

### 1.6X0.8mm SMD CHIP LED LAMP

Part Number: APT1608CGCK

Green

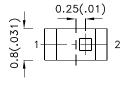
### **Features**

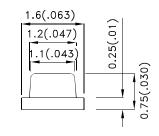
- 1.6mmX0.8mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel .
- Moisture sensitivity level : level 3.
- RoHS compliant.

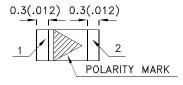
### Description

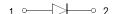
The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

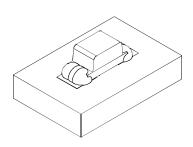
# **Package Dimensions**











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.1(0.004") 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.

SPEC NO: DSAA6059 APPROVED: WYNEC

**REV NO: V.14** CHECKED: Allen Liu

DATE: SEP/01/2010 DRAWN: F.F.Zhou

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## **Selection Guide**

| Part No.    | Dice            | Lens Type   | lv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|-------------|-----------------|-------------|------------------------|------|----------------------|
|             |                 |             | Min.                   | Тур. | 201/2                |
| APT1608CGCK | Green (AlGaInP) | Water Clear | 20                     | 50   | 120°                 |

- 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%.

# Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter                | Device | Тур. | Max. | Units | Test Conditions    |
|--------|--------------------------|--------|------|------|-------|--------------------|
| λpeak  | Peak Wavelength          | Green  | 574  |      | nm    | IF=20mA            |
| λD [1] | Dominant Wavelength      | Green  | 570  |      | nm    | IF=20mA            |
| Δλ1/2  | Spectral Line Half-width | Green  | 20   |      | nm    | IF=20mA            |
| С      | Capacitance              | Green  | 15   |      | pF    | VF=0V;f=1MHz       |
| VF [2] | Forward Voltage          | Green  | 2.1  | 2.5  | V     | IF=20mA            |
| lR     | Reverse Current          | Green  |      | 10   | uA    | V <sub>R</sub> =5V |

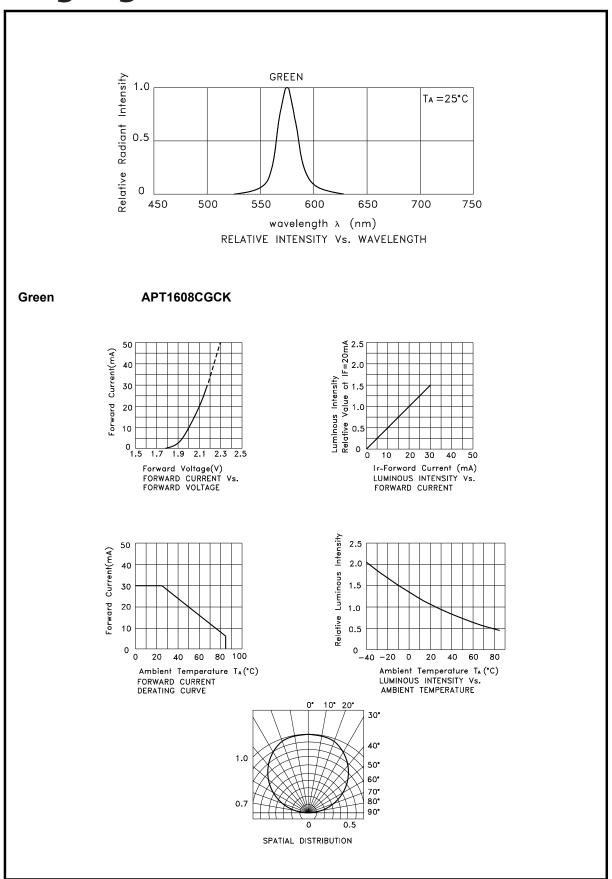
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

# Absolute Maximum Ratings at TA=25°C

| Parameter                | Green          | Units |
|--------------------------|----------------|-------|
| Power dissipation        | 75             | mW    |
| DC Forward Current       | 30             | 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 |       |

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

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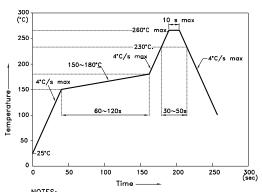
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### APT1608CGCK

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.

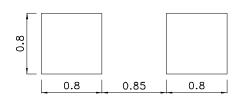


NOTES:

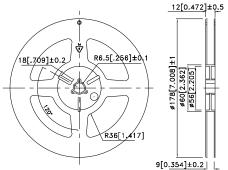
1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

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

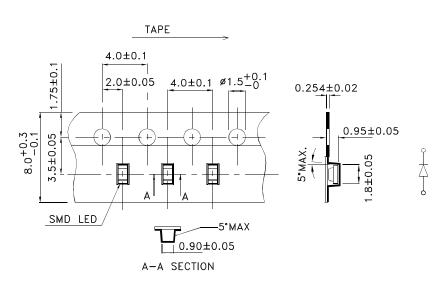


# **Reel Dimension**

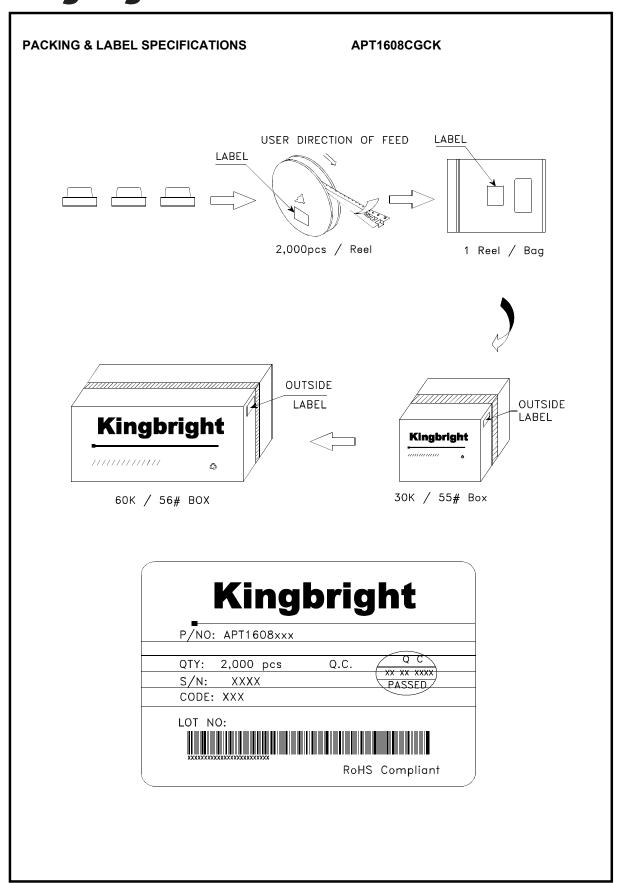


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## **Tape Dimensions** (Units: mm)



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