



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: APT1608PBC/A Blue

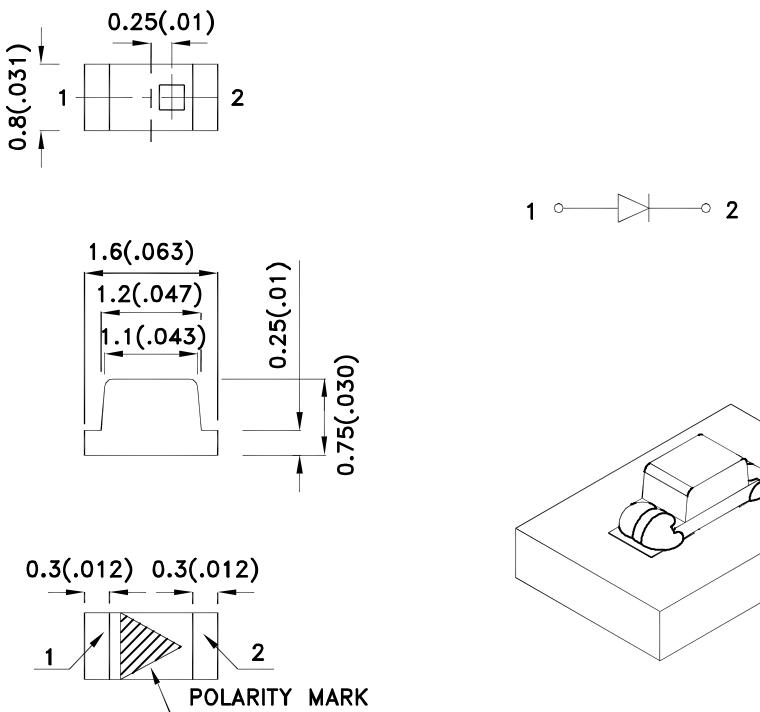
Features

- 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 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



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.
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 | I _v (mcd) [2] @ 20mA | | Viewing Angle [1] |
|--------------|--------------|-------------|---------------------------------|------|-------------------|
| | | | Min. | Typ. | |
| APT1608PBC/A | Blue (InGaN) | WATER CLEAR | 18 | 60 | 120° |

Notes:

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 | Typ. | Max. | Units | Test Conditions |
|--------------------|--------------------------|--------|------|------|-------|---------------------------|
| λpeak | Peak Wavelength | Blue | 468 | | nm | I _F =20mA |
| λD [1] | Dominant Wavelength | Blue | 470 | | nm | I _F =20mA |
| Δλ1/2 | Spectral Line Half-width | Blue | 21 | | nm | I _F =20mA |
| C | Capacitance | Blue | 100 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | Blue | 3.2 | 4 | V | I _F =20mA |
| I _R | Reverse Current | Blue | | 10 | uA | V _R =5V |

Notes:

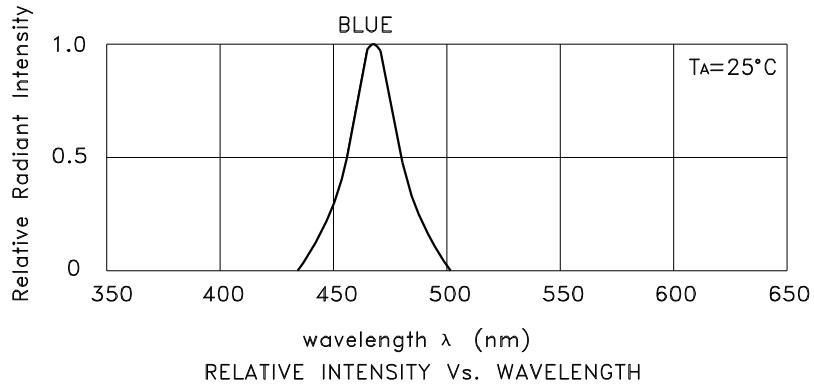
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

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 | |

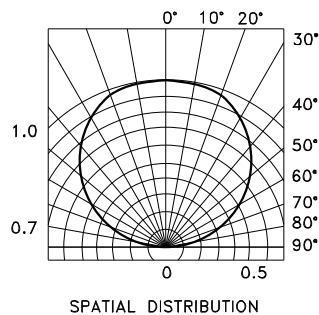
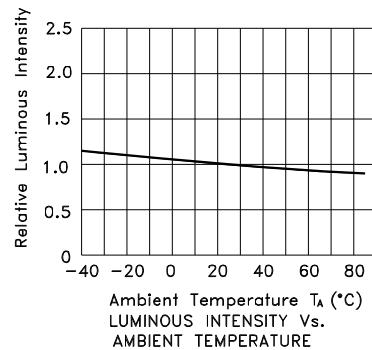
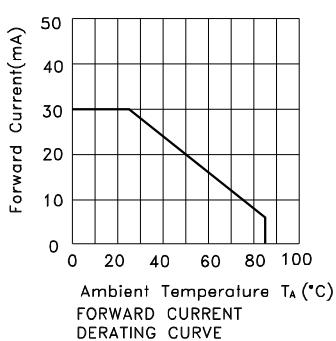
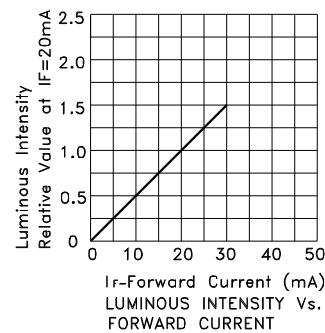
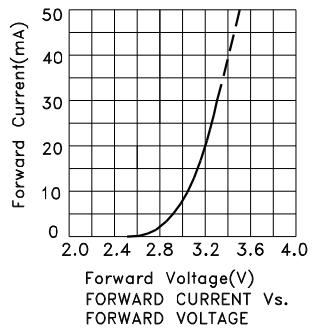
Note:

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



Blue

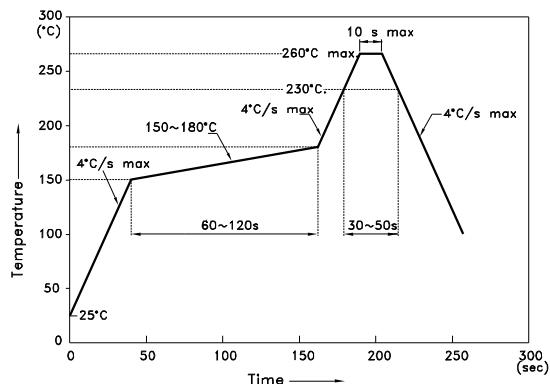
APT1608PBC/A



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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.

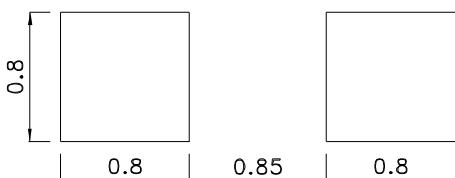
Reflow Soldering Profile For Lead-free SMT Process.



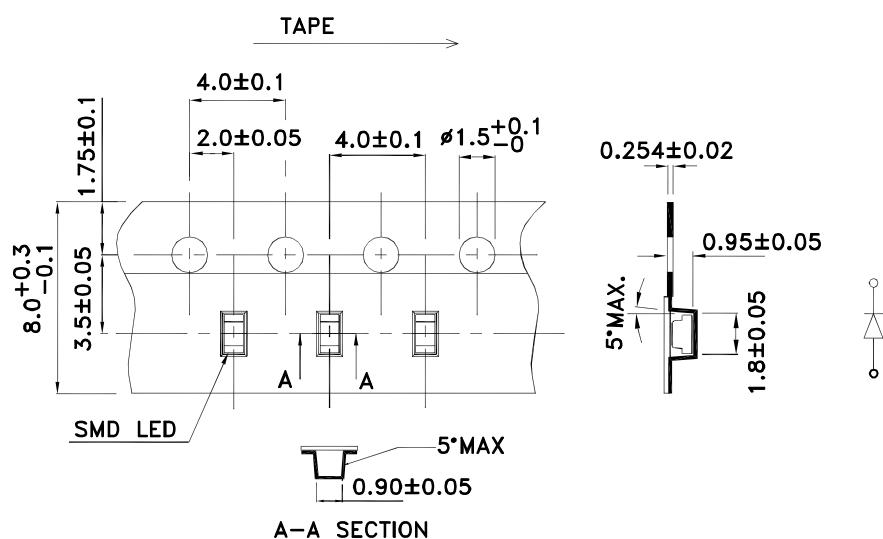
NOTES:

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)



Tape Dimensions (Units : mm)



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PACKING & LABEL SPECIFICATIONS

APT1608PBC/A

