#### 3.5x2.8 mm SMD CHIP LED LAMP



**ATTENTION** 

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

AA3528MBC

**BLUE** 

#### **Features**

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

#### Description

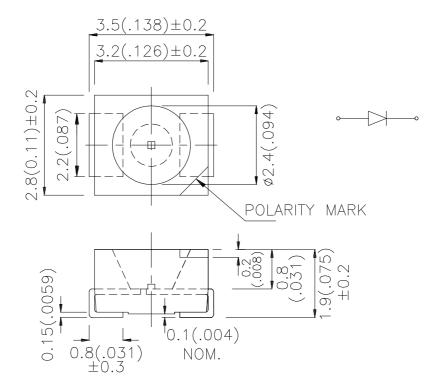
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

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:

- 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.

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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	201/2
AA3528MBC	BLUE (GaN)	WATER CLEAR	4	15	120°

### Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	430		nm	IF=20mA
λD	Dominant Wavelength	Blue	466		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	60		nm	IF=20mA
С	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF	Forward Voltage	Blue	3.8	4.5	V	IF=20mA
lr	Reverse Current	Blue		10	uA	VR = 5V

### Absolute Maximum Ratings at Ta=25°C

Parameter	Blue	Units
Power dissipation	135	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	ture -40°C To +85°C	

Note:

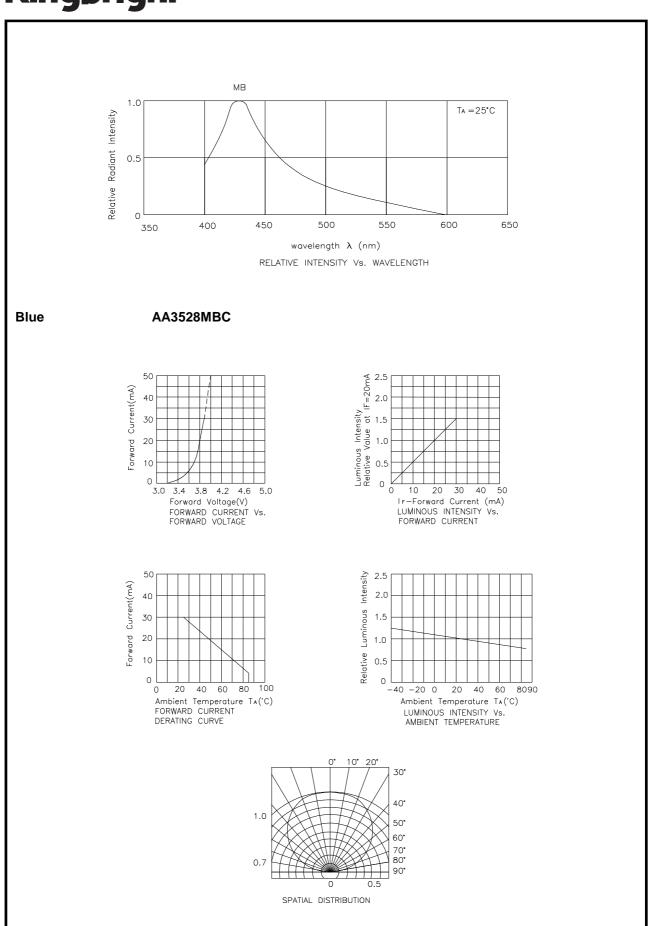
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Note: 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

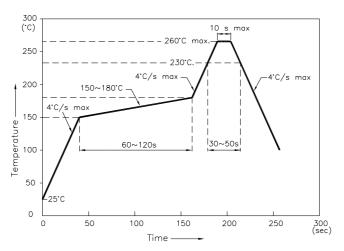
<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.



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#### AA3528MBC

Reflow Soldering Profile For Lead-free SMT Process.

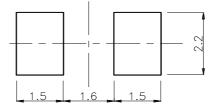


### NOTES:

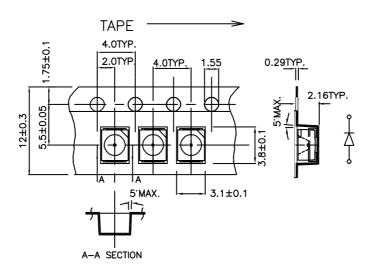
- 1.We recommend the reflow temperature 245°C( $\pm$ 0.The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

## Recommended Soldering Pattern

(Units: mm)



# Tape Specifications (Units: mm)



#### Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
- 2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).
- 3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).

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