

3.2mmx1.6mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

DEVICES

Part Number: APT3216PBC/Z-PRV-SI

Blue

Features

- 3.2mmx1.6mm SMT LED, 0.75mm 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

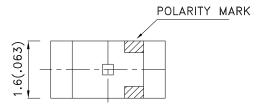
The Blue source color devices are made with InGaN Light Emitting Diode.

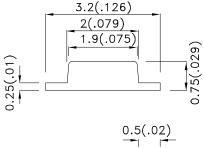
Static electricity and surge damage the LEDS.

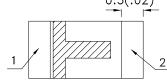
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

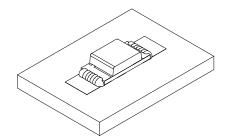
Package Dimensions











- 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.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]
		21	Min.	Тур.	201/2
APT3216PBC/Z-PRV-SI	Blue (InGaN)	WATER CLEAR	70	180	120°

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

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions			
λpeak	Peak Wavelength	Blue	458		nm	IF=20mA			
λD [1]	Dominant Wavelength	Blue	465		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	3.7	V	IF=20mA			
lr	Reverse Current	Blue		10	uA	VR=5V			

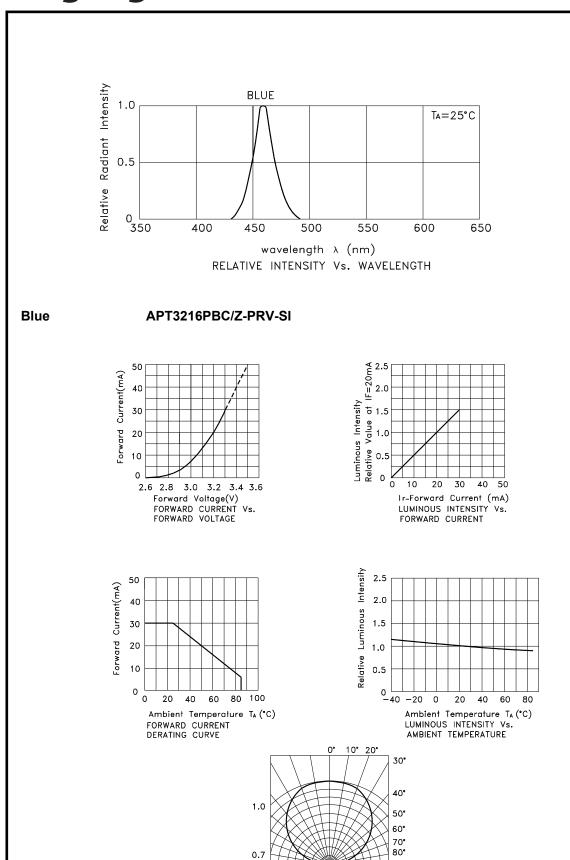
1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units	
Power dissipation	111	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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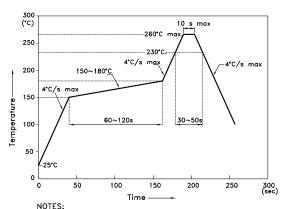
SPATIAL DISTRIBUTION

90°

APT3216PBC/Z-PRV-SI

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



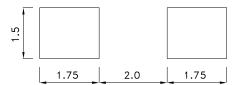
- NOTES:

 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

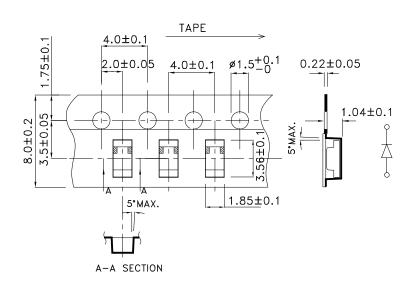
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

 3.Number of reflow process shall be 2 times or less.

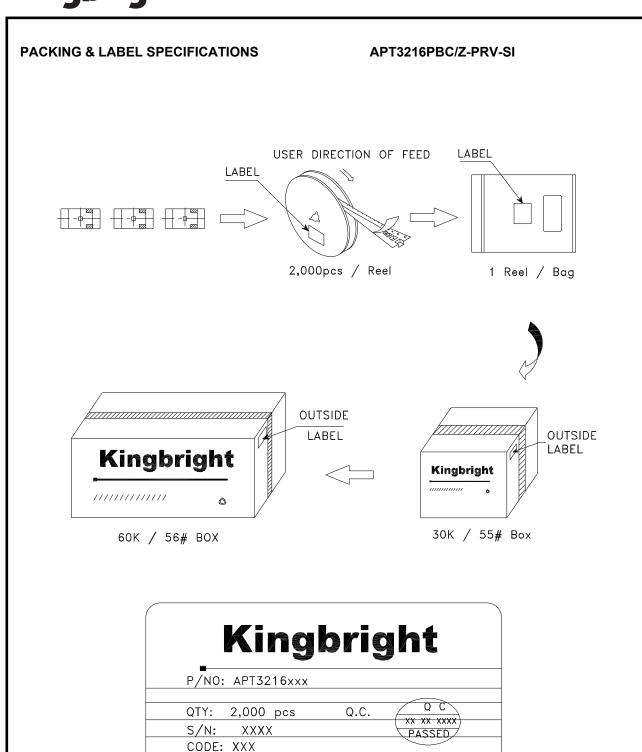
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)



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LOT NO:

DATE: FEB/12/2009 DRAWN: D.M.Su

RoHS Compliant

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Mouser Electronics

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