

PRELIMINARY SPEC

Part Number: APA2107LVBC/D

Blue



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

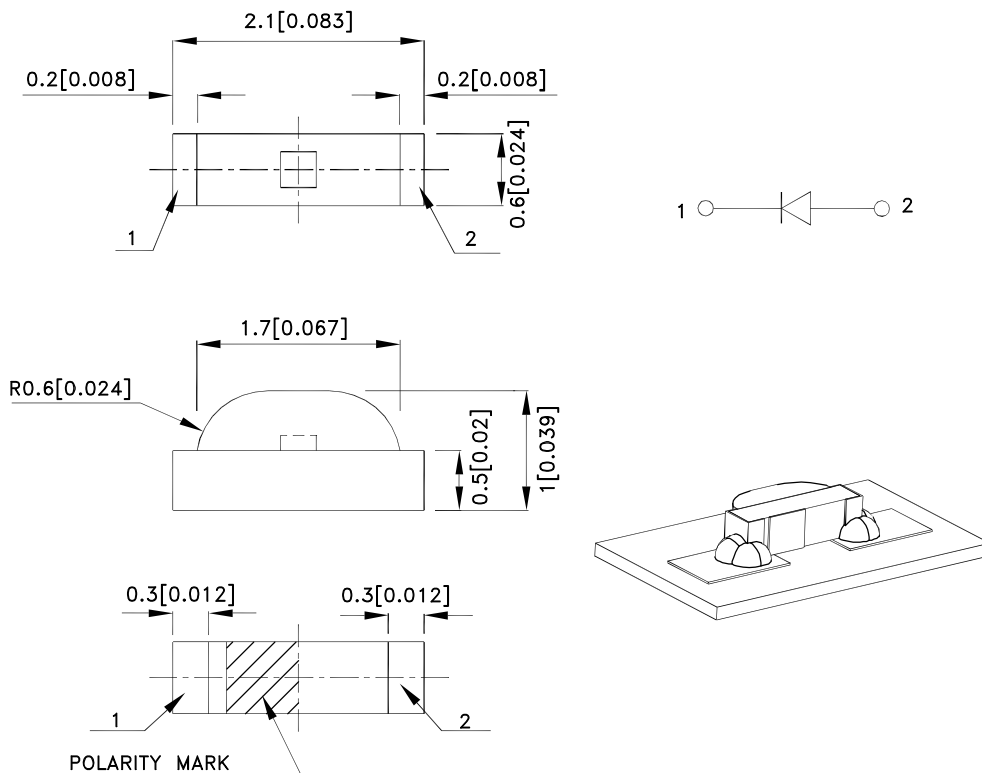
Features

- 2.1mmX0.6mm right angle SMT LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Tinned pads for improved solderability.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- 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 anti-electrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.1 (0.004") 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



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APA2107LVBC/D	Blue (InGaN)	Water Clear	10	20	120°

Notes:

- 1.θ1/2 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	Min	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Blue		465		nm	I _F =2mA
λ _D [1]	Dominant Wavelength	Blue		470		nm	I _F =2mA
Δλ _{1/2}	Spectral Line Half-width	Blue		22		nm	I _F =2mA
C	Capacitance	Blue		100		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Blue	2.2	2.65	3	V	I _F =2mA
I _R	Reverse Current	Blue			50	uA	V _R =5V

Notes:

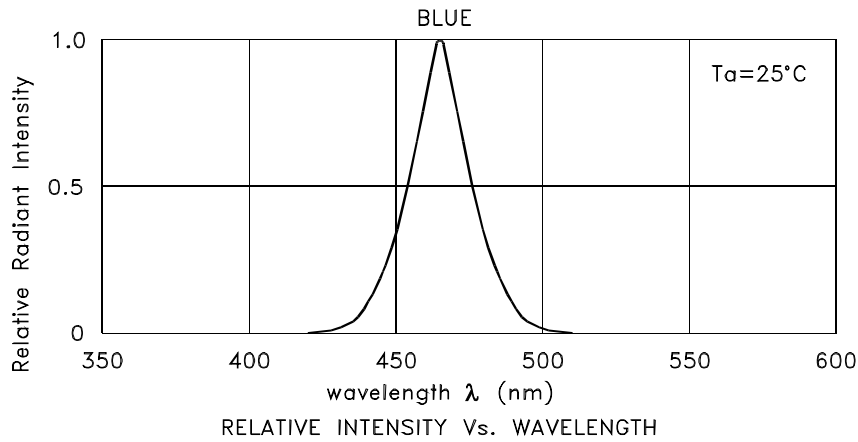
- 1.Wavelength: +/-1nm.
- 2.Forward Voltage: +/-0.1V.
- 3.Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units
Power dissipation	90	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	

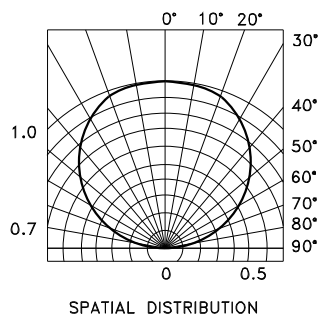
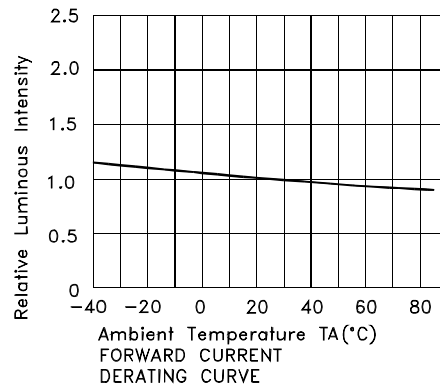
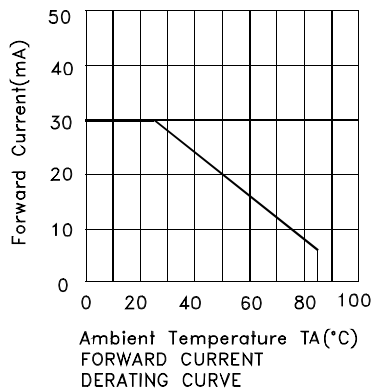
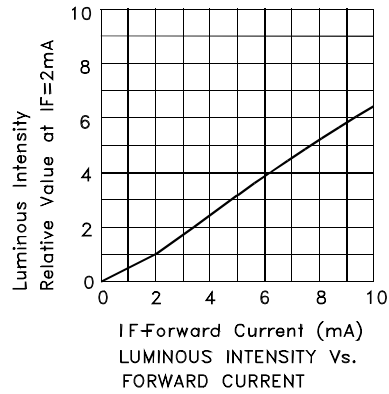
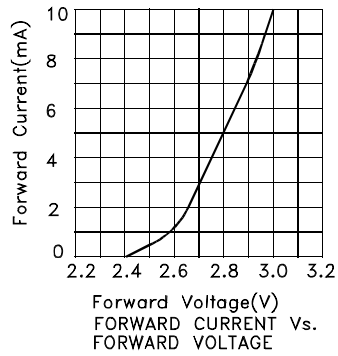
Note:

- 1.1/10 Duty Cycle, 0.1ms Pulse Width.



Blue

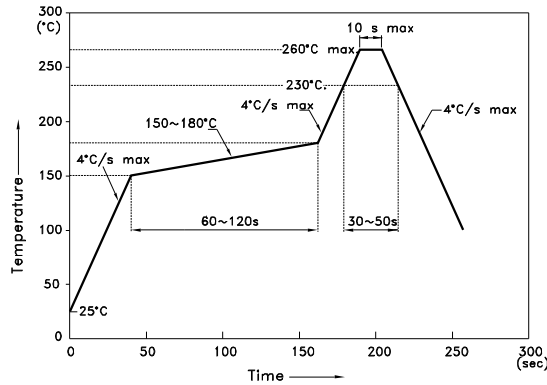
APA2107LVBC/D



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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.

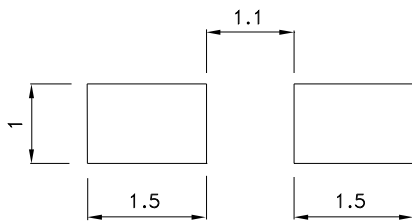
Reflow Soldering Profile For Lead-free SMT Process.



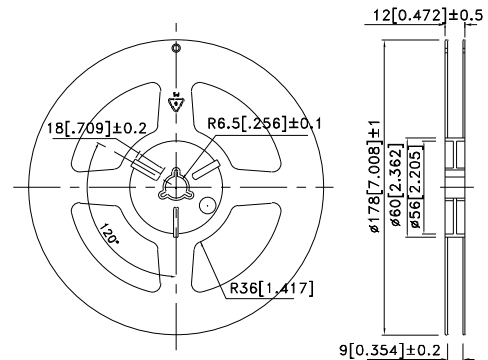
NOTES:

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

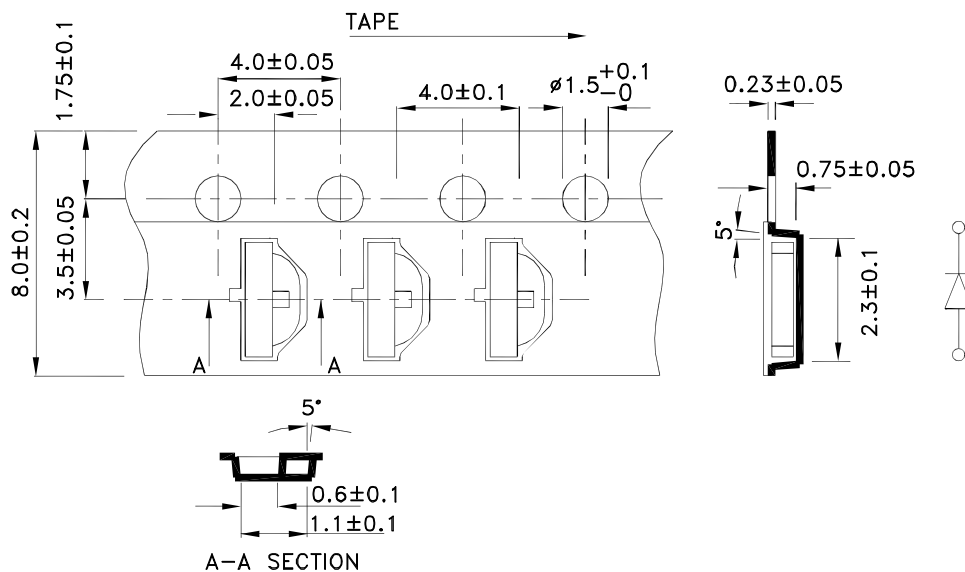
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension

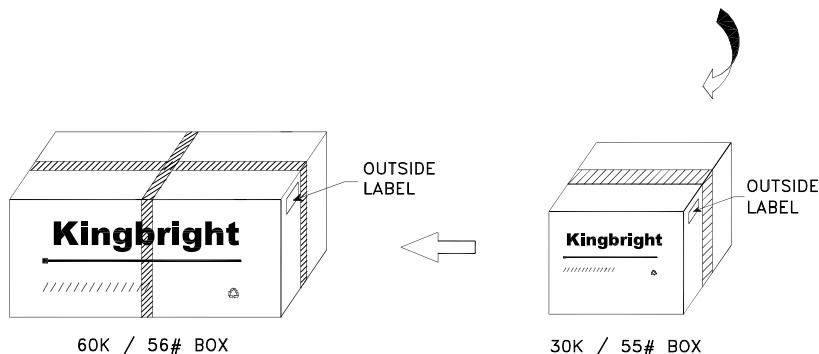
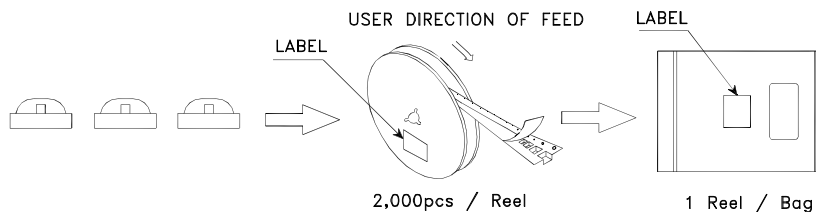


Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APA2107LVBC/D



Kingbright				
P/NO: APA2107xxx				
QTY: 2,000 pcs	Q.C.			
S/N: XXXX	<table border="1"> <tr> <td>Q C</td> </tr> <tr> <td>xx xx xxxx</td> </tr> <tr> <td>PASSED</td> </tr> </table>	Q C	xx xx xxxx	PASSED
Q C				
xx xx xxxx				
PASSED				
CODE: XXX				
LOT NO:				
RoHS Compliant				

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