3.2x1.6mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

DEVICES

Part Number: APTD3216ZGC

Features

- 3.2mmX1.6mm SMT LED, 1.8mm 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 Green source color devices are made with AllnGaN on Sapphire Light Emitting Diode.

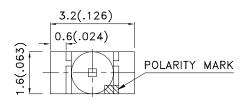
Green

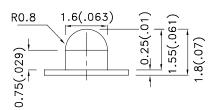
Static electricity and surge damage the LEDS.

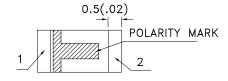
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

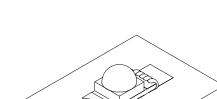
All devices, equipment and machinery must be electrically grounded.

Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2 (0.008")$ unless otherwise noted.
- 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.





SPEC NO: DSAF2947 **REV NO: V.2** DATE: MAY/07/2007 PAGE: 1 OF 5 APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Y.L.LI ERP: 1203002332

Selection Guide

Part No.	Part No. Dice Lens Type		lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APTD3216ZGC	Green (AllnGaN)	WATER CLEAR	380	850	50°

- 1. 01/2 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	Green	515		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	30		nm	IF=20mA
С	Capacitance	Green	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	3.3	4.1	V	IF=20mA
lr	Reverse Current	Green		10	uA	V _R =5V

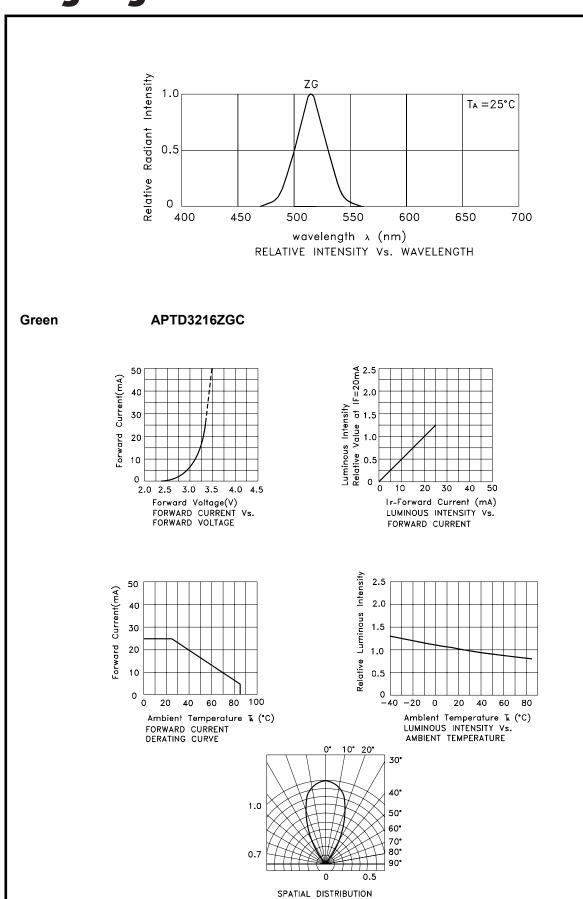
- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units			
Power dissipation	102.5	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.

PAGE: 2 OF 5 SPEC NO: DSAF2947 **REV NO: V.2** DATE: MAY/07/2007 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Y.L.LI ERP: 1203002332

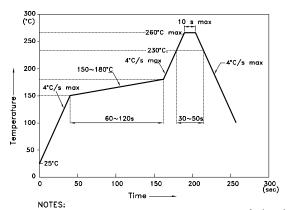


 SPEC NO: DSAF2947
 REV NO: V.2
 DATE: MAY/07/2007
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: Y.L.LI
 ERP: 1203002332

APTD3216ZGC

Reflow Soldering Profile For Lead-free SMT Process.



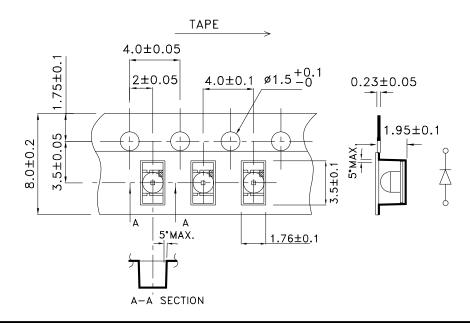
- NOTES:

 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)

1.75 1.75 2.0

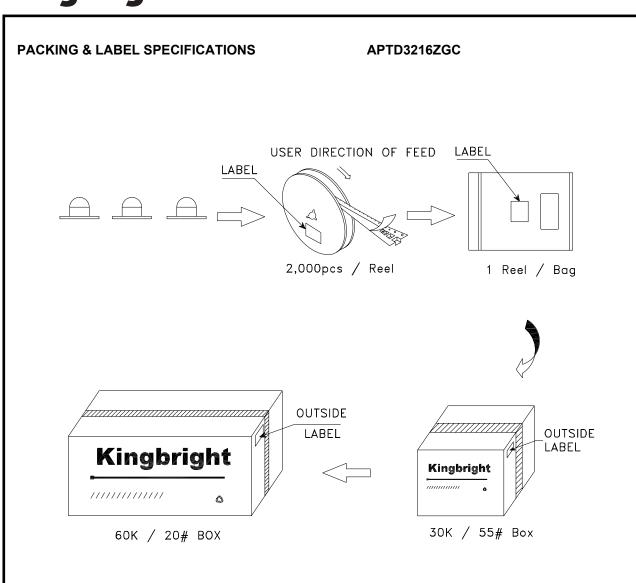
Tape Specifications (Units: mm)



SPEC NO: DSAF2947 APPROVED: WYNEC

REV NO: V.2 CHECKED: Allen Liu DATE: MAY/07/2007 DRAWN: Y.L.LI

PAGE: 4 OF 5 ERP: 1203002332





SPEC NO: DSAF2947 APPROVED: WYNEC REV NO: V.2 CHECKED: Allen Liu DATE: MAY/07/2007 DRAWN: Y.L.LI PAGE: 5 OF 5 ERP: 1203002332