

#### 3.0x2.0 mm SMD CHIP LED LAMP

AA3020PBC

**BLUE** 

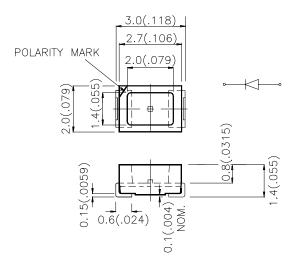
#### **Features**

- •3.0MM X 2.0MM, 1.4MM HIGH, ONLY MINIMUM SPACE REQUIRED.
- •SUITABLE FOR COMPACT OPTOELECTRONIC APPLICATIONS.
- •LOW POWER CONSUMPTION.
- •EMBOSSED TAPING.
- •PACKAGE: 2000PCS/REEL.

#### **Description**

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

#### **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25 (0.01\mbox{"})$  unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

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#### **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (mcd)</b> @ 20 mA		<b>Viewing</b> Angle
			Min.	Тур.	201/2
AA3020PBC	BLUE (InGaN)	WATER CLEAR	20	60	90°

#### Note:

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	468		nm	IF=20mA
λD	Dominate Wavelength	Blue	465		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	Blue	25		nm	IF=20mA
С	Capacitance	Blue	65		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Blue	3.65	4.2	V	IF=20mA
I <sub>R</sub>	Reverse Current	Blue		10	uA	VR = 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 Temperature	-20°C To +80°C			
Storage Temperature	-30°C To +85°C			

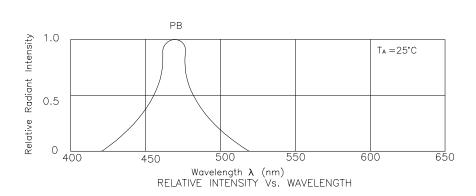
Note

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

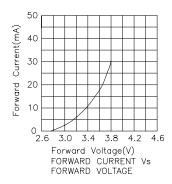
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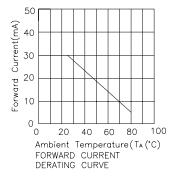
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

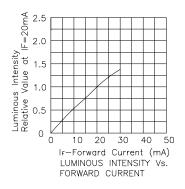


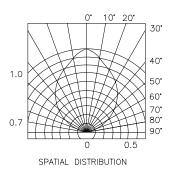


#### Blue AA3020PBC









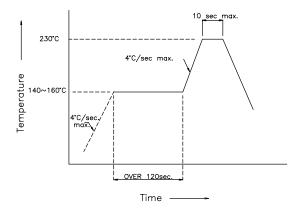
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# Kingbright

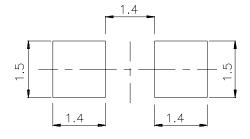
#### AA3020PBC

### **SMT Reflow Soldering Instructions**

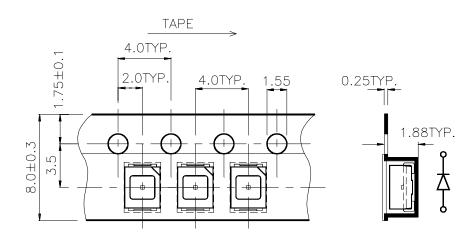
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



### Recommended Soldering Pattern (Units:mm)



## Tape Specifications (Units:mm)



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