#### 3.2x1.6mm SMD CHIP LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

KP-3216MBCK

**BLUE** 

#### **Features**

- •3.2mmx1.6mm 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.
- •LEAD AND CADMIUM FREE.

#### **Description**

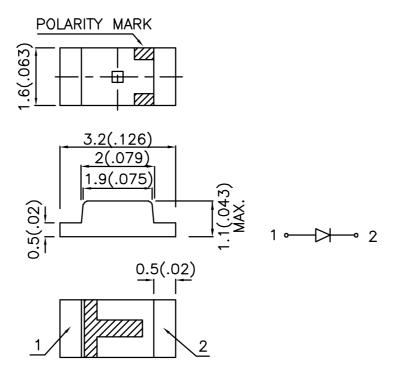
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

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  $\pm 0.2 (0.0079")$  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.	2 θ 1/2
KP-3216MBCK	BLUE (GaN)	WATER CLEAR	2.6	8	120°

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	430		nm	IF=20mA
λD	Dominate 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	4.0	5.2	V	IF=20mA
lr	Reverse Current	Blue		10	uA	VR = 5V

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

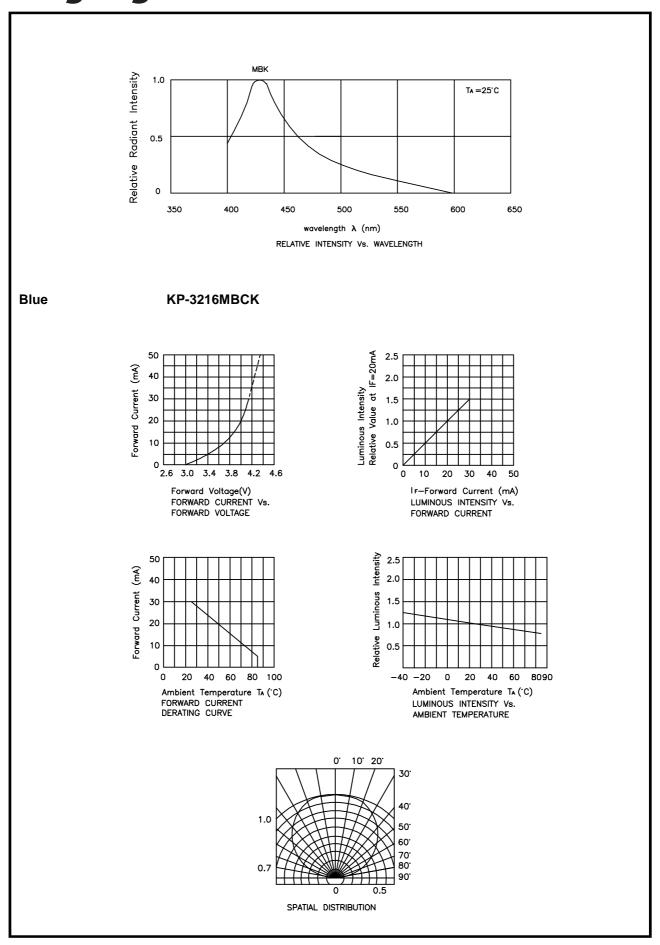
Parameter	Blue	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

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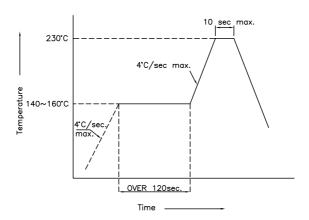
 $<sup>1. \</sup>theta 1/2$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.



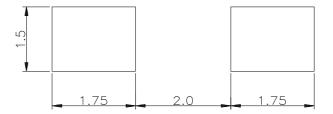
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## KP-3216MBCK **SMT Reflow Soldering Instructions**

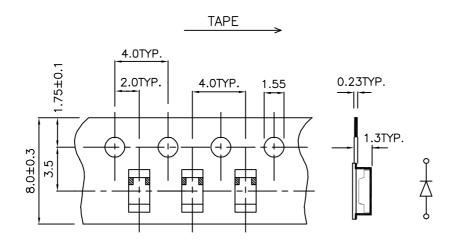
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



### **Recommended Soldering Pattern** (Units: mm)



### **Tape Specifications** (Units: mm)



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