



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

P/N: AP2012PBC/A

BLUE

Features

- 2.0mmx1.25mm SMT LED,1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

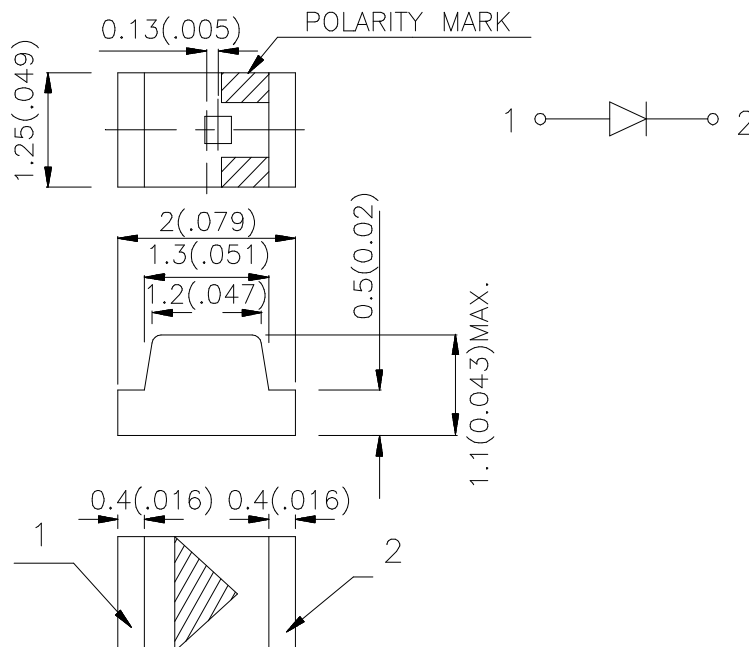
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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 $\pm 0.1 (0.004)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2 θ 1/2
AP2012PBC/A	BLUE (InGaN)	WATER CLEAR	18	60	120°

Notes:

- θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- 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	468		nm	I _F =20mA
λ _D [1]	Dominant Wavelength	Blue	470		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Blue	21		nm	I _F =20mA
C	Capacitance	Blue	100		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Blue	3.3	3.8	V	I _F =20mA
I _R	Reverse Current	Blue		10	uA	V _R = 5V

Notes:

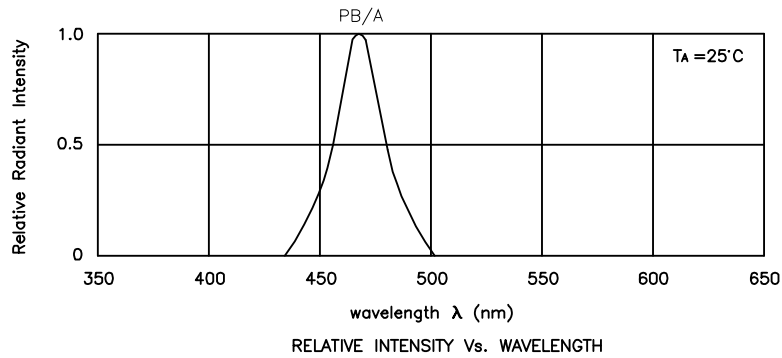
- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units
Power dissipation	110	mW
DC Forward Current	30	mA
Peak Forward Current [1]	100	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

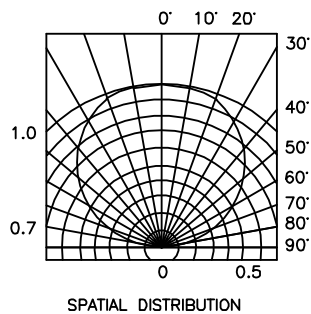
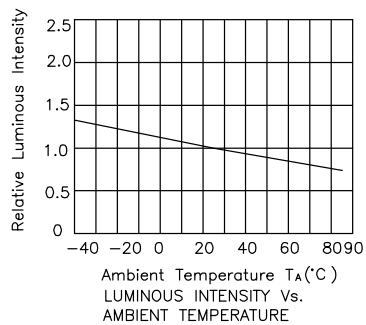
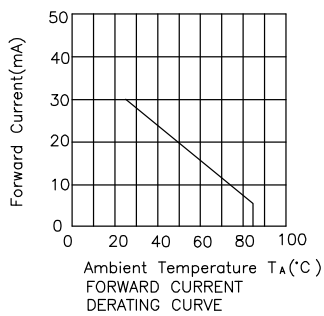
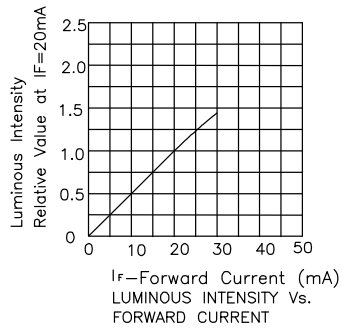
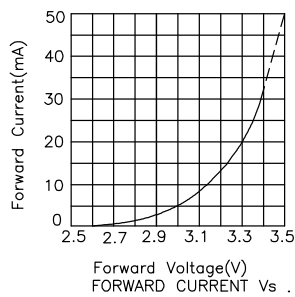
Note:

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



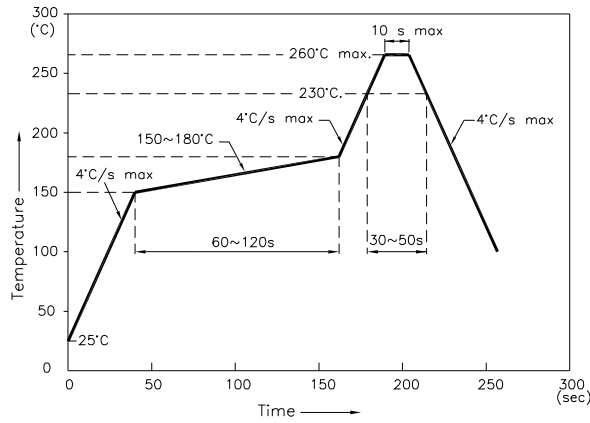
Blue

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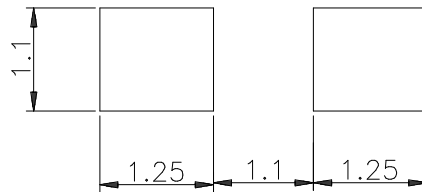
Reflow Soldering Profile For Lead-free SMT Process.



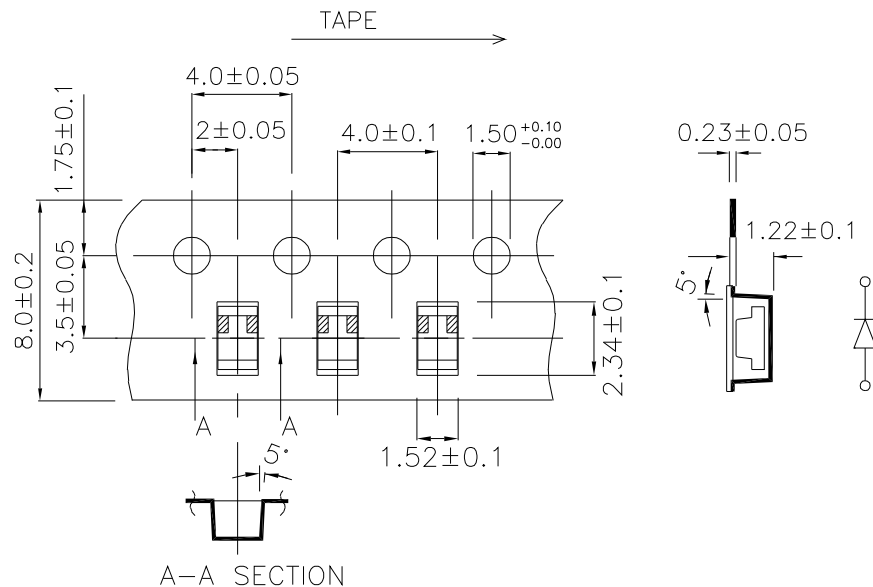
NOTES:

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)

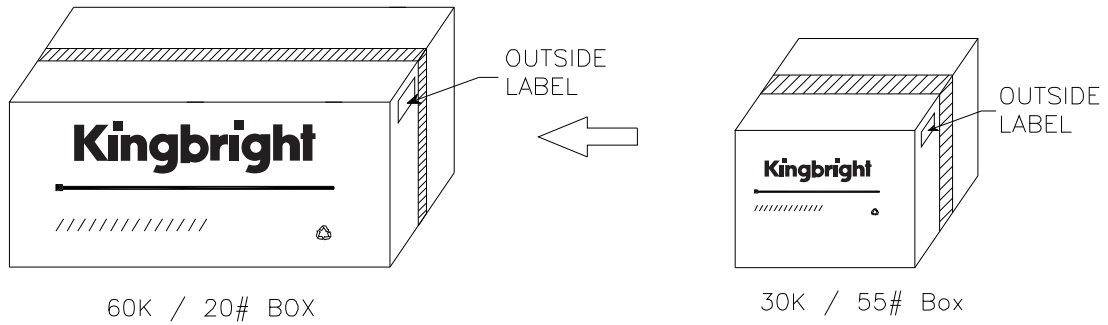
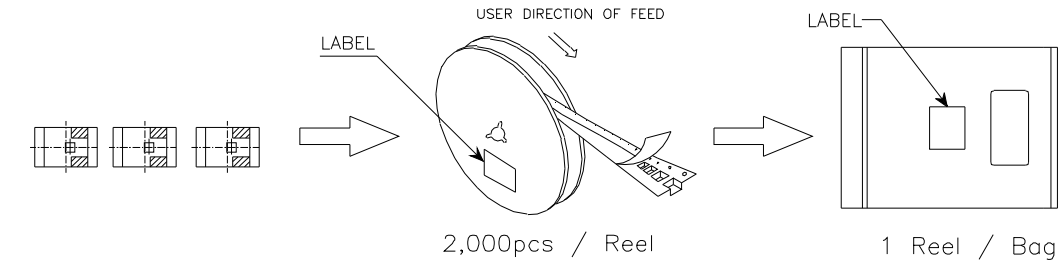



Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

AP2012PBC/A



Kingbright	
P/NO: AP2012XXX	
QTY: 2,000 pcs	Q.C. xx xx xxx PASSED
S/N: XXXX	Date
CODE: XXX	
LOT NO:	
 <small>xxxxxxxxxxxxxxxxxxxxxxxxxxxx</small>	
RoHS Compliant	