



**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

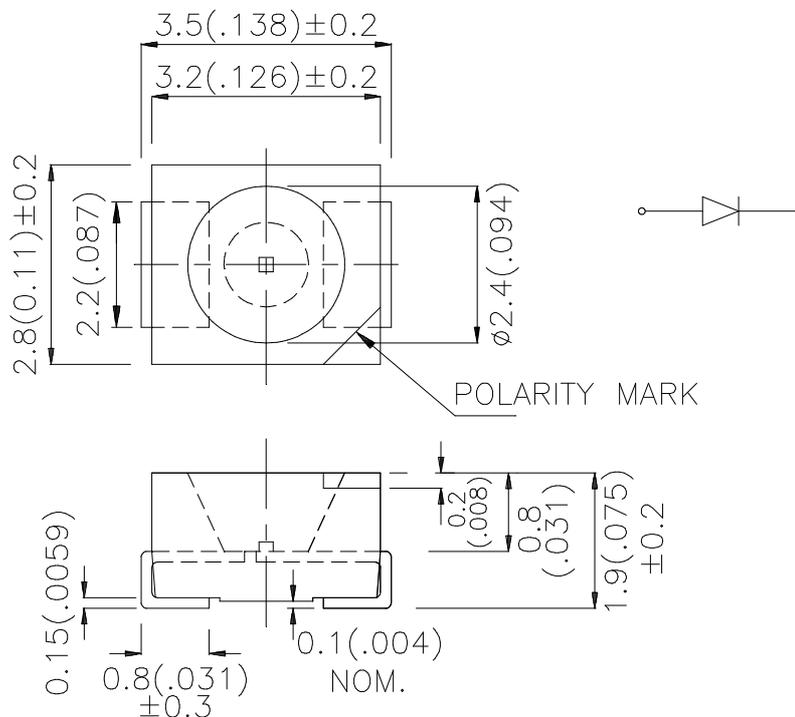
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

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:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

| Part No.  | Dice       | Lens Type   | Iv (mcd)<br>@ 20mA |      | Viewing<br>Angle |
|-----------|------------|-------------|--------------------|------|------------------|
|           |            |             | Min.               | Typ. | 2θ1/2            |
| AA3528MBC | BLUE (GaN) | WATER CLEAR | 4                  | 15   | 120°             |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at TA=25°C

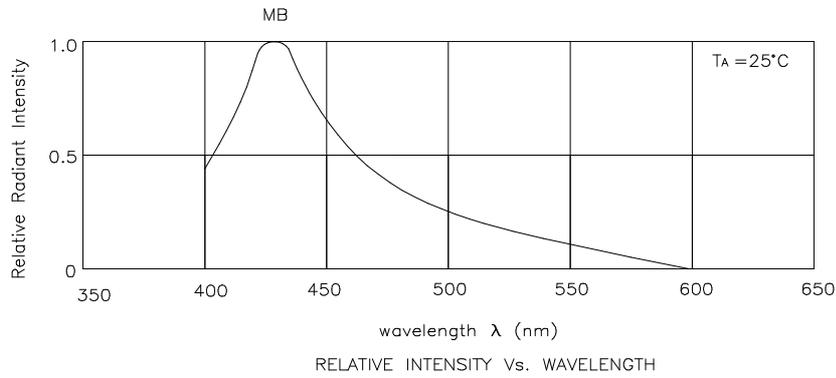
| Symbol            | Parameter                | Device | Typ. | Max. | Units | Test Conditions            |
|-------------------|--------------------------|--------|------|------|-------|----------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | Blue   | 430  |      | nm    | I <sub>F</sub> =20mA       |
| λ <sub>D</sub>    | Dominant Wavelength      | Blue   | 466  |      | nm    | I <sub>F</sub> =20mA       |
| Δλ <sub>1/2</sub> | Spectral Line Half-width | Blue   | 60   |      | nm    | I <sub>F</sub> =20mA       |
| C                 | Capacitance              | Blue   | 100  |      | pF    | V <sub>F</sub> =0V; f=1MHz |
| V <sub>F</sub>    | Forward Voltage          | Blue   | 3.8  | 4.5  | V     | I <sub>F</sub> =20mA       |
| I <sub>R</sub>    | Reverse Current          | Blue   |      | 10   | uA    | V <sub>R</sub> = 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 | -40°C To +85°C |       |

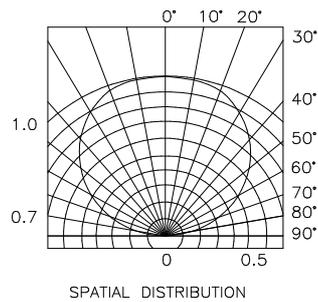
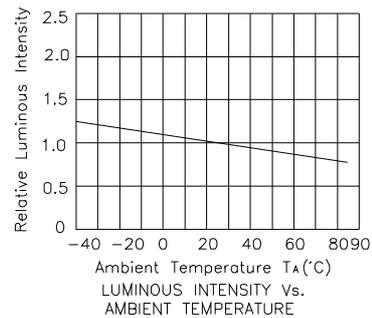
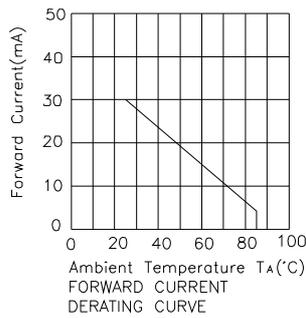
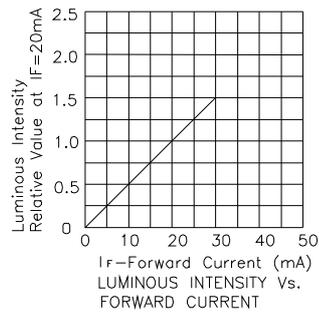
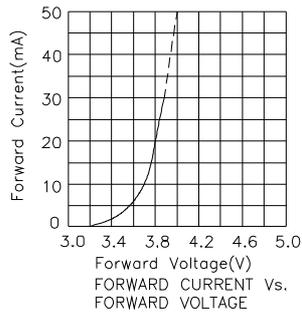
Note:

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



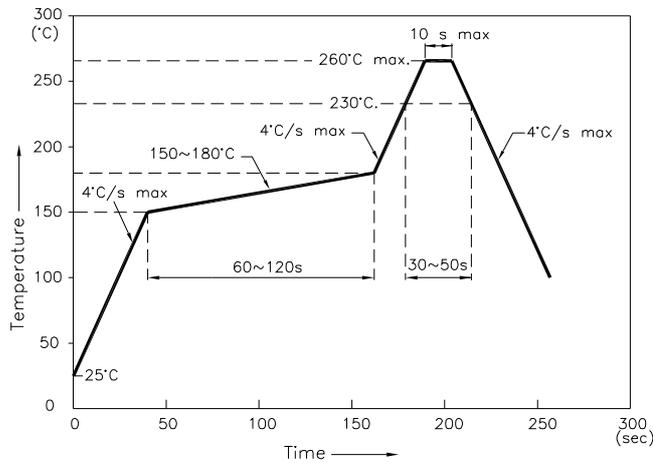
## Blue

### AA3528MBC



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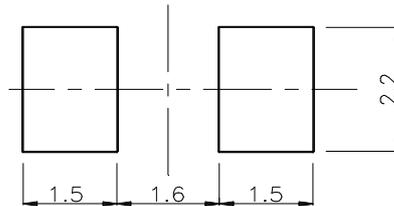
Reflow Soldering Profile For Lead-free SMT Process.



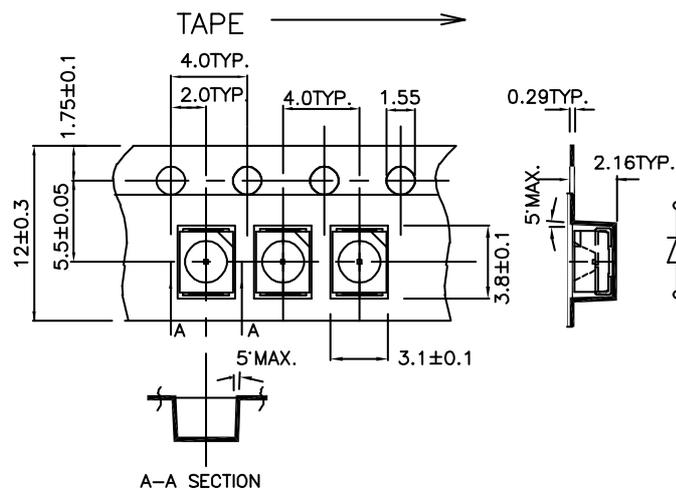
**NOTES:**

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)



**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).