

PRELIMINARY SPEC

Part Number: KPTL-3216PBC-J

BLUE



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

### Features

- 3.2mmx1.6mm SMT LED, 1.1mm 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

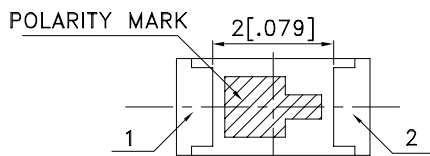
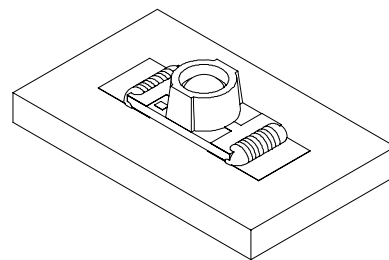
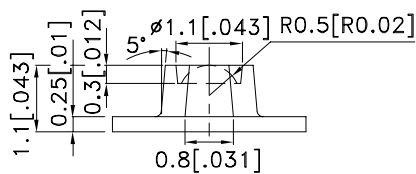
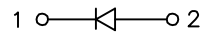
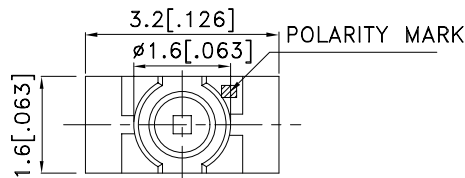
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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.



## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2 θ 1/2
KPTL-3216PBC-J	BLUE (InGaN)	WATER CLEAR	180	400	70 °

Notes:

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	Typ.	Max.	Units	Test Conditions
λ peak	Peak Wavelength	Blue	467		nm	IF=20mA
λ D [1]	Dominant Wavelength	Blue	470		nm	IF=20mA
Δλ 1/2	Spectral Line Half-width	Blue	22		nm	IF=20mA
C	Capacitance	Blue	110		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	4.0	V	IF=20mA
IR	Reverse Current	Blue		10	uA	VR = 5V

Notes:

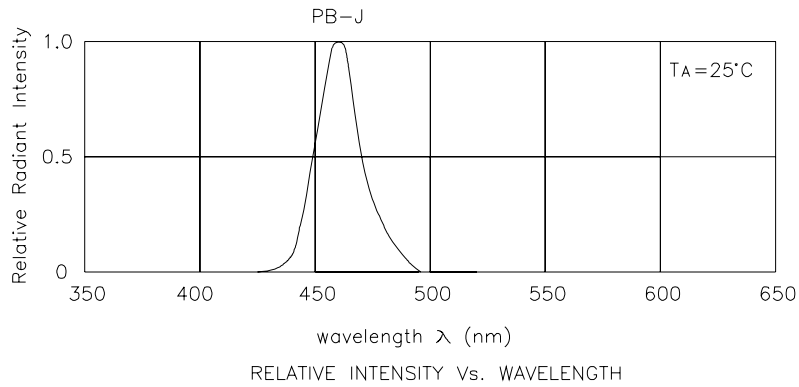
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## 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/Storage Temperature	-40°C To +85°C	

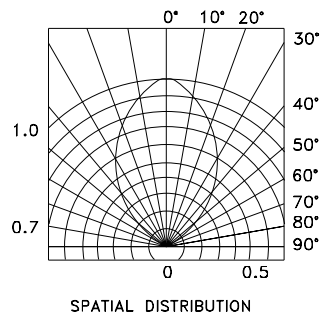
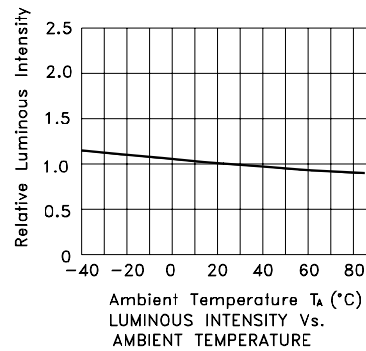
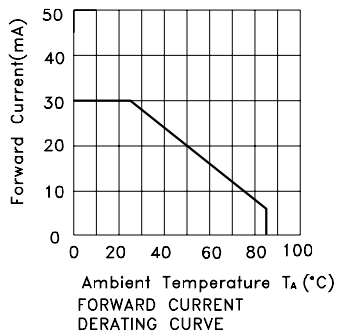
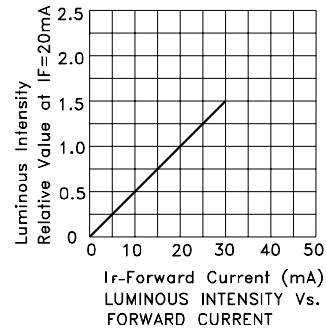
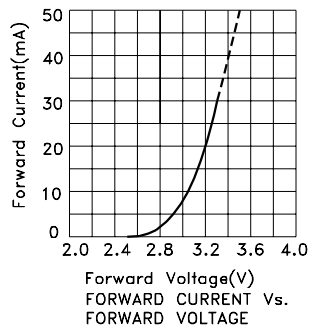
Note:

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



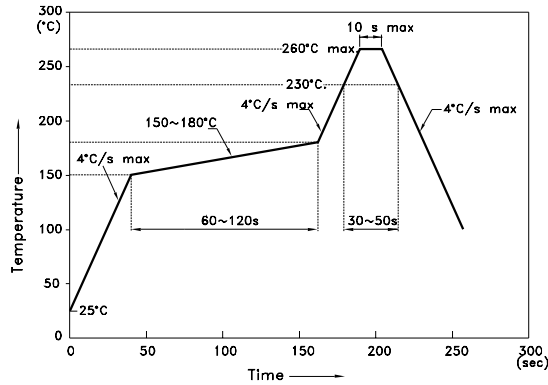
## Blue

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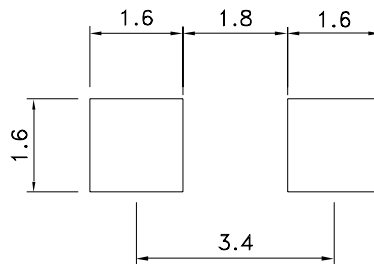
Reflow Soldering Profile For Lead-free SMT Process.



**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)

