

### 3.0mmx1.0 mm RIGHT ANGLE SMD **CHIP LED LAMP**

Part Number: APA3010QBC/G-GX Blue



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

#### **Features**

- 3.0mmx1.0mm right angle SMT LED, 2.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for back light and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

### Description

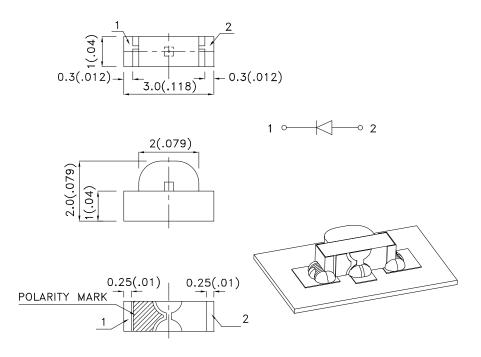
The Blue source color devices are made with InGaN Light Emitting Diode.

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 ±0.15(0.006") unless otherwise noted.
- 3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior 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]   Dice		,	Viewing Angle [1]
			Min.	Тур.	201/2
APA3010QBC/G-GX	Blue (InGaN)	Water Clear	80	150	120°

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak 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	461		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue	465		nm	I==20mA
Δλ1/2	Spectral Line Half-width	Blue	25		nm	IF=20mA
С	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.3	4	V	IF=20mA
lr	Reverse Current	Blue		50	uA	V <sub>R</sub> =5V

#### Notes:

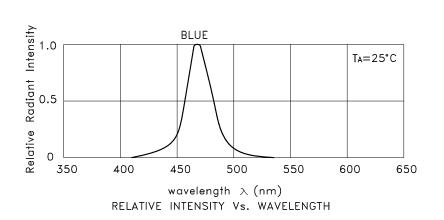
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

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

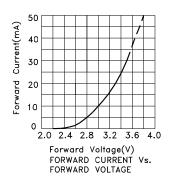
Abbotato maximum ratingo at 177 20 0					
Parameter	Blue	Units			
Power dissipation	120	mW			
DC Forward Current	30	mA			
Peak Forward Current [1]	150	mA			
Reverse Voltage	5	V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

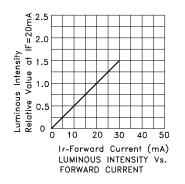
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

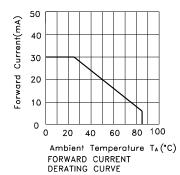
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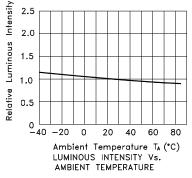


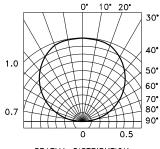
Blue APA3010QBC/G-GX











SPATIAL DISTRIBUTION

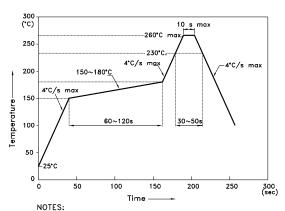
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### APA3010QBC/G-GX

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

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.

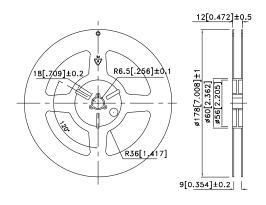
  3.Number of reflow process shall be 2 times or less.

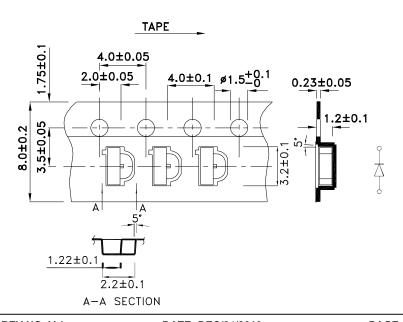
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)

# 1.5 1.5 5.0

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

### **Reel Dimension**

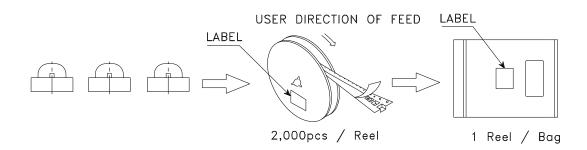


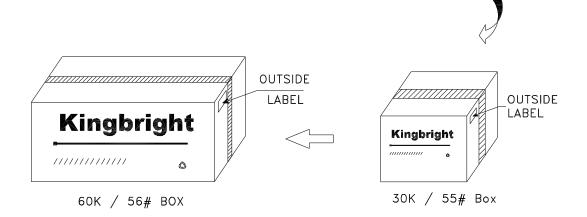


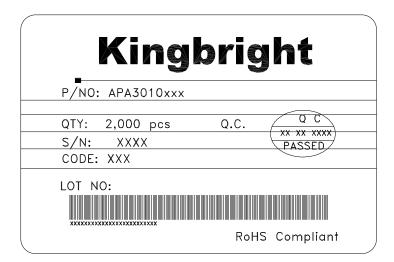
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### PACKING & LABEL SPECIFICATIONS

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