### 3.2x1.6mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

Part Number: KPTL-3216PBC-J

BLUE

#### **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**

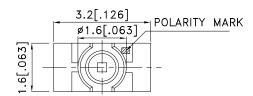
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

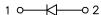
Static electricity and surge damage the LEDS.

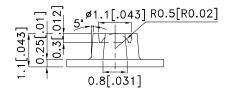
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

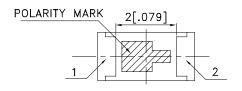
All devices, equipment and machinery must be electrically grounded.

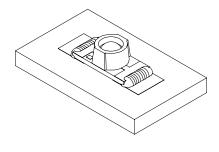
## **Package Dimensions**











- 1. All dimensions are in millimeters (inches).
- Tolerance is ±0.1(0.004") unless otherwise noted.
   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	Iv (mcd) [2] Lens Type @ 20mA		,	Viewing Angle [1]	
			Min.	Тур.	2 θ 1/2	
KPTL-3216PBC-J	BLUE (InGaN)	WATER CLEAR	180	400	70°	

1.0 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	Тур.	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
С	Capacitance	Blue	110		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	4.0	V	IF=20mA
lr	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		

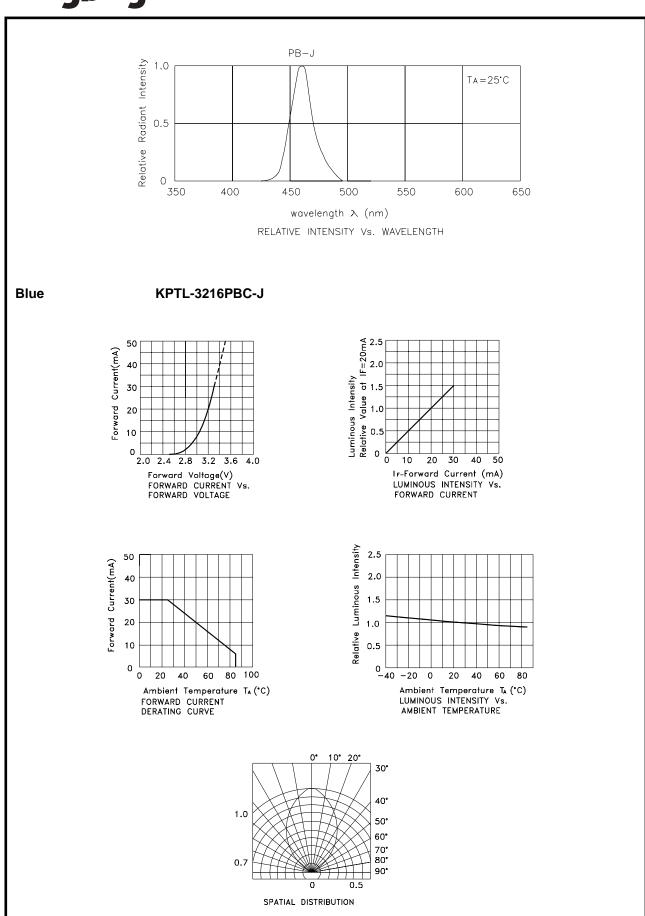
### Note:

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

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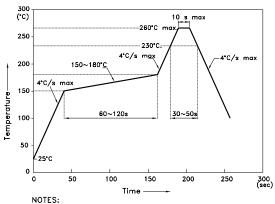
APPROVED: WYNEC **CHECKED: Allen Liu** 



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# KPTL-3216PBC-J

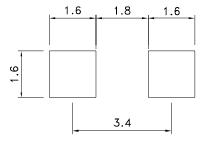
Reflow Soldering Profile For Lead-free SMT Process.



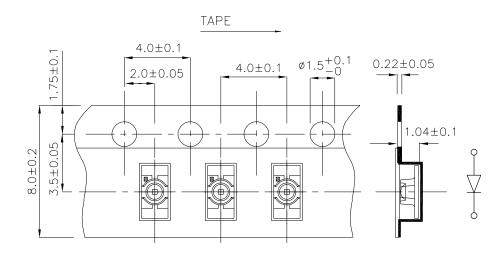
- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
  2.Don't cause stress to the epoxy resin while it is exposed
- to high temperature.

  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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