

Kingbright

3.5x2.8 mm SMD CHIP LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: AA3528APBC/A

Blue

Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

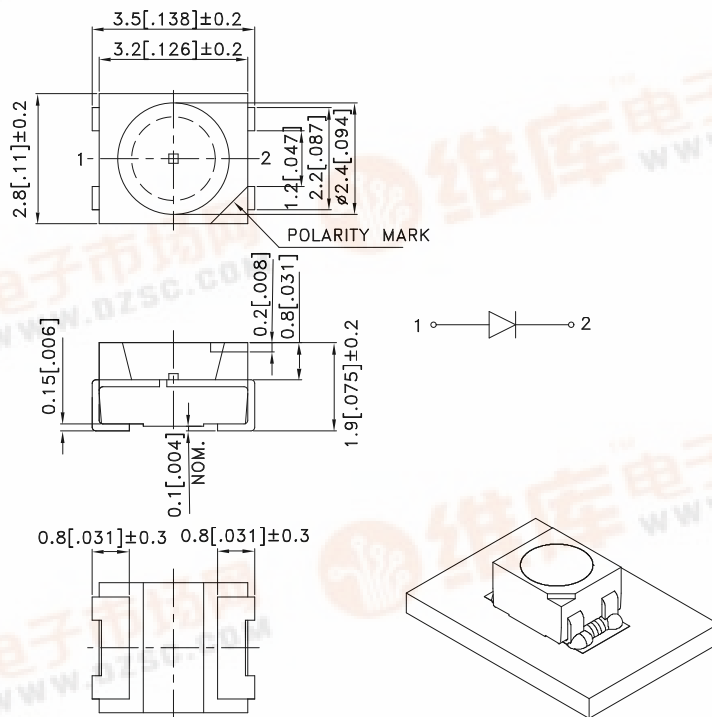
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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 $\pm 0.25(0.01")$ 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
AA3528APBC/A	Blue (InGaN)	WATER CLEAR	18	60	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
λpeak	Peak Wavelength	Blue	468		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue	470		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	21		nm	IF=20mA
C	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	4	V	IF=20mA
IR	Reverse Current	Blue		10	uA	VR=5V

Notes:

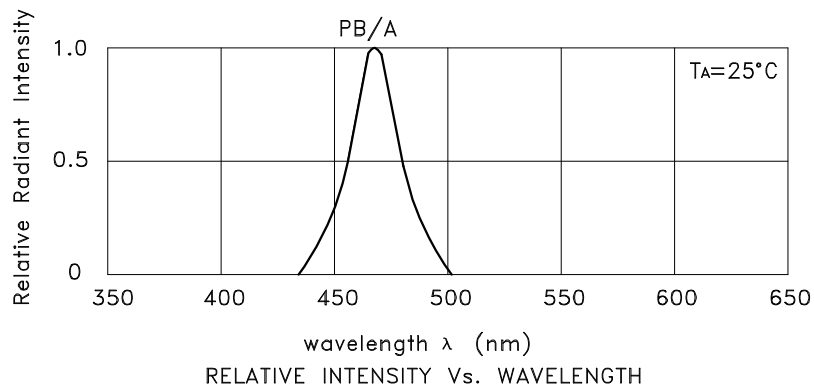
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units
Power dissipation	120	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	

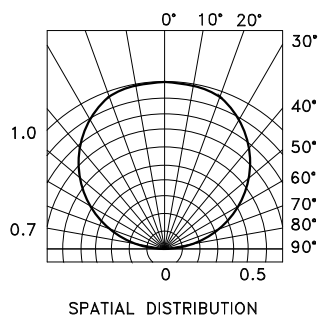
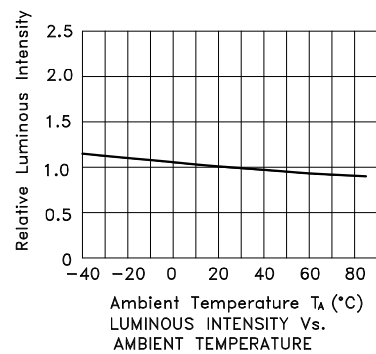
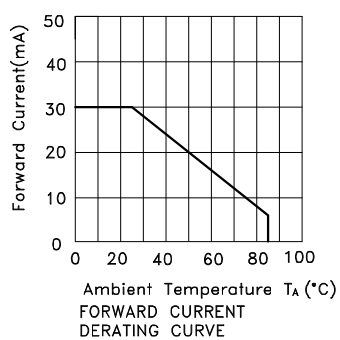
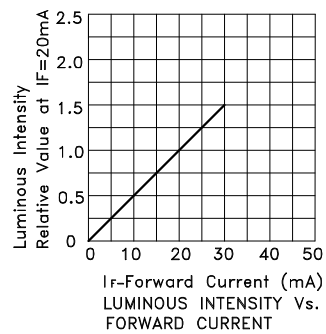
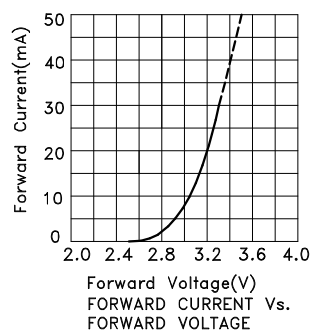
Note:

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



Blue

AA3528APBC/A



The graph illustrates the temperature profile of the furnace over time. The temperature starts at 25°C and rises at a rate of 4°C/s to 150°C, which takes approximately 60 to 120 seconds. It then continues to rise at 4°C/s to 230°C. A dwell time of 30 to 50 seconds is maintained at 230°C. The temperature then rises to 260°C at 4°C/s, with a maximum dwell time of 10 seconds at this temperature. Finally, the furnace cools at a rate of 4°C/s.

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.

Technical drawing of a tape with dimensions and a cross-section A-A.

Top View Dimensions:

- Total width: 12 ± 0.3
- Distance from top edge to first hole center: 5.5 ± 0.05
- Distance between hole centers: 4.0 ± 0.1
- Distance from hole center to edge: 2 ± 0.05
- Distance between hole centers: 4.0 ± 0.1
- Hole diameter: $\varnothing 1.55 \pm 0.05$
- Distance from hole center to edge: 3.95 ± 0.15
- Distance between hole centers: 4.0 ± 0.1
- Distance from hole center to edge: 2 ± 0.05

Section A-A Dimensions:

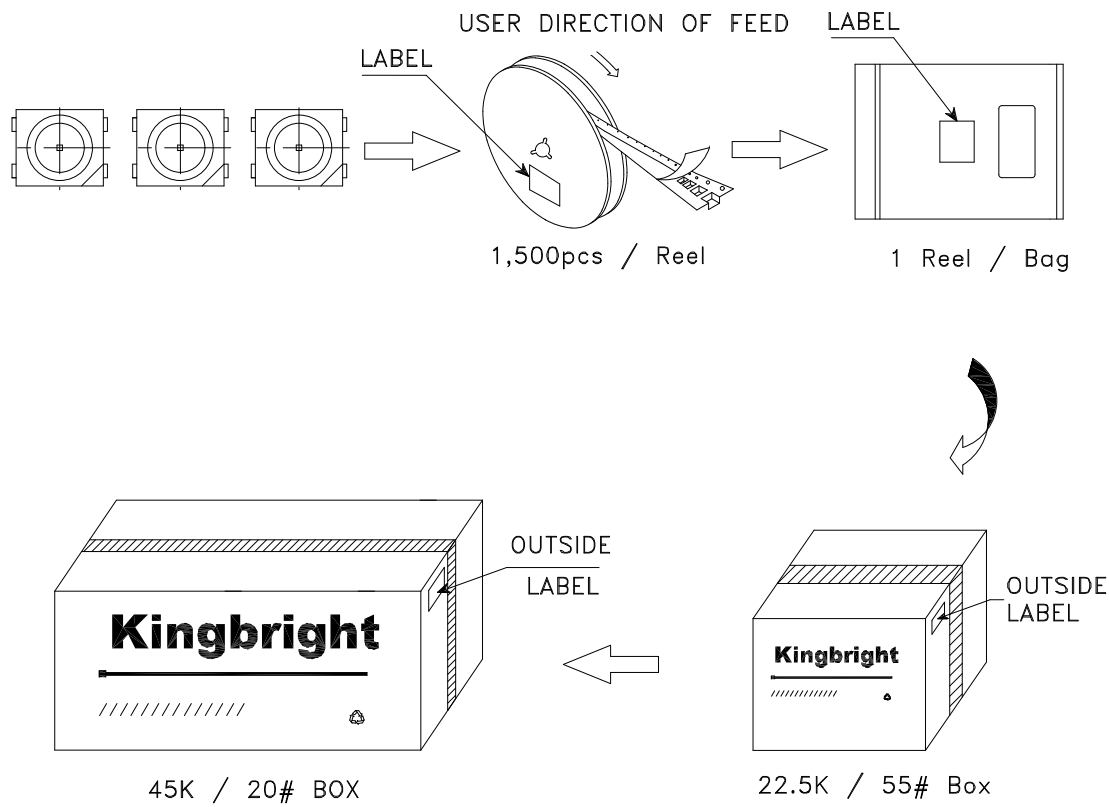
- Top flange width: 0.25 ± 0.1
- Top flange height: 2.15 ± 0.1
- Bottom flange width: 3.1 ± 0.15
- Bottom flange height: 5°MAX.

Other Dimensions:

- Distance from top edge to first hole center: 5.5 ± 0.05
- Distance between hole centers: 4.0 ± 0.1
- Distance from hole center to edge: 2 ± 0.05
- Distance between hole centers: 4.0 ± 0.1
- Hole diameter: $\varnothing 1.55 \pm 0.05$
- Distance from hole center to edge: 3.95 ± 0.15
- Distance between hole centers: 4.0 ± 0.1
- Distance from hole center to edge: 2 ± 0.05

PACKING & LABEL SPECIFICATIONS

AA3528APBC/A



Kingbright	
P/NO: AA3528Axxx	
QTY: 1,500 pcs	Q.C. Q C xx-xx-xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
	
RoHS Compliant	