3.2x1.6mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

DEVICES

Part Number: APTL3216PBC/Z

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.
- MOISTURE SENSITIVITY LEVEL: LEVEL 3.
- RoHS COMPLIANT.

Description

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

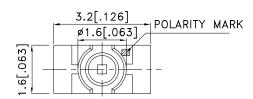
Blue

Static electricity and surge damage the LEDS.

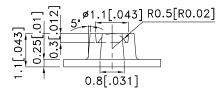
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

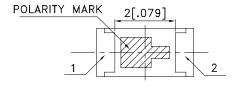
All devices, equipment and machinery must be electrically grounded.

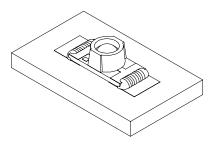
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1 (0.004")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.4. The device has a single mounting surface. The device must be mounted according to the specifications.





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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,,	Min.	Тур.	201/2
APTL3216PBC/Z	Blue (InGaN)	WATER CLEAR	180	400	70°

- θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
 Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	467		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue	470		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	22		nm	IF=20mA
С	Capacitance	Blue	110		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	4	V	IF=20mA
lR	Reverse Current	Blue		10	uA	V _R =5V

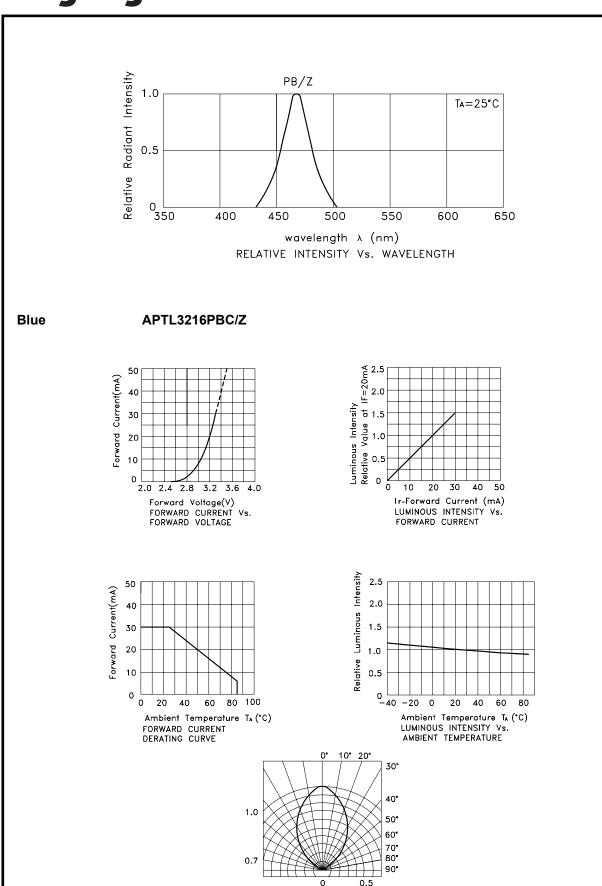
- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units	
Power dissipation	120	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	100	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

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

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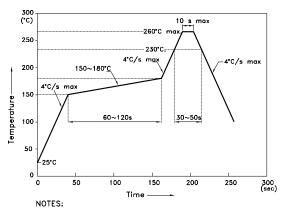
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SPATIAL DISTRIBUTION

APTL3216PBC/Z

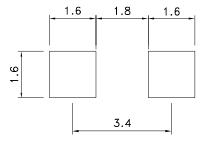
Reflow Soldering Profile For Lead-free SMT Process.



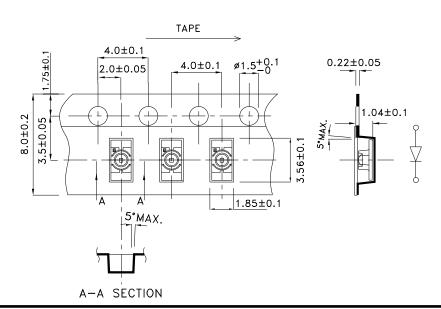
- NOTES:

 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; Tolerance: ± 0.1)



Tape Specifications (Units: mm)

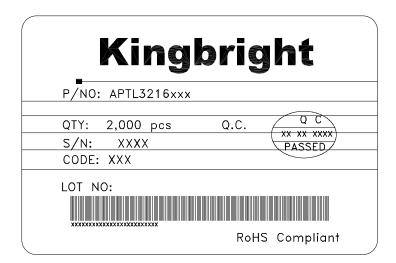


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PACKING & LABEL SPECIFICATIONS APTL3216PBC/Z USER DIRECTION OF FEED LABEL LABEL 2,000pcs / Reel 1 Reel / Bag OUTSIDE LABEL OUTSIDE LABEL Kingbright Kingbright 30K / 55# Box 60K / 20# BOX



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