

3.2x1.6mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

Part Number: APTR3216ZGC/G

Features

- 3.2mmx1.6mm SMT LED,1.05mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Vavrious colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

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

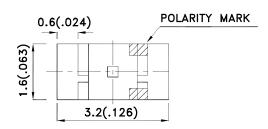
Green

Static electricity and surge damage the LEDS.

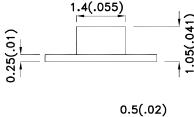
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

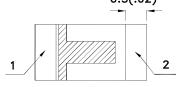
All devices, equipment and machinery must be electrically grounded.

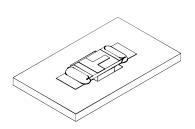
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2 (0.008")$ unless otherwise noted.
- Specifications are subject to change without notice.
 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]
		2.	Min.	Тур.	201/2
APTR3216ZGC/G	Green (InGaN)	WATER CLEAR	380	700	120°

Notes:

- 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%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Green	520		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	35		nm	IF=20mA
С	Capacitance	Green	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	3.2	4	V	IF=20mA
lR	Reverse Current	Green		10	uA	VR=5V

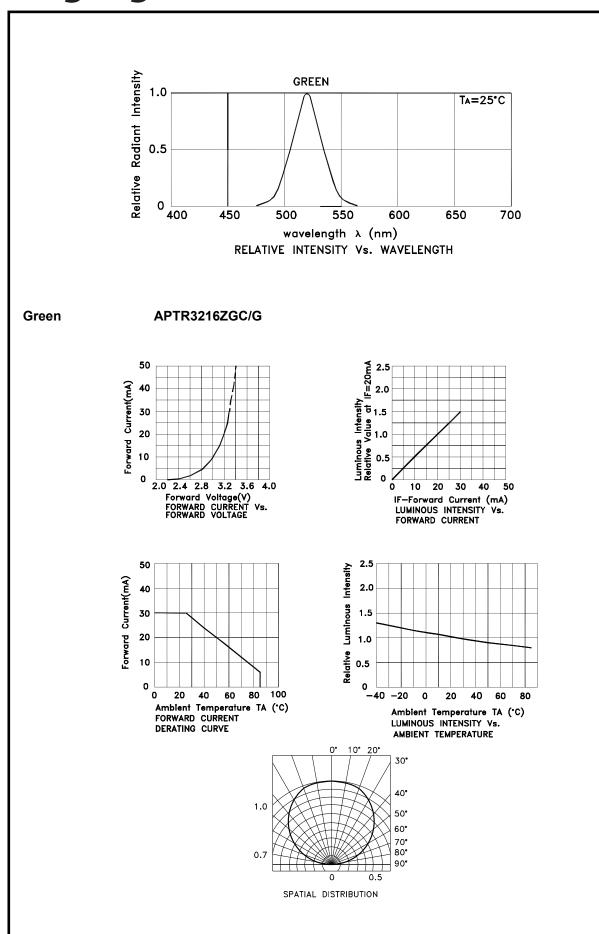
- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

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Parameter	Green	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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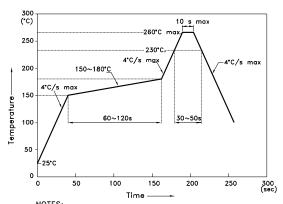
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APTR3216ZGC/G

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.



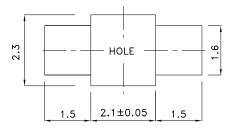
- NOTES:

 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.

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

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

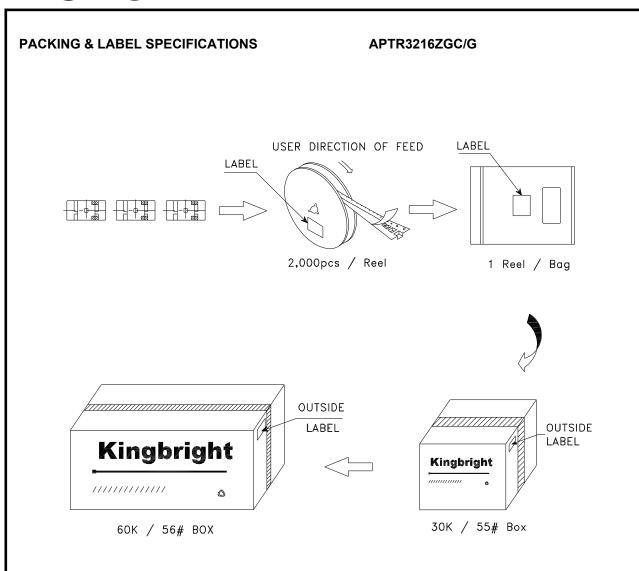


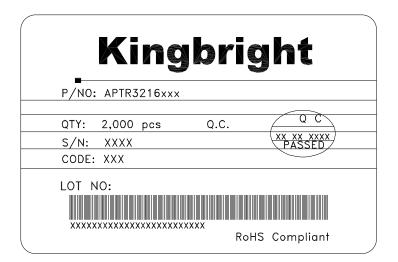
Tape Dimensions (Units : mm)

TAPE 4.0±0.1 2.0±0.05 4.0±0.1 0.229±0.013 1.3±0.1 8.0+0.3 5±0.05 9°MAX 3.4 ± 0.1 **Emitting** 9°MAX. 1.78±0.1 A-A SECTION

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