



### ATTENTION

OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

KPHK-1608PBC

BLUE

### 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.

### Description

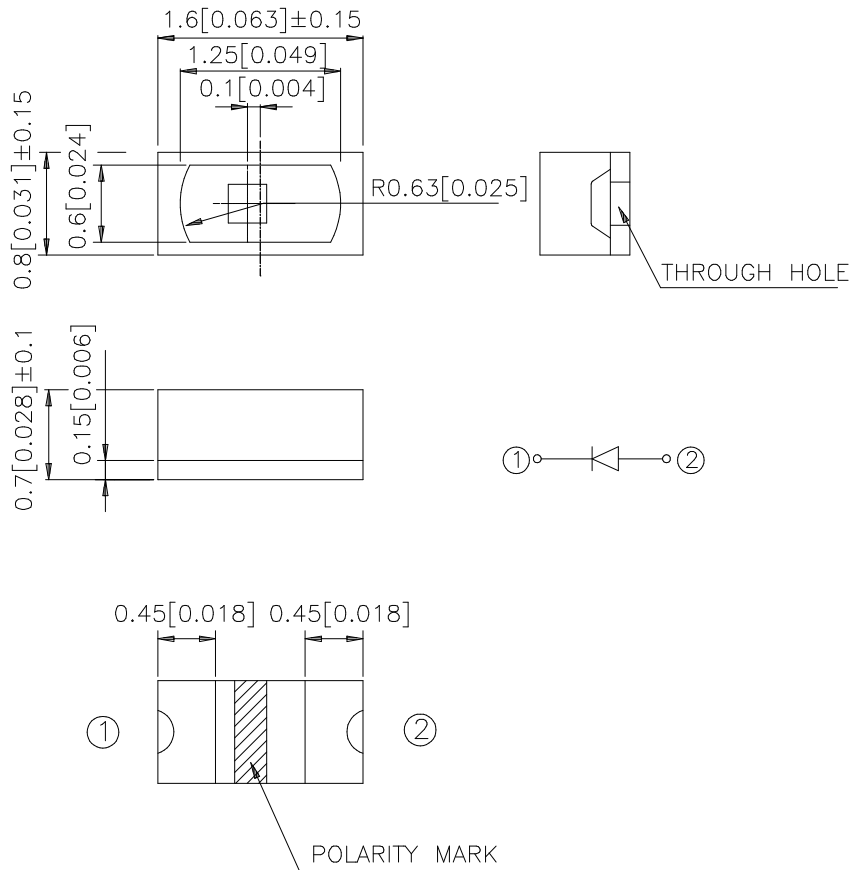
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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 ±0.1 (±0.004") unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

| Part No.     | Dice           | Lens Type   | Iv (mcd)<br>@ 20 mA |      | Viewing<br>Angle |
|--------------|----------------|-------------|---------------------|------|------------------|
|              |                |             | Min.                | Typ. | 2θ1/2            |
| KPHK-1608PBC | BLUE ( InGaN ) | WATER CLEAR | 36                  | 70   | 90°              |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

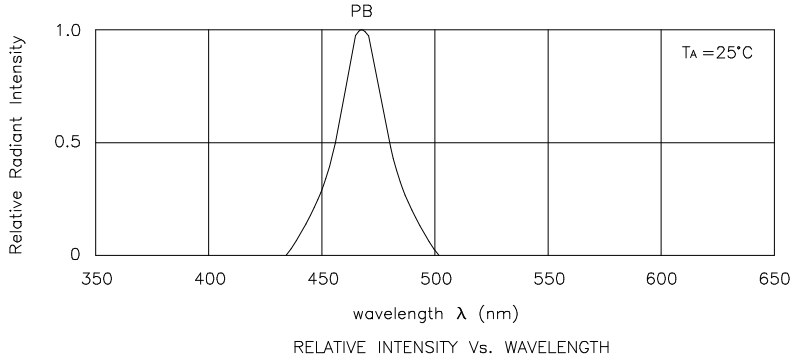
| Symbol                | Parameter                | Device | Typ. | Max. | Units | Test Conditions           |
|-----------------------|--------------------------|--------|------|------|-------|---------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Blue   | 468  |      | nm    | I <sub>F</sub> =20mA      |
| $\lambda_D$           | Dominate Wavelength      | Blue   | 470  |      | nm    | I <sub>F</sub> =20mA      |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Blue   | 25   |      | nm    | I <sub>F</sub> =20mA      |
| C                     | Capacitance              | Blue   | 65   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub>        | Forward Voltage          | Blue   | 3.65 | 4.2  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>        | Reverse Current          | Blue   |      | 10   | μA    | V <sub>R</sub> = 5V       |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

| Parameter                     | Blue           | Units |
|-------------------------------|----------------|-------|
| Power dissipation             | 102            | mW    |
| DC Forward Current            | 30             | mA    |
| Peak Forward Current [1]      | 160            | mA    |
| Reverse Voltage               | 5              | V     |
| Operating/Storage Temperature | -40°C To +85°C |       |

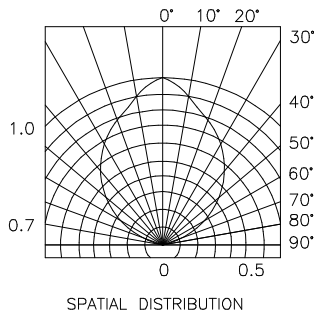
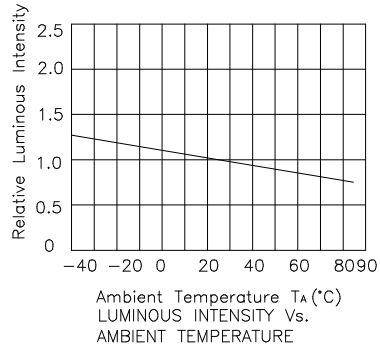
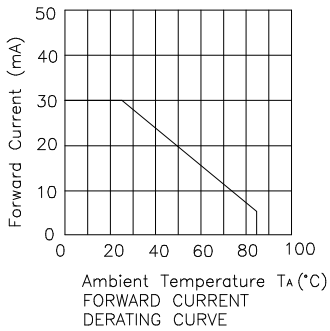
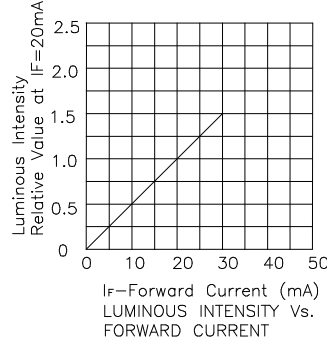
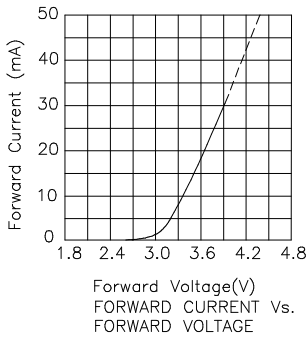
Note:

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



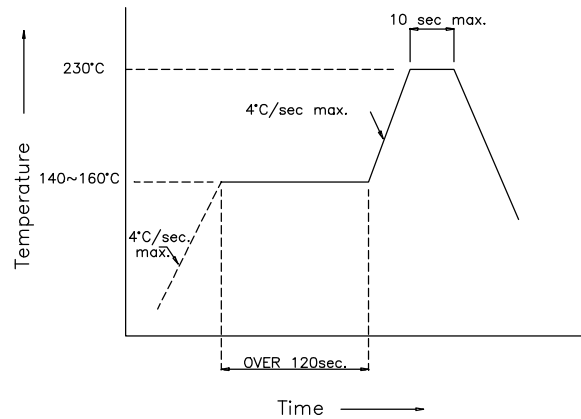
**Blue**

**KPHK-1608PBC**

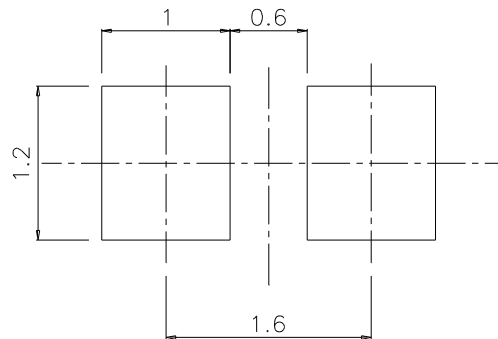


## KPHK-1608PBC SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)

