

1.6x0.6mm RIGHT ANGLE SMD CHIP LED **LAMP**

Part Number: APA1606QBC/D Blue



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

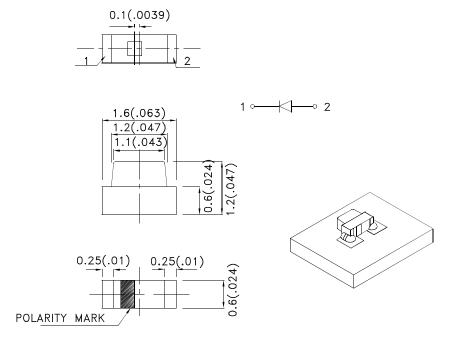
Features

- 1.6mmx0.6mm right angle SMT LED,1.2mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package :2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

Descriptions

- The Blue source color devices are made with InGaN Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or antielectrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1 (0.004")$ unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
 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	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
APA1606QBC/D	Blue (InGaN)	Water Clear	40	80	110°

Notes:

- 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- 2. Luminous intensity/ luminous Flux: +/-15%.
- 3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions			
λpeak	Peak Wavelength	Blue	460		nm	IF=20mA			
λD [1]	Dominant Wavelength	Blue	465		nm	IF=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	VR=5V			

Notes:

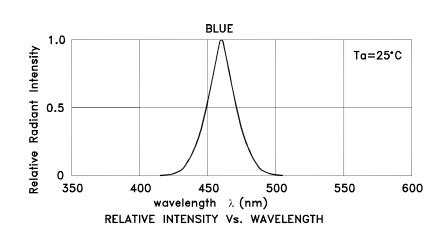
- 1. Wavelength: +/-1nm.
 2. Forward Voltage: +/-0.1V.
 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
 4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

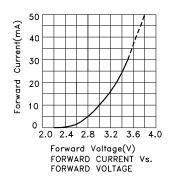
Parameter	Blue	Units		
Power dissipation	120	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	150	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C	-40°C To +85°C		
Storage Temperature	-40°C To +85°C			

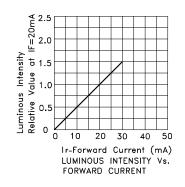
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

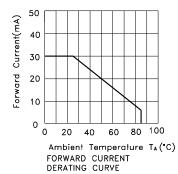
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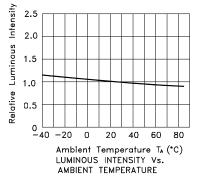


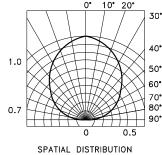
Blue APA1606QBC/D











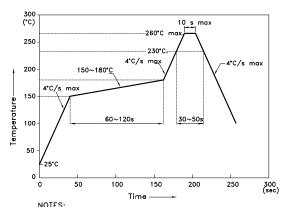
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

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.
 - to high temperature.

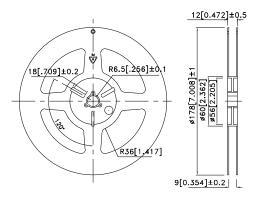
 3.Number of reflow process shall be 2 times or less.

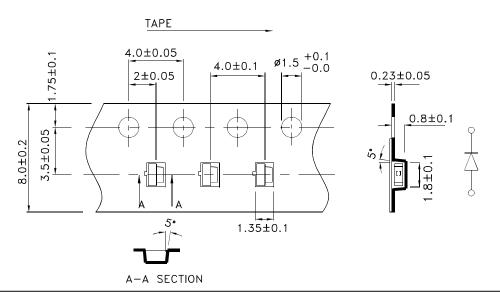
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

0.9 0.9

Tape Dimensions (Units : mm)

Reel Dimension



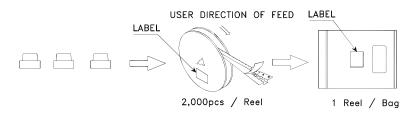


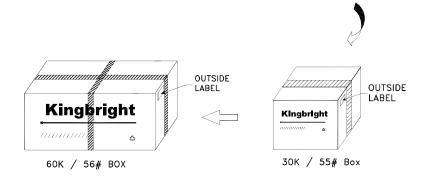
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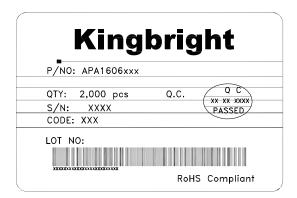
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PACKING & LABEL SPECIFICATIONS

APA1606QBC/D







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