

1.6X0.8mm SMD CHIP LED LAMP (0.25mm Height)

PRELIMINARY SPEC

Part Number: APG1608CGKC/T

Green

Features

- 1.6mmX0.8mm SMT LED, 0.25mm thickness.
- Low power consumption.
- Wide viewing angle.
- Compatible with automatic placement equipment.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

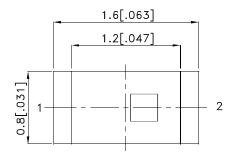
Description

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

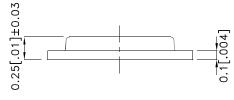
Applications

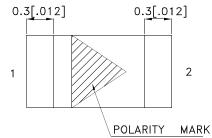
- 1. Mobile phone Keypad indicator and backlight.
- 2.Flat backlight for LCD, switch and symbol.
- 3.Toys.

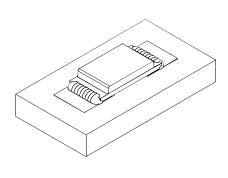
Package Dimensions











Notes

- All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.1(0.004") 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: DSAI5959
 REV NO: V.2
 DATE: MAR/30/2009
 PAGE: 1 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: X.M.He
 ERP: 1203008081

Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|---------------|-----------------|-------------|------------------------|------|----------------------|
| | | ,, | Min. | Тур. | 201/2 |
| APG1608CGKC/T | Green (AlGaInP) | WATER CLEAR | 36 | 60 | 120° |

- 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 | 574 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Green | 570 | | nm | I=20mA |
| Δλ1/2 | Spectral Line Half-width | Green | 15 | | nm | IF=20mA |
| С | Capacitance | Green | 15 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Green | 2.1 | 2.6 | V | IF=20mA |
| lR | Reverse Current | Green | | 10 | uA | V _R =5V |

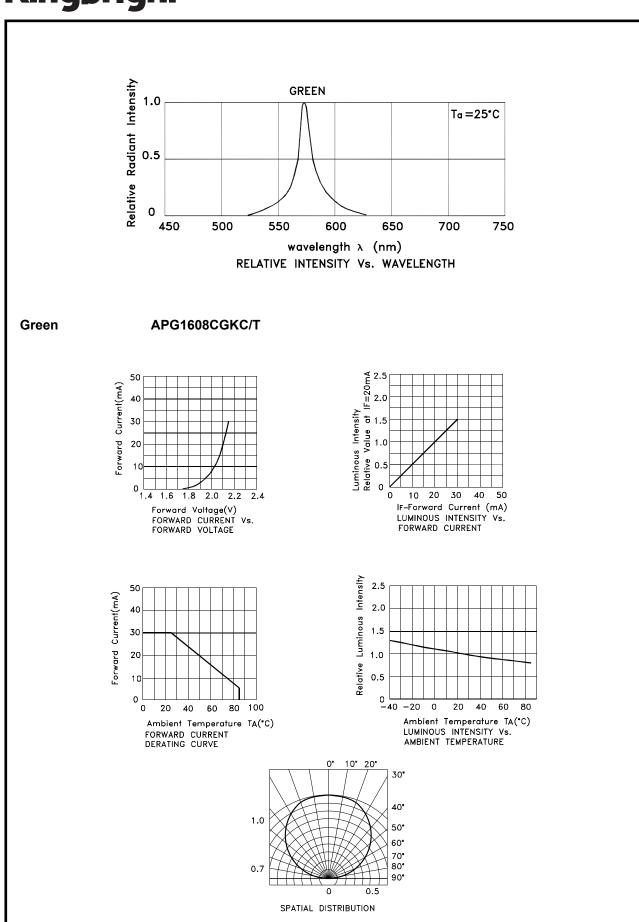
1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

| Parameter | Green | Units | |
|--------------------------|----------------|-------|--|
| Power dissipation | 78 | 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.

SPEC NO: DSAI5959 **REV NO: V.2** DATE: MAR/30/2009 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: X.M.He ERP: 1203008081



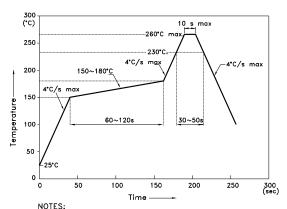
 SPEC NO: DSAI5959
 REV NO: V.2
 DATE: MAR/30/2009
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: X.M.He
 ERP: 1203008081

APG1608CGKC/T

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.



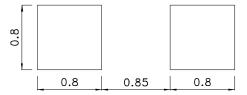
- NOTES:

 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

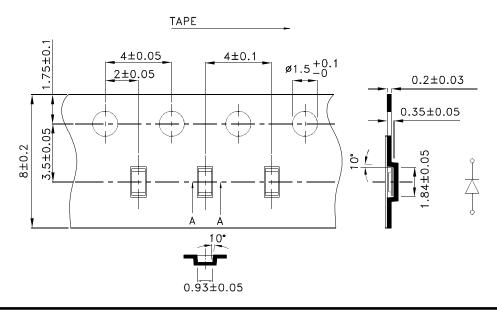
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

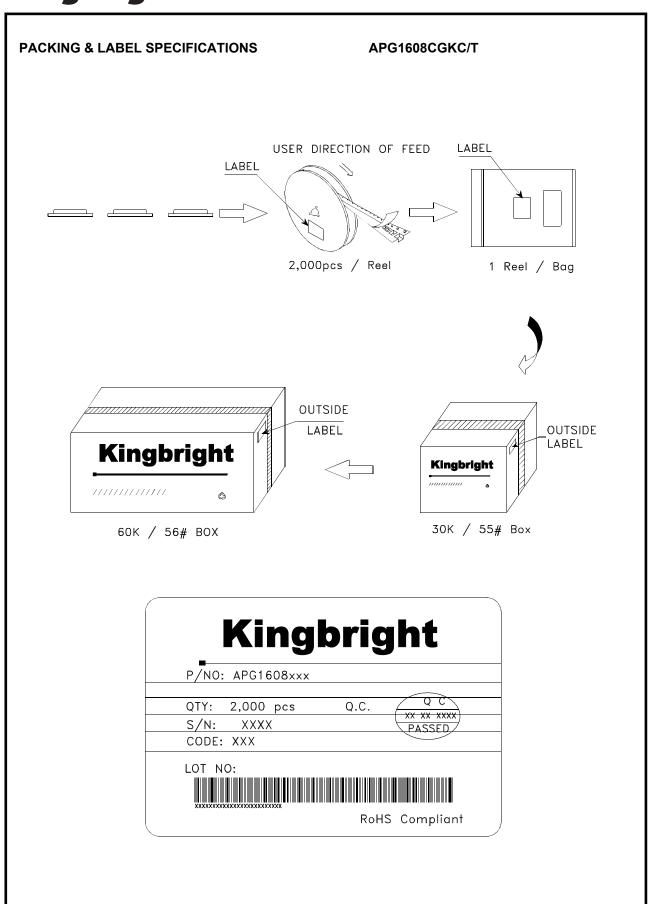
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units : mm)



SPEC NO: DSAI5959 **REV NO: V.2** DATE: MAR/30/2009 PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: X.M.He ERP: 1203008081



SPEC NO: DSAI5959 APPROVED: WYNEC REV NO: V.2 CHECKED: Allen Liu DATE: MAR/30/2009 DRAWN: X.M.He PAGE: 5 OF 5 ERP: 1203008081