

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

Part Number: APH1608PBC/A Blue



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

**DEVICES** 

### **Features**

- 1.6mmX0.8mm SMT LED, 0.65mm 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

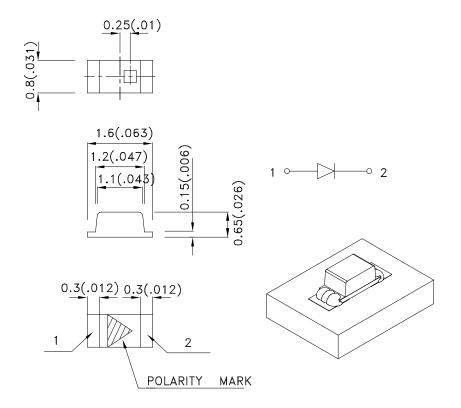
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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**



- 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.4. The device has a single mounting surface. The device must be mounted according to the specifications.





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## **Selection Guide**

| Part No.     | Dice         | Lens Type   | lv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|--------------|--------------|-------------|------------------------|------|----------------------|
|              |              | 2.          | Min.                   | Тур. | 201/2                |
| APH1608PBC/A | Blue (InGaN) | WATER CLEAR | 18                     | 60   | 120°                 |

- 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          | Blue   | 468  |      | nm    | IF=20mA         |
| λD [1] | Dominant Wavelength      | Blue   | 470  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Blue   | 21   |      | nm    | IF=20mA         |
| С      | Capacitance              | Blue   | 100  |      | pF    | VF=0V;f=1MHz    |
| VF [2] | Forward Voltage          | Blue   | 3.2  | 4    | V     | IF=20mA         |
| lr     | Reverse Current          | Blue   |      | 10   | uA    | VR=5V           |

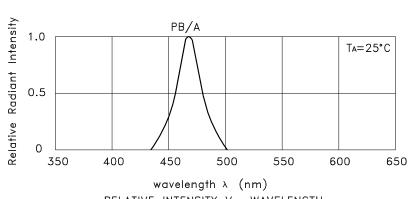
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

| Parameter                | Blue           | Units |  |  |
|--------------------------|----------------|-------|--|--|
| Power dissipation        | 120            | mW    |  |  |
| DC Forward Current       | 30             | mA    |  |  |
| Peak Forward Current [1] | 100            | mA    |  |  |
| Reverse Voltage          | 5              | V     |  |  |
| Operating Temperature    | -40°C To +85°C |       |  |  |
| Storage Temperature      | -40°C To +85°C |       |  |  |

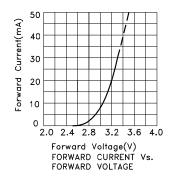
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

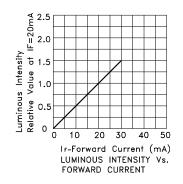
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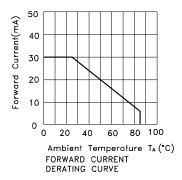


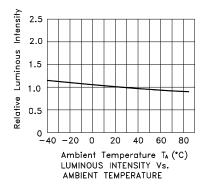
RELATIVE INTENSITY Vs. WAVELENGTH

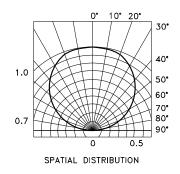
### Blue APH1608PBC/A







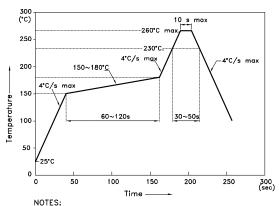




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## APH1608PBC/A

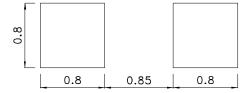
Reflow Soldering Profile For Lead-free SMT Process.



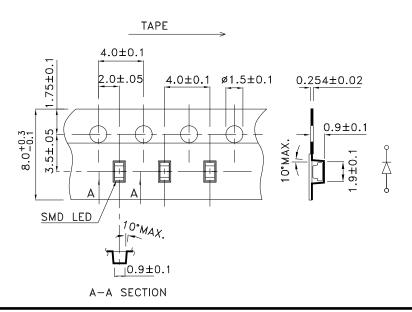
- NOTES:

  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)



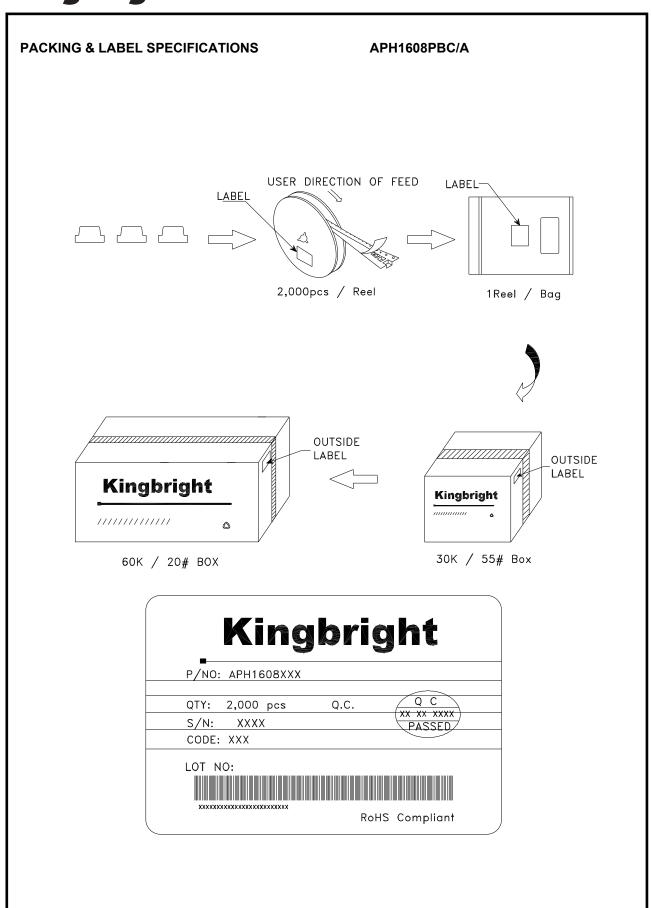
## **Tape Specifications** (Units: mm)



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