

Kingbright

3.5x2.8 mm SMD CHIP LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

AA3528MBCK

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

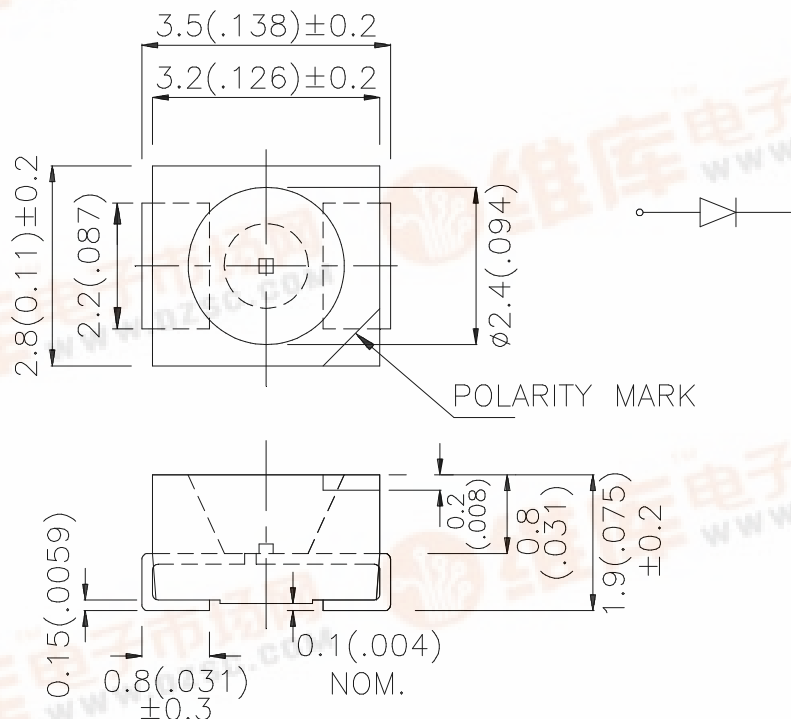
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

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 $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
AA3528MBCK	BLUE (GaN)	WATER CLEAR	4	8	120°

Note:

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

Electrical / Optical Characteristics at T_A=25°C

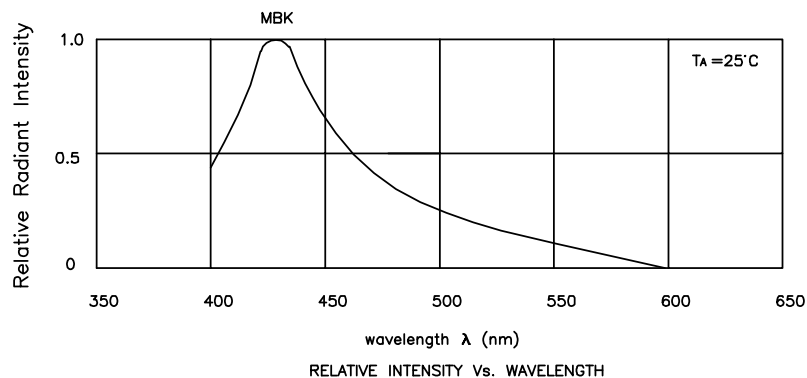
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue	430		nm	I _F =20mA
λ_D	Dominant Wavelength	Blue	466		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	60		nm	I _F =20mA
C	Capacitance	Blue	100		pF	V _F =0V; f=1MHz
V _F	Forward Voltage	Blue	4.0	5.2	V	I _F =20mA
I _R	Reverse Current	Blue		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Blue	Units
Power dissipation	141	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

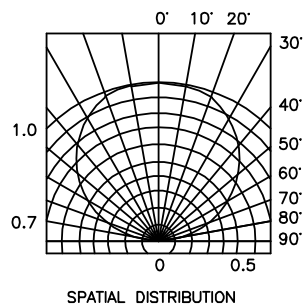
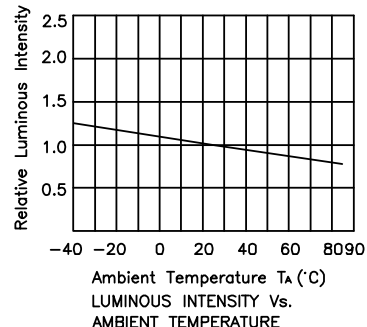
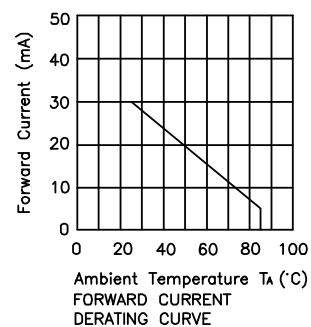
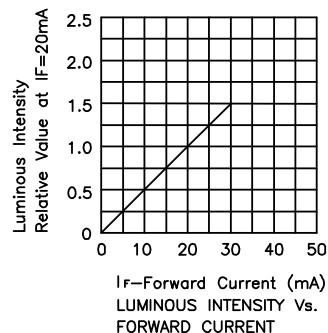
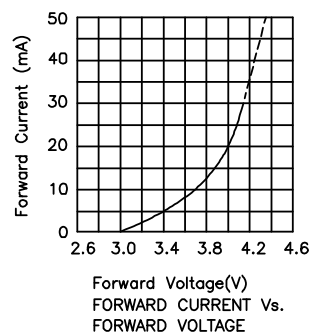
Note:

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



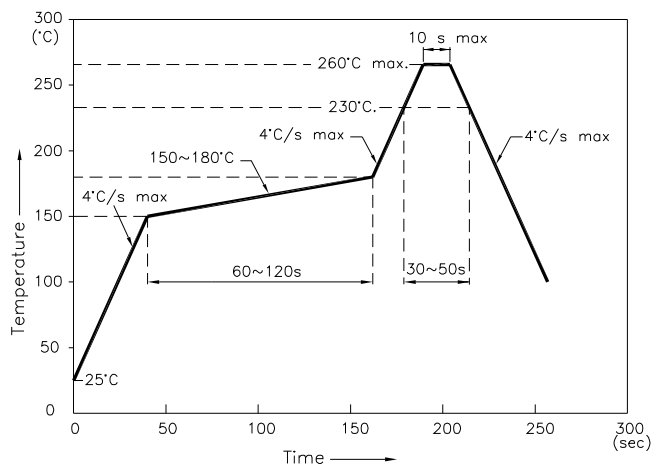
Blue

AA3528MBCK



AA3528MBCK

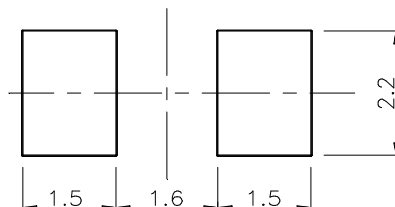
Reflow Soldering Profile For Lead-free SMT Process.



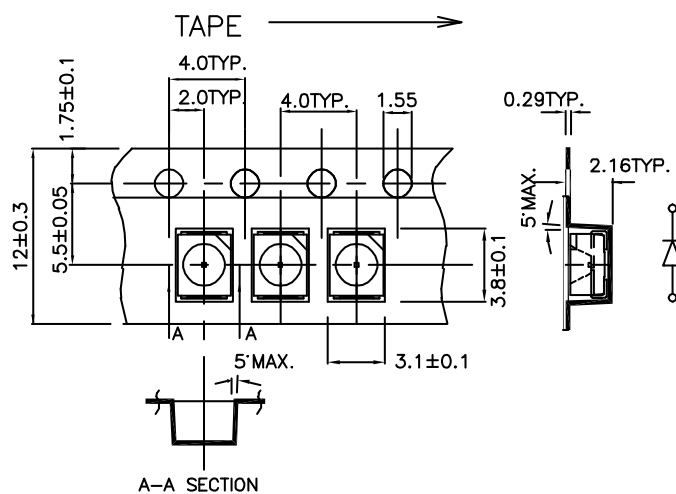
NOTES:

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 (eq. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1.Wavelength: $\pm 1\text{nm}$ (Test condition is based on the sorting standard).
- 2.Luminous intensity: $\pm 15\%$ (Test condition is based on the sorting standard).
- 3.Forward voltage: $\pm 0.1\text{V}$ (Test condition is based on the sorting standard).