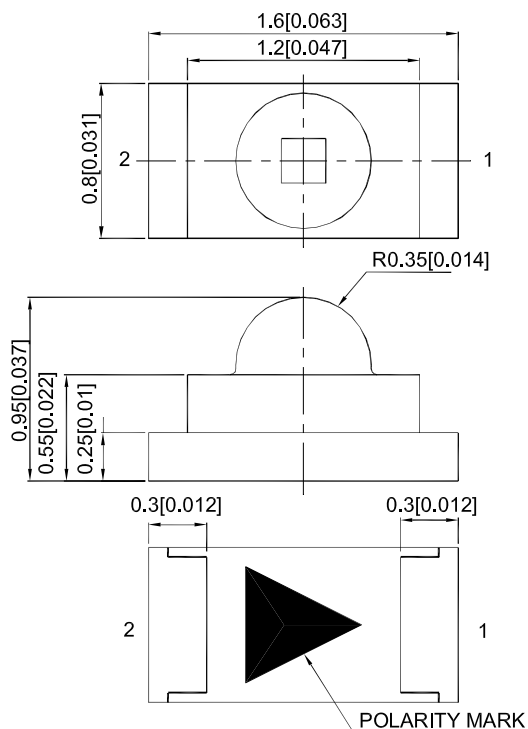
### Features

- 1.6mmX0.8mm SMT LED, 0.95mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel .
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- 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 anti-electrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.15(0.006)$  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.



## Selection Guide

| Part No.      | Dice          | Lens Type   | Iv (mcd) [2]<br>@ 2mA |      | Viewing<br>Angle [1] |
|---------------|---------------|-------------|-----------------------|------|----------------------|
|               |               |             | Min.                  | Typ. | 2θ1/2                |
| APTD1608LZGCK | Green (InGaN) | Water Clear | 50                    | 90   | 60°                  |

Notes:

1.  $\theta_{1/2}$  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 | Min. | Typ. | Max. | Units | Test Conditions            |
|-----------------------|--------------------------|--------|------|------|------|-------|----------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Green  |      | 515  |      | nm    | I <sub>F</sub> =2mA        |
| $\lambda_D$ [1]       | Dominant Wavelength      | Green  |      | 525  |      | nm    | I <sub>F</sub> =2mA        |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Green  |      | 35   |      | nm    | I <sub>F</sub> =2mA        |
| C                     | Capacitance              | Green  |      | 45   |      | pF    | V <sub>F</sub> =0V; f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Green  | 2.2  | 2.65 | 3    | V     | I <sub>F</sub> =2mA        |
| I <sub>R</sub>        | Reverse Current          | Green  |      |      | 50   | uA    | V <sub>R</sub> =5V         |

Notes:

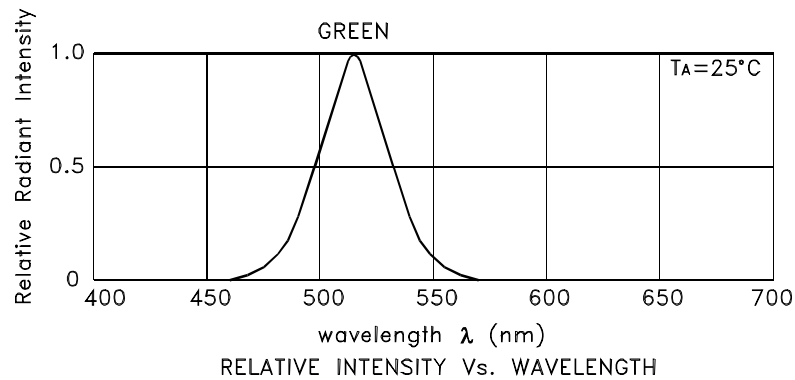
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

| Parameter                | Green          | Units |
|--------------------------|----------------|-------|
| Power dissipation        | 75             | 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 |       |

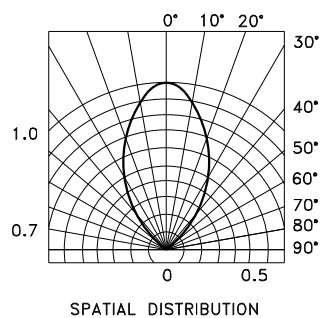
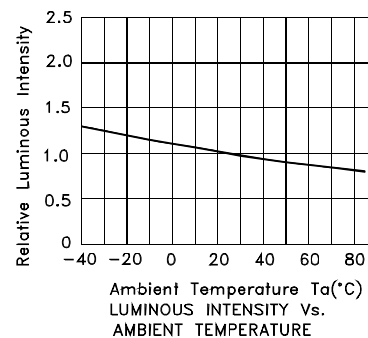
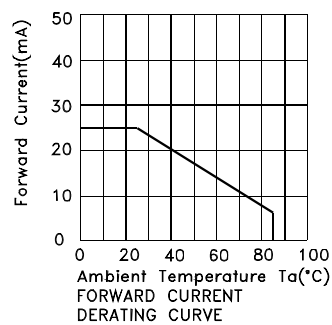
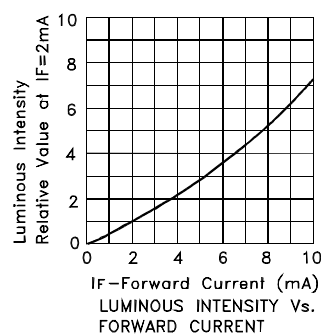
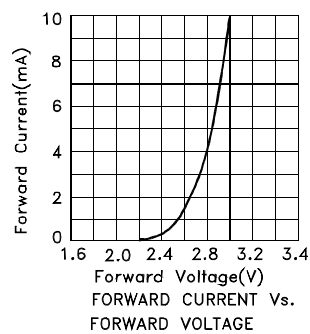
Note:

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



Green

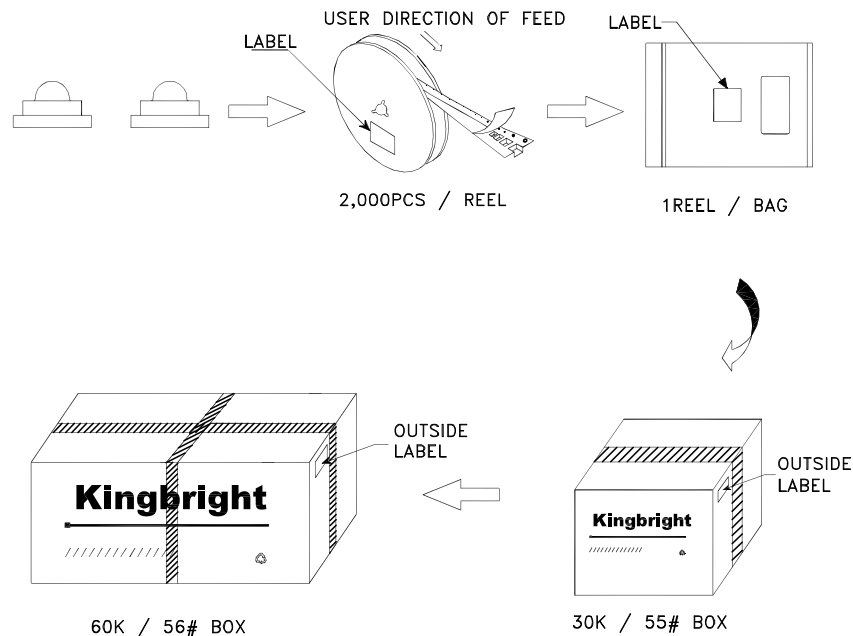
APTD1608LZGCK





## PACKING & LABEL SPECIFICATIONS

APTD1608LZGCK



|                                                                                      |                             |
|--------------------------------------------------------------------------------------|-----------------------------|
| <b>Kingbright</b>                                                                    |                             |
| P/NO: APTD1608xxx                                                                    |                             |
| QTY: 2,000 pcs                                                                       | Q.C.                        |
| S/N: XXXX                                                                            | Q C<br>XX-XX-XXXX<br>PASSED |
| CODE: XXX                                                                            |                             |
| LOT NO:                                                                              |                             |
|  |                             |
| xxxxxxxxxxxxxxxxxxxxxxxxxxxx                                                         |                             |
| RoHS Compliant                                                                       |                             |

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- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

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Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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