#### 1.6x0.8mm SMD CHIP LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

APHK1608TGC

**GREEN** 

#### **Features**

- •1.6mmx0.8mm SMT LED, 0.7mm THICKNESS.
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACK LIGHT AND INDICATOR.
- •VARIOUS COLORS AND LENS TYPES AVAILABLE.
- •PACKAGE: 2000PCS/REEL.
- •RoHS COMPLIANT.

#### Description

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

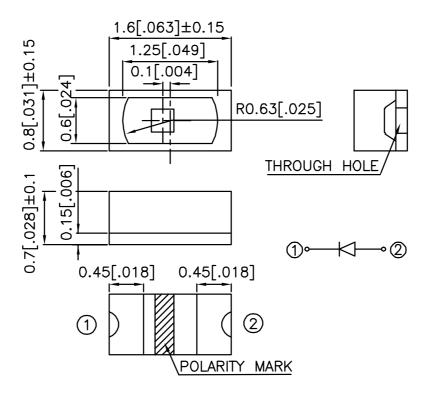
Static electricity and surge damage the LEDS.

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**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1 (0.004")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

 SPEC NO: DSAD1117
 REV NO: V.2
 DATE: MAR/12/2005
 PAGE: 1 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: Y.W.WANG
 ERP:1204000415

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA Min. Typ.		Viewing Angle
					201/2
APHK1608TGC	GREEN (InGaN)	WATER CLEAR	70	150	90°

## Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	500		nm	IF=20mA
λD	Dominant Wavelength	Green	505		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	30		nm	IF=20mA
С	Capacitance	Green	56		pF	VF=0V;f=1MHz
VF	Forward Voltage	Green	3.6	4.4	V	IF=20mA
lR	Reverse Current	Green		10	uA	VR = 5V

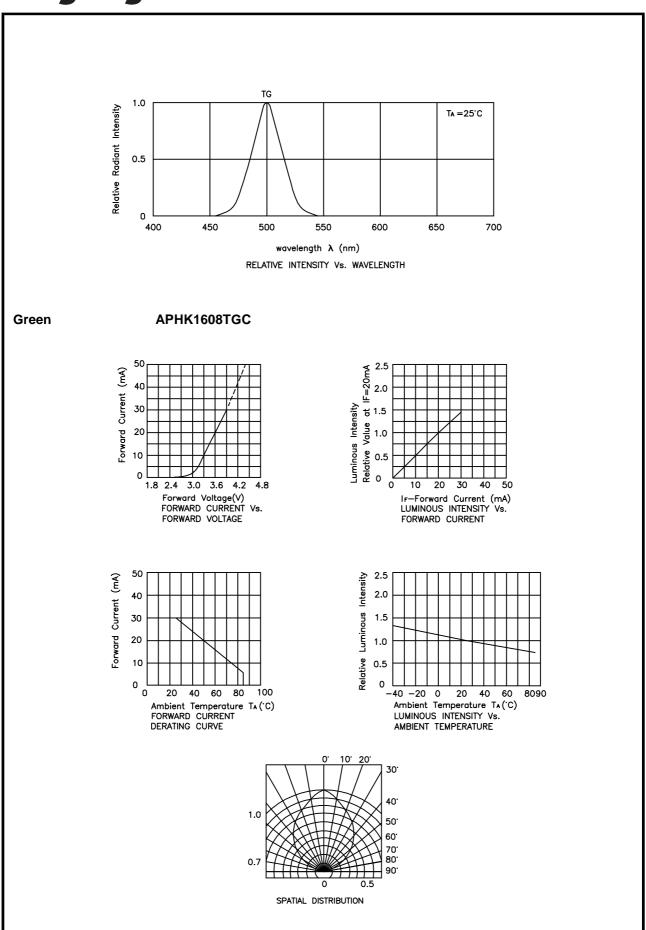
## Absolute Maximum Ratings at Ta=25°C

Parameter	Green	Units	
Power dissipation	110	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		

SPEC NO: DSAD1117 **REV NO: V.2** DATE: MAR/12/2005 PAGE: 2 OF 4 APPROVED: J. Lu **CHECKED: Allen Liu** DRAWN: Y.W.WANG ERP:1204000415

Note:
1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.

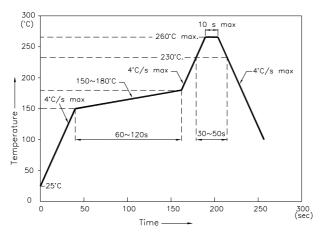


 SPEC NO: DSAD1117
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 PAGE: 3 OF 4

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#### APHK1608TGC

Reflow Soldering Profile For Lead-free SMT Process.

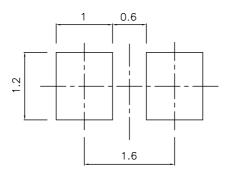


- NOTES:

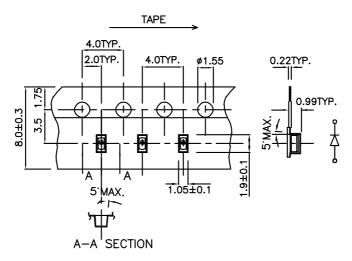
  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
  - 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
  - 3. Number of reflow process shall be 2 times or less.

### **Recommended Soldering Pattern**

(Units:mm)



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



If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
- 2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).
- 3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).

SPEC NO: DSAD1117 **REV NO: V.2** DATE: MAR/12/2005 PAGE: 4 OF 4 **CHECKED: Allen Liu** ERP:1204000415 APPROVED: J. Lu DRAWN: Y.W.WANG