



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

P/N: APA3010LMBD-NL2

BLUE

PRELIMINARY SPEC

Features

- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- LOW CURRENT IF=2mA OPERATING.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3
- RoHS COMPLIANT.

Description

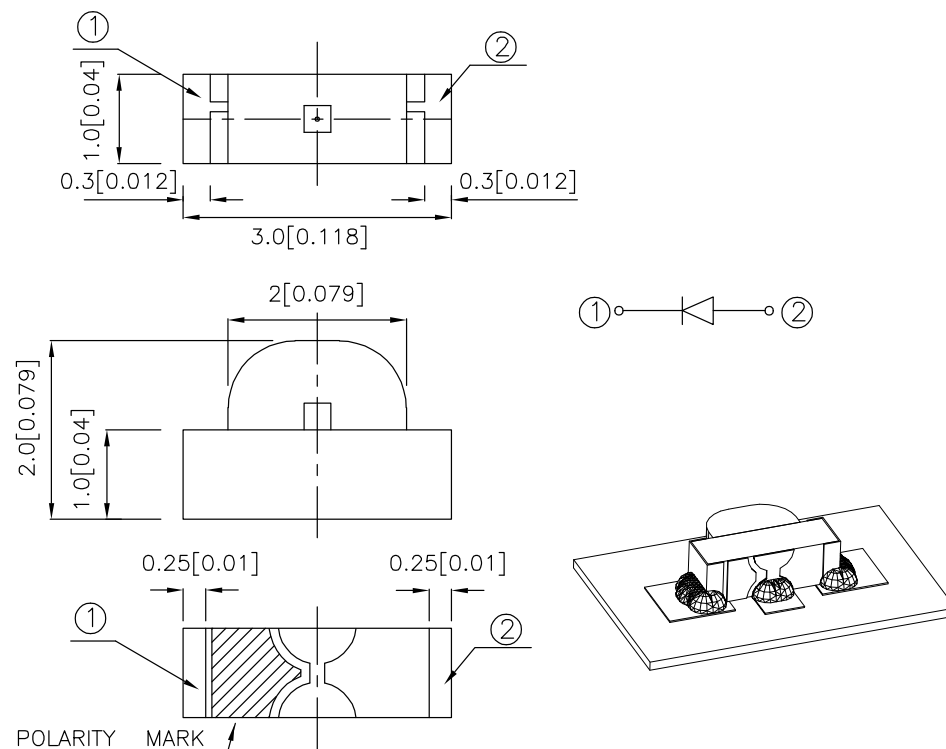
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

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 $\pm 0.15(0.006")$ 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
APA3010LMBD-NL2	BLUE (GaN)	BLUE DIFFUSED	I	0.4	0.7	120°
			K	0.7	1.2	
			L	1.2	2.0	

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

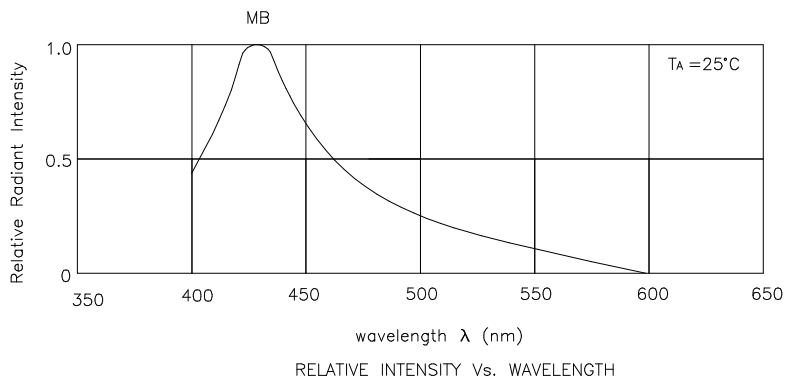
Symbol	Parameter	Device		Min.	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Blue			430		nm	I _F =20mA
λ _D	Dominant Wavelength	Blue	1B	461		468	nm	I _F =20mA
			2A	464		471		
			2B	467		473		
Δλ _{1/2}	Spectral Line Half-width	Blue			60		nm	I _F =20mA
C	Capacitance	Blue			100		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Blue			3.8	4.5	V	I _F =20mA
I _R	Reverse Current	Blue				10	uA	V _R = 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	

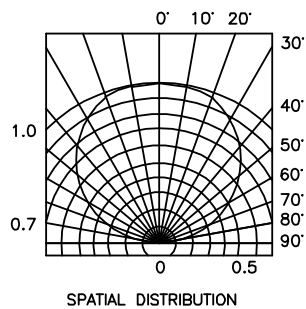
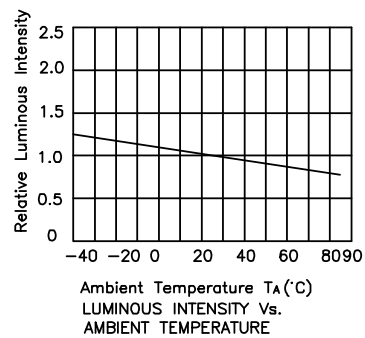
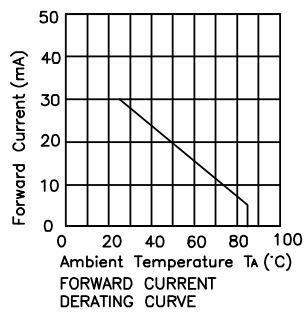
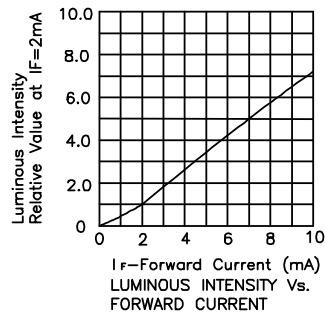
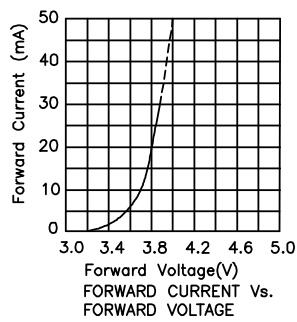
Note:

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



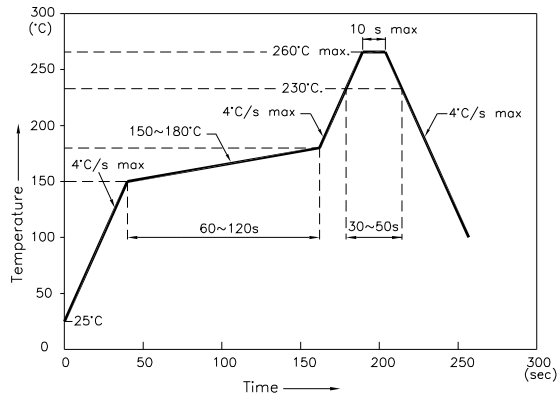
Blue

APA3010LMBD-NL2



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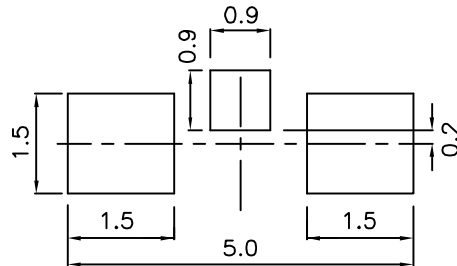
Reflow Soldering Profile For Lead-free SMT Process.



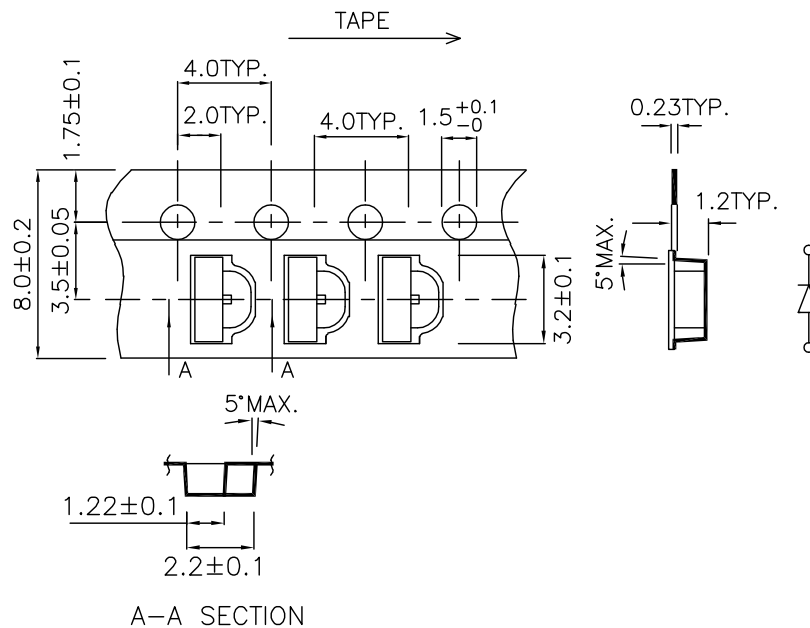
NOTES:

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)

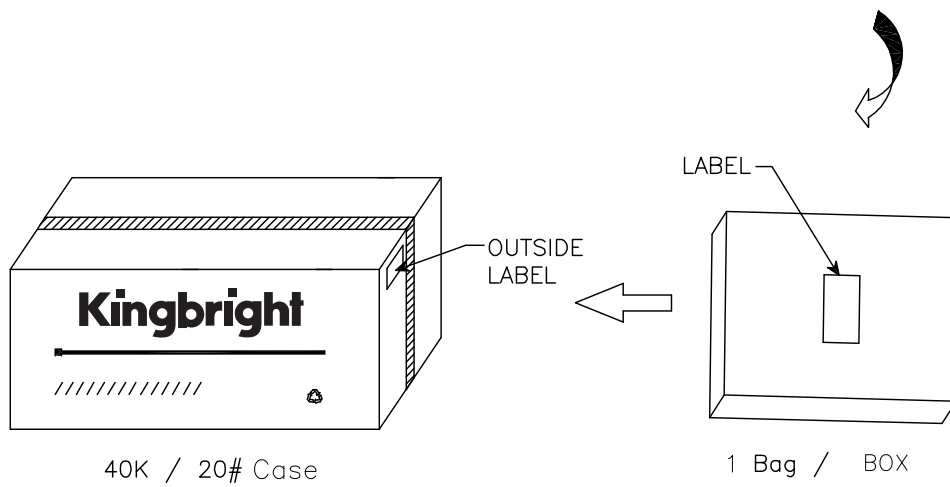
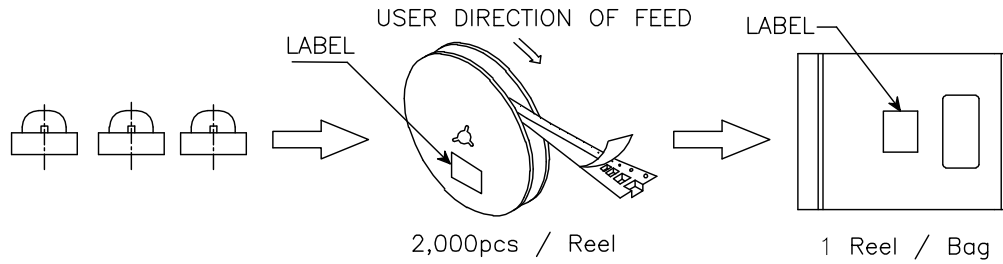



Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

APA3010LMBD-NL2



Kingbright	
P/NO: APA3010xxx	
QTY: 2,000 pcs	Q.C. Q C xx xx. xxxx PASSED
S/N: XXXX	Date
CODE: XXX	
LOT NO:	
 <small>xxxxxxxxxxxxxxxxxxxxxxxxxxxx</small>	
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.