

### **Excellent Integrated System Limited**

Stocking Distributor

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**Kingbright** APT3216PBC/A

For any questions, you can email us directly: sales@integrated-circuit.com



#### **Distributor of Kingbright: Excellent Integrated System Limited**

Datasheet of APT3216PBC/A - LED BLUE CLEAR 1206 SMD

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

### **Kingbright**

#### 3.2mmx1.6mm SMD CHIP LED LAMP

Blue

Part Number: APT3216PBC/A

# ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC

DISCHARGE SENSITIVE DEVICES



#### **Features**

- 3.2mmx1.6mm 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**

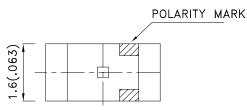
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

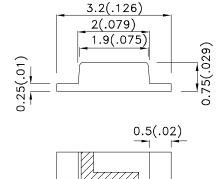
Static electricity and surge damage the LEDS.

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

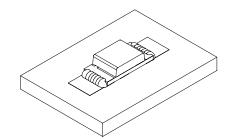
All devices, equipment and machinery must be electrically grounded.

#### **Package Dimensions**









- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.2(0.008") 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	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APT3216PBC/A	Blue (InGaN)	WATER CLEAR	18	60	120°

1.  $\theta$ 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
λpeak	Peak Wavelength	Blue	468		nm	I==20mA
λD [1]	Dominant Wavelength	Blue	470		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	21		nm	I=20mA
С	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	4	V	I=20mA
lr	Reverse Current	Blue		10	uA	V <sub>R</sub> =5V

#### Notes:

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

#### Absolute Maximum Ratings at TA=25°C

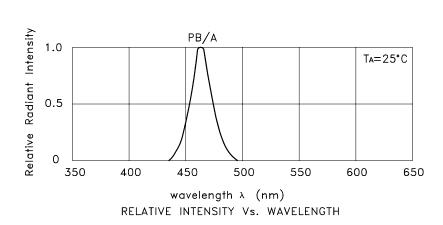
Parameter	Blue	Units		
Power dissipation	120	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	100	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

#### Note:

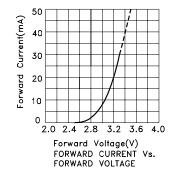
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

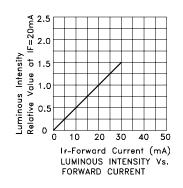
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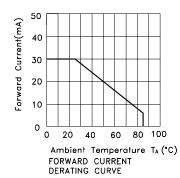
## **Kingbright**

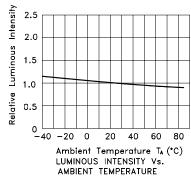


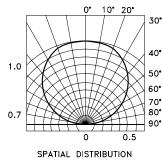
#### Blue APT3216PBC/A











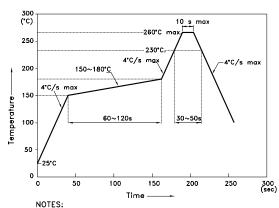
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#### APT3216PBC/A

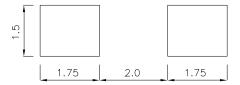
Reflow Soldering Profile For Lead-free SMT Process.



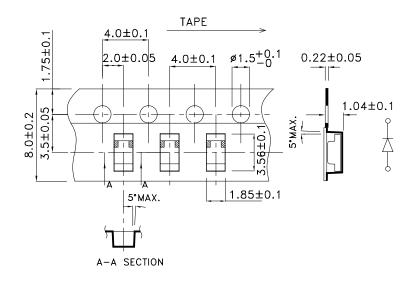
1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

3.Number of reflow process shall be 2 times or less.

#### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



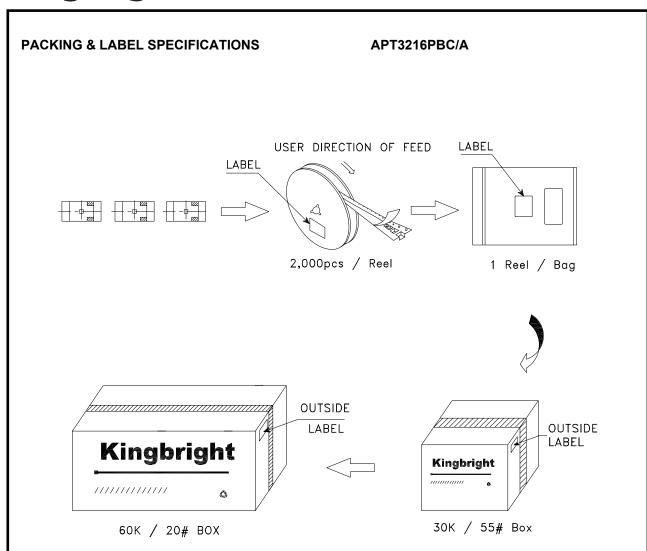
#### **Tape Specifications** (Units: mm)



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