

#### 2.1x0.6mm RIGHT ANGLE SURFACE LED **LAMP**

Blue

PRELIMINARY SPEC



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

**DEVICES** 

Part Number: APA2106PBC/Z

#### **Features**

- 2.1mmX0.6mm RIGHT ANGLE SMT LED, 1.0mm 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

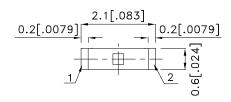
The Blue source color devices are made with InGaN Light Emitting Diode.

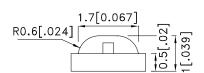
Static electricity and surge damage the LEDS.

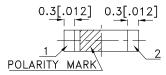
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

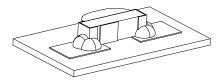
All devices, equipment and machinery must be electrically grounded.

### **Package Dimensions**









- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1 (0.004")$  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





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SPEC NO: DSAH3727 **REV NO: V.2** APPROVED: WYNEC **CHECKED: Allen Liu** 

DATE: AUG/07/2007 DRAWN: S.J.Liu

#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
APA2106PBC/Z	Blue (InGaN)	WATER CLEAR	110	230	120°

- 1. θ1/2 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	458		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue	465		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	22		nm	I=20mA
С	Capacitance	Blue	110		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	3.7	V	I==20mA
lR	Reverse Current	Blue		10	uA	V <sub>R</sub> =5V

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

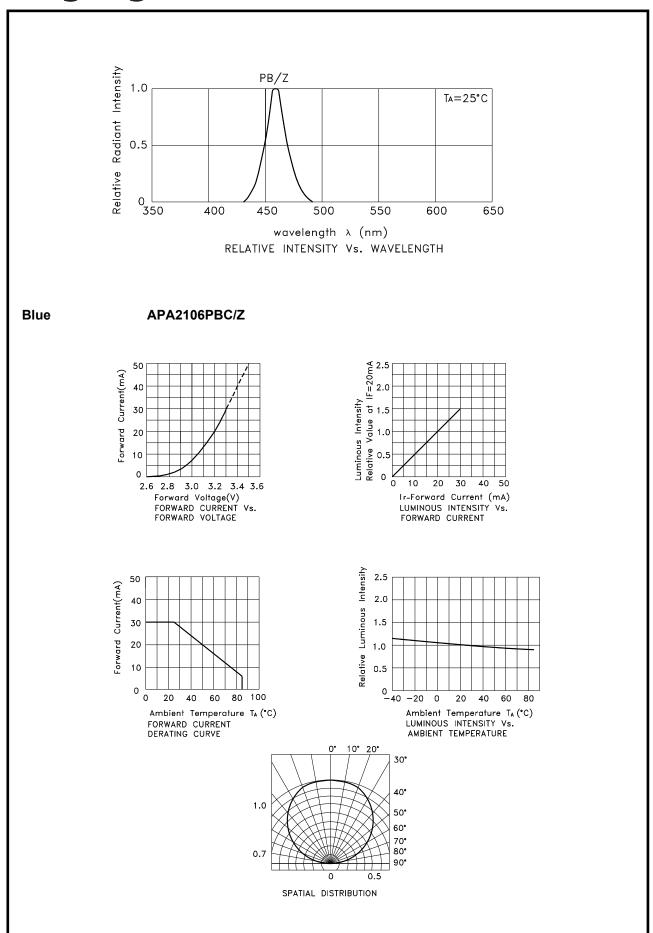
#### Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units		
Power dissipation	111	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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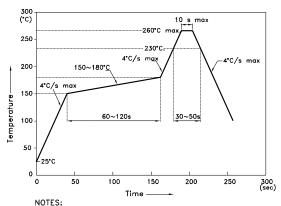


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#### APA2106PBC/Z

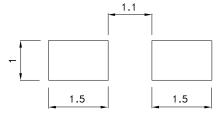
Reflow Soldering Profile For Lead-free SMT Process.



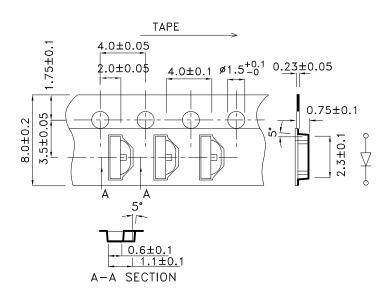
- NOTES:

  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.

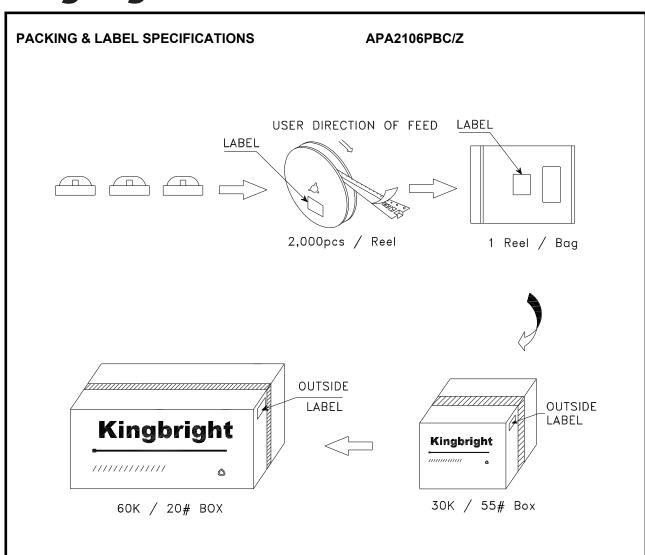
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



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



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