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Kingbright APT3216LZGCK

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Datasheet of APT3216LZGCK - LED GREEN CLEAR 1206 SMD

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3.2mmx1.6mm SMD CHIP LED LAMP

Part Number: APT3216LZGCK

Green



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

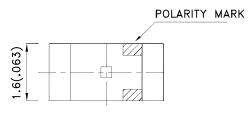
Features

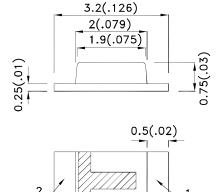
- 3.2mmx1.6mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

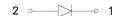
Descriptions

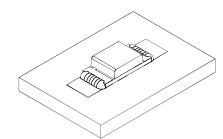
- The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or antielectrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

Package Dimensions









Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2 (0.008")$ unless otherwise noted.
- 3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior 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] @ 2mA		Viewing Angle [1]
		-	Min.	Тур.	201/2
APT3216LZGCK	Green (InGaN)	Water Clear	20	50	120°

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value. 2. Luminous intensity/ luminous Flux: +/-15%.
- 3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Min.	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green		515		nm	IF=2mA
λD [1]	Dominant Wavelength	Green		525		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Green		35		nm	IF=2mA
С	Capacitance	Green		45		pF	V _F =0V;f=1MHz
VF [2]	Forward Voltage	Green	2.2	2.65	3	V	IF=2mA
lr	Reverse Current	Green			50	uA	V _R =5V

- Navelength: +/-1nm.
 Forward Voltage: +/-0.1V.
 Navelength value is traceable to the CIE127-2007 compliant national standards.
- 4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

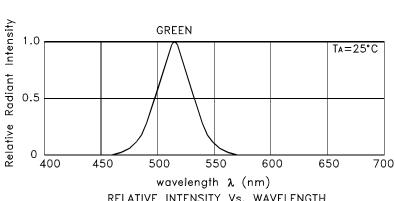
Parameter	Green	Units		
Power dissipation	75	mW		
DC Forward Current	25	mA		
Peak Forward Current [1]	150	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

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

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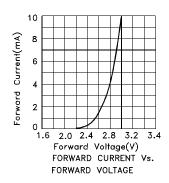
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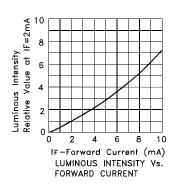


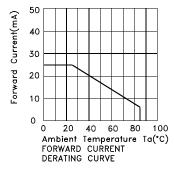
RELATIVE INTENSITY Vs. WAVELENGTH

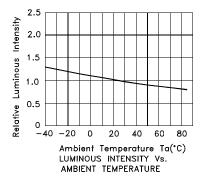
Green

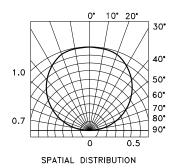
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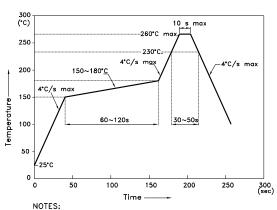
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APT3216LZGCK

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.



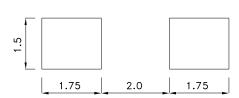
OIES:

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

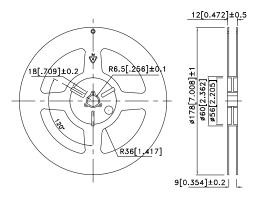
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

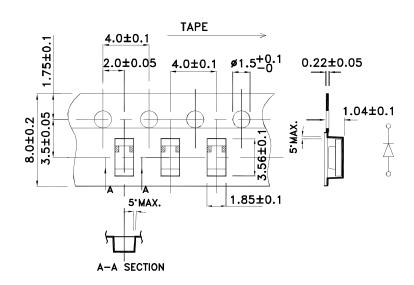
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension



Tape Dimensions (Units : mm)



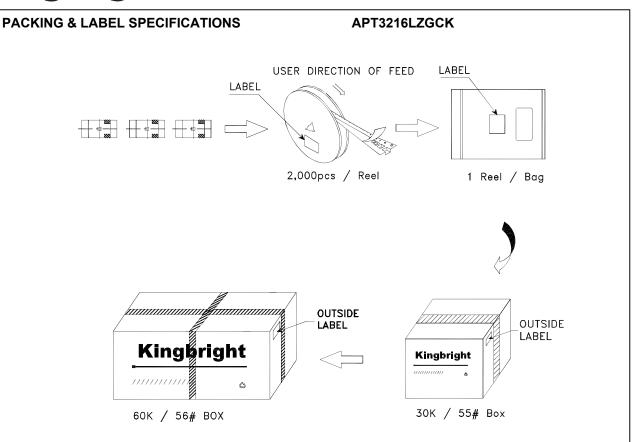
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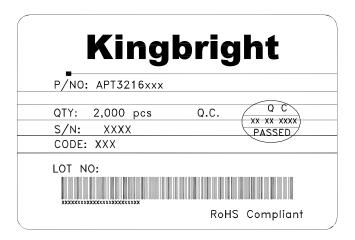


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