



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

APL3015LMBD-LE2

BLUE

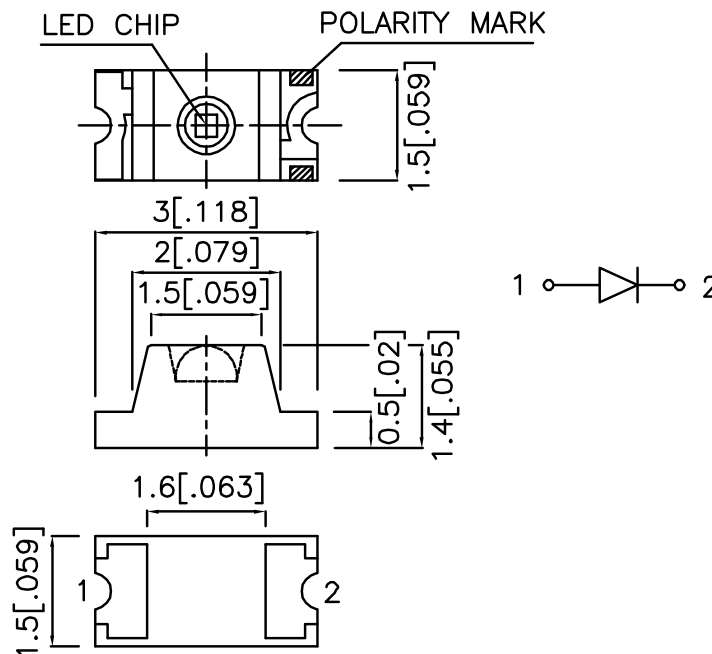
### Features

- 3.0mmx1.5mm SMT LED, 1.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- LOW CURRENT IF=2mA OPERATING.
- 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  $\pm 0.2(0.008)$ " unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 2mA			Viewing Angle
			Code.	Min.	Max.	2θ1/2
APL3015LMBD-LE2	BLUE (GaN)	BLUE DIFFUSED	K	0.7	1.2	70°
			L	1.2	2.0	
			M	2	5	

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

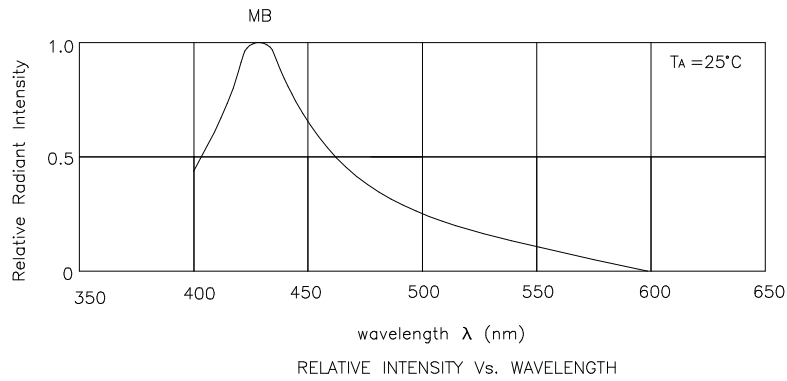
Symbol	Parameter	Device	Code.	Min.	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Blue			430		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominant Wavelength	Blue	1B	461		468	nm	I <sub>F</sub> =20mA
			2A	464		471		
			2B	467		473		
			3A	469		475		
Δλ1/2	Spectral Line Half-width	Blue			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	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	

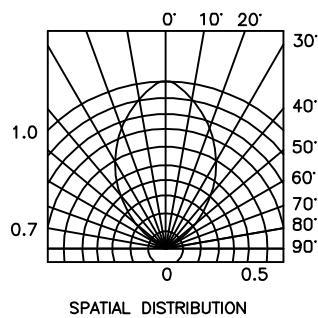
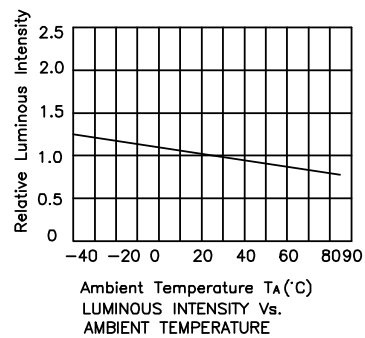
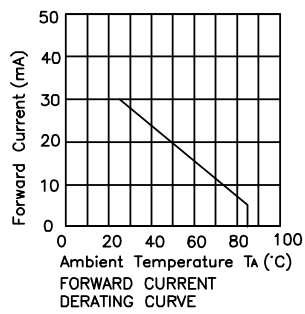
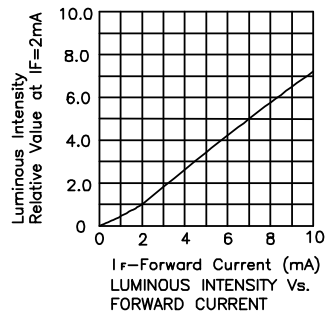
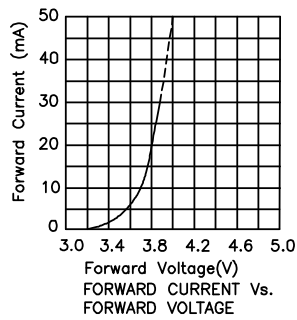
Note:

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



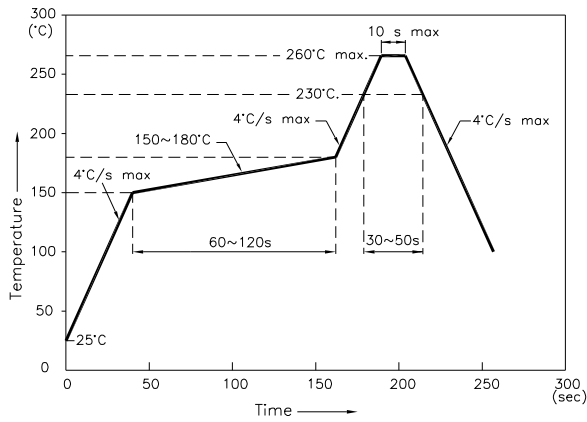
Blue

APL3015LMBD-LE2



## APL3015LMBD-LE2

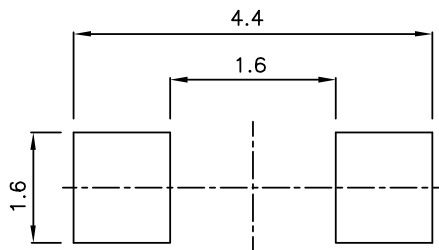
Reflow Soldering Profile For Lead-free SMT Process.



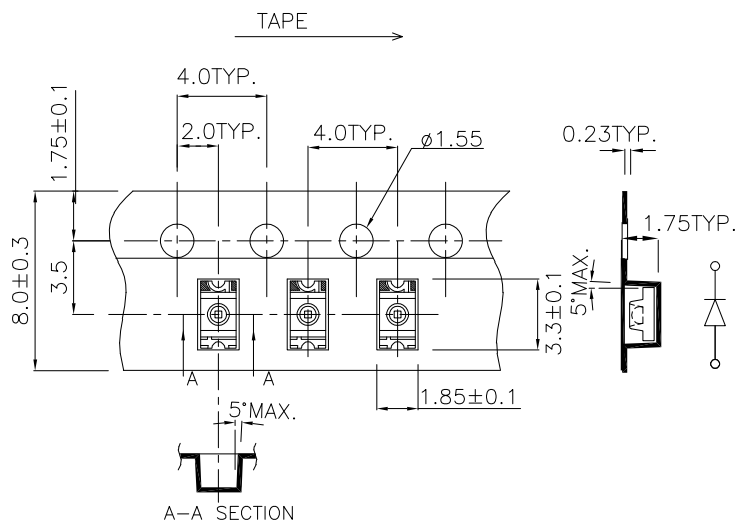
NOTES:

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)

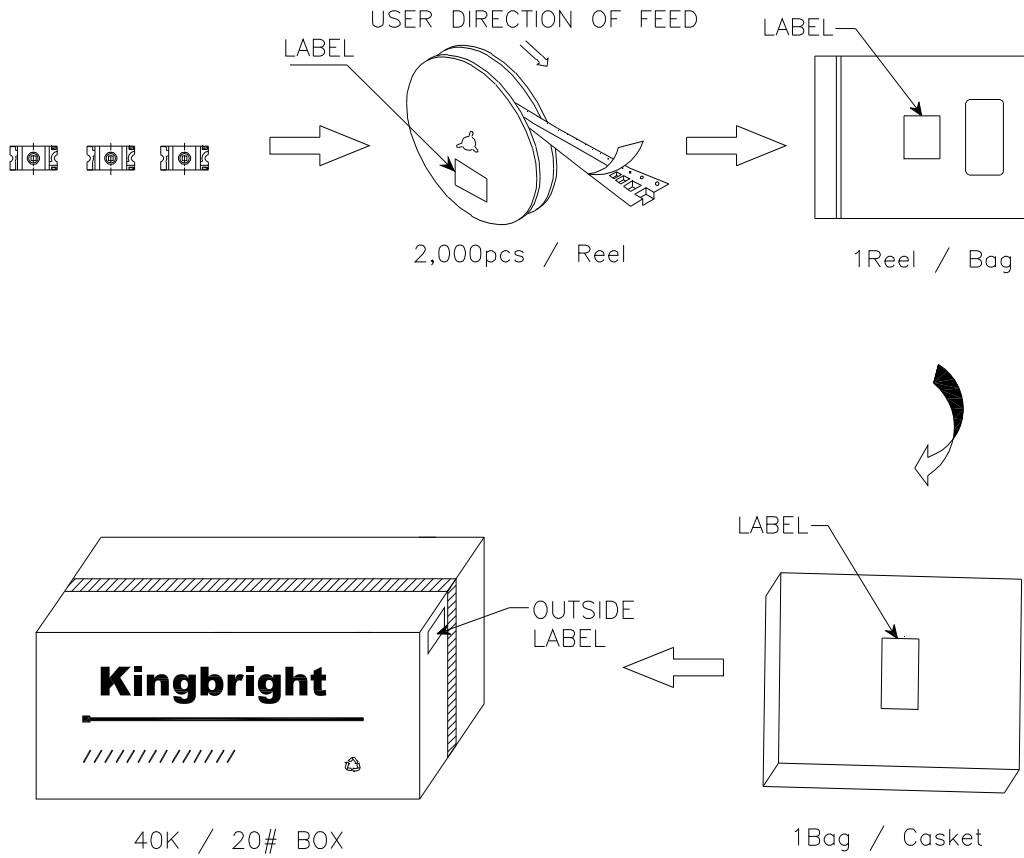



### Tape Specifications (Units : mm)



## PACKING & LABEL SPECIFICATIONS

## APL3015LMBD-LE2



<b>Kingbright</b>	
P/NO: APL3015XXX	
QTY: 2,000 pcs	Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C XX XX XXXX PASSED</span>
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	

### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.