

PRELIMINARY SPEC

Part Number: APA2106PBC/Z-PRV-SI 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.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

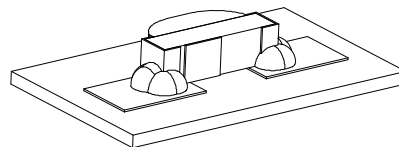
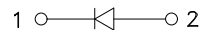
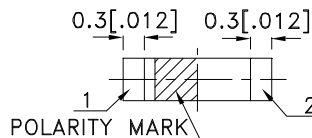
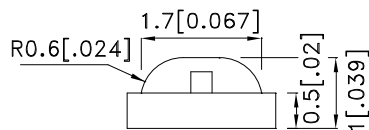
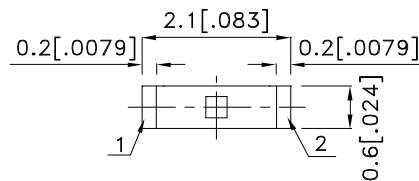
The Blue source color devices are made with InGaN Light Emitting Diode.

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



Notes:

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



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APA2106PBC/Z-PRV-SI	Blue (InGaN)	WATER CLEAR	110	230	120°

Notes:

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	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Blue	458		nm	I _F =20mA
λ _D [1]	Dominant Wavelength	Blue	465		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Blue	22		nm	I _F =20mA
C	Capacitance	Blue	110		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Blue	3.2	3.7	V	I _F =20mA
I _R	Reverse Current	Blue		10	uA	V _R =5V

Notes:

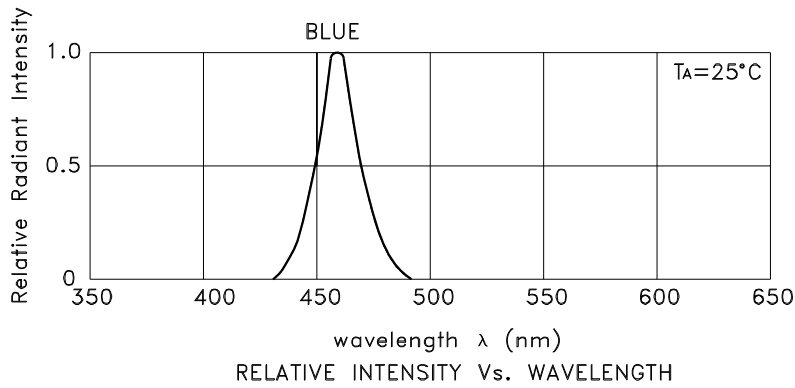
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

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	

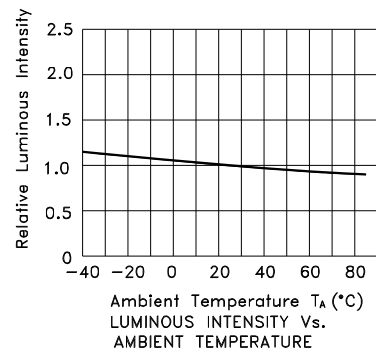
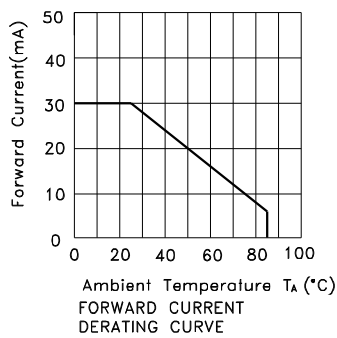
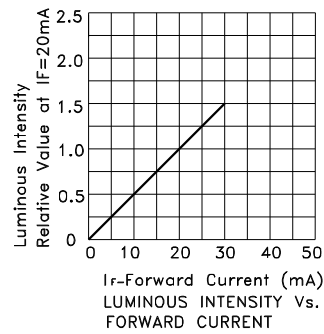
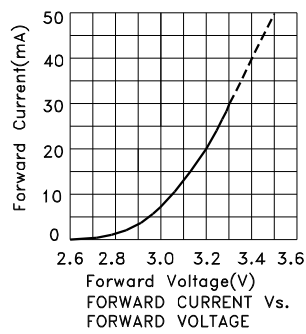
Note:

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



Blue

APA2106PBC/Z-PRV-SI



APA2106PBC/Z-PRV-SI

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.

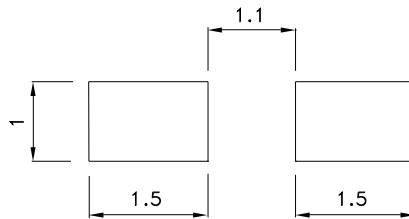
Reflow Soldering Profile For Lead-free SMT Process.



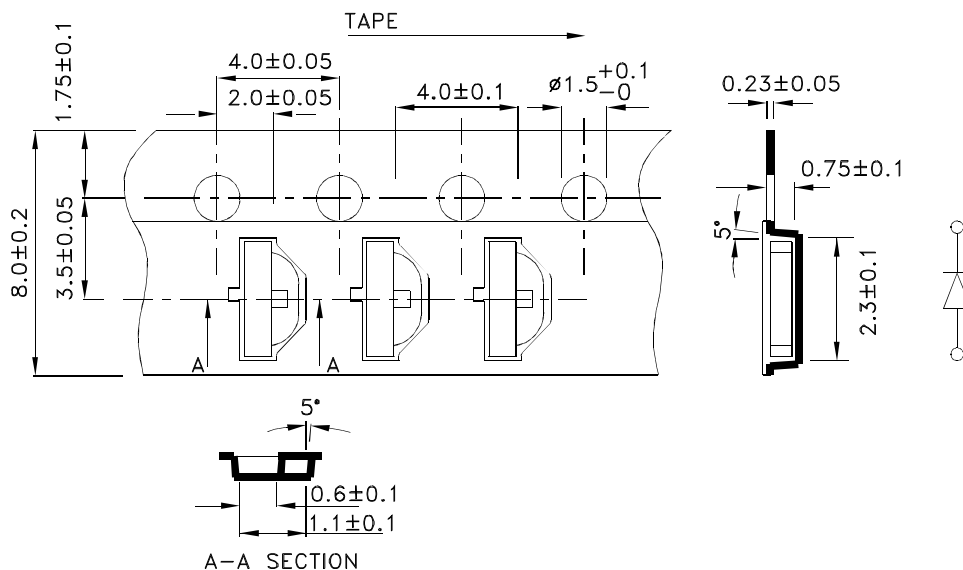
NOTES:

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)

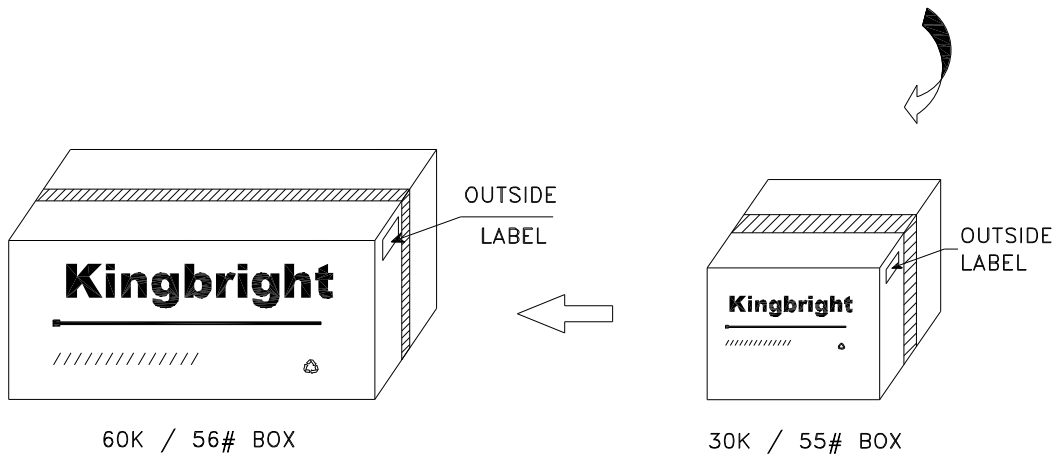
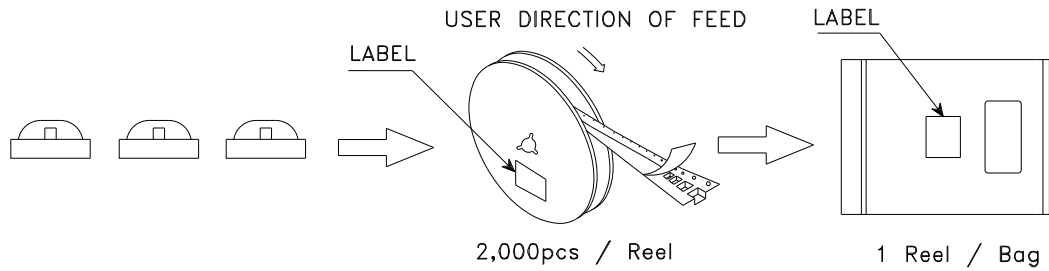



Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APA2106PBC/Z-PRV-SI



<h1>Kingbright</h1>				
P/NO: APA2106xxx				
QTY: 2,000 pcs	Q.C.			
S/N: XXXX	<table border="1" style="margin: auto;"> <tr> <td style="text-align: center;">Q C</td> </tr> <tr> <td style="text-align: center;">xx xx xxxx</td> </tr> <tr> <td style="text-align: center;">PASSED</td> </tr> </table>	Q C	xx xx xxxx	PASSED
Q C				
xx xx xxxx				
PASSED				
CODE: XXX				
LOT NO:				
				
xxxxxxxxxxxxxxxxxxxxxxxxxxxx				
RoHS Compliant				