

Kingbright

1.6X0.8mm SMD CHIP LED LAMP

PRELIMINARY SPEC

Part Number: APT1608VGC/A GREEN



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Features

- 1.6mmX0.8mm 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 SENSIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

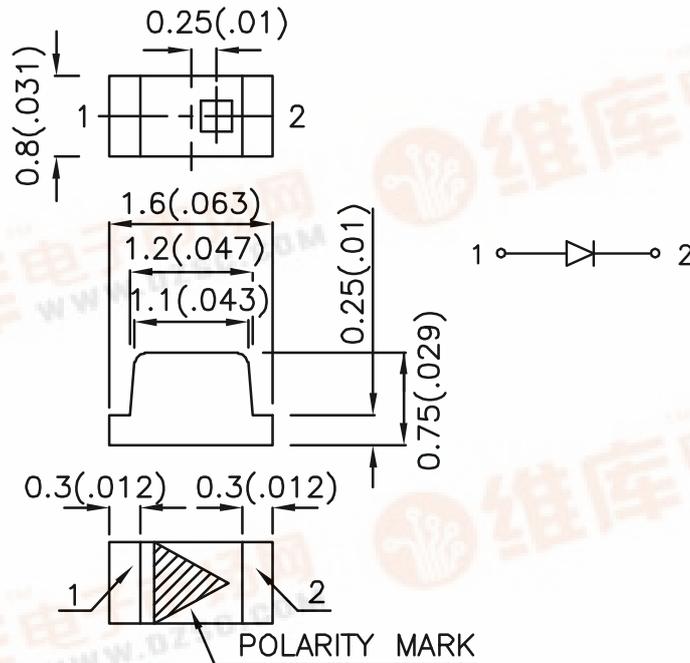
The Green source color devices are made with InGaN on G-SiC Light Emitting Diode.

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



Notes:

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.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2 θ 1/2
APT1608VGC/A	GREEN (InGaN)	WATER CLEAR	50	180	120°

Notes:

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	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Green	520		nm	IF=20mA
λ _D [1]	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ _{1/2}	Spectral Line Half-width	Green	35		nm	IF=20mA
C	Capacitance	Green	100		pF	VF=0V;f=1MHz
VF[2]	Forward Voltage	Green	3.2	4.0	V	IF=20mA
IR	Reverse Current	Green		10	uA	VR = 5V

Notes:

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

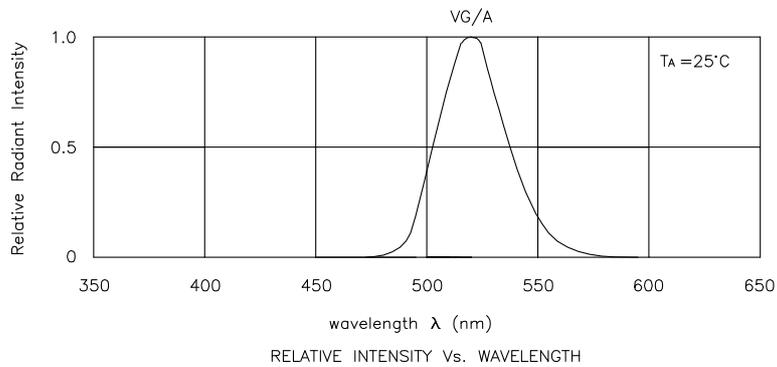
Absolute Maximum Ratings at TA=25°C

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

Note:

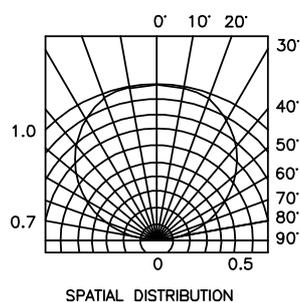
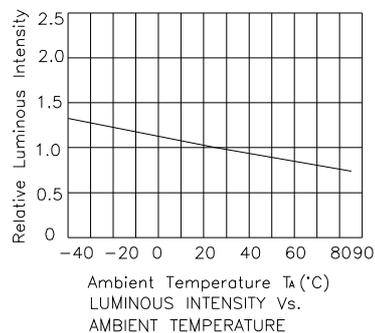
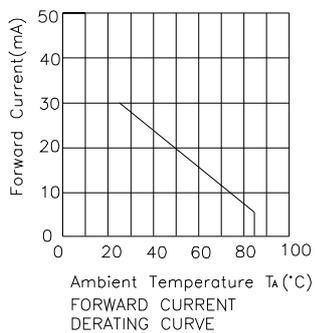
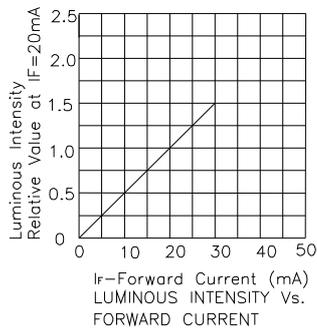
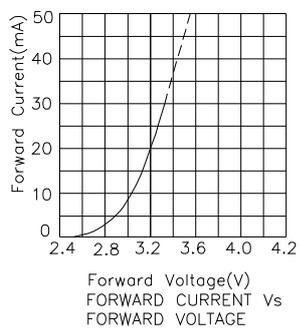
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

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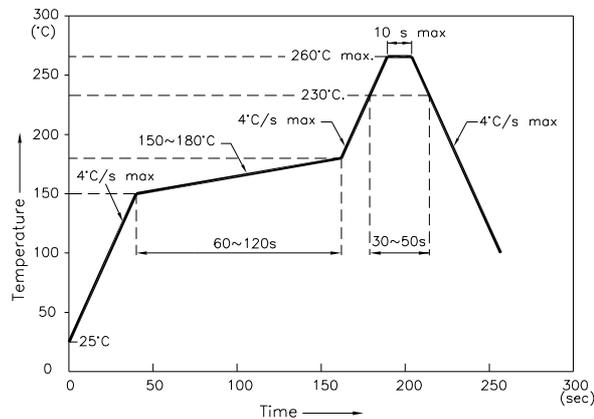
Green

APT1608VGC/A



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Reflow Soldering Profile For Lead-free SMT Process.

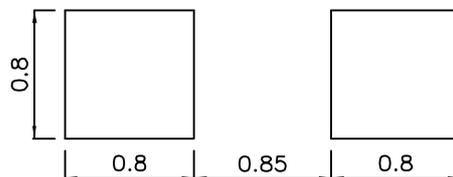


NOTES:

1. We recommend the reflow temperature $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$. 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.

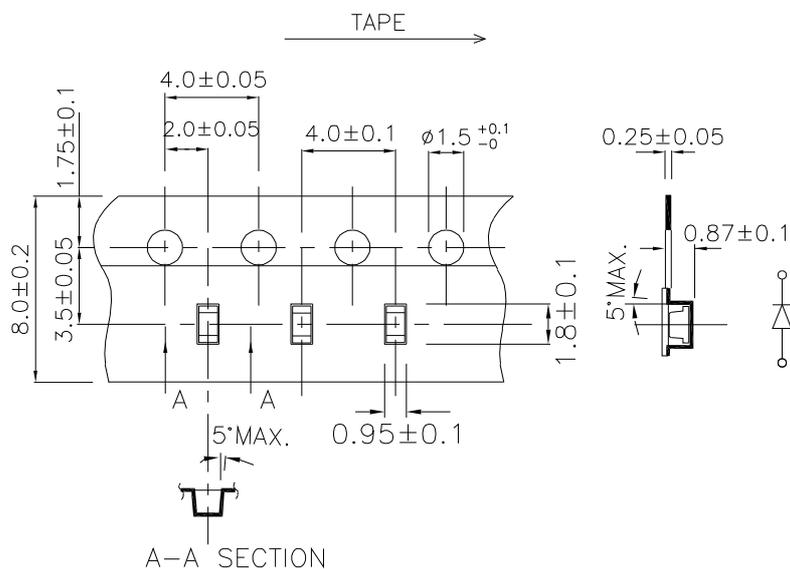
Recommended Soldering Pattern

(Units : mm; Tolerance: ± 0.1)



Tape Specifications

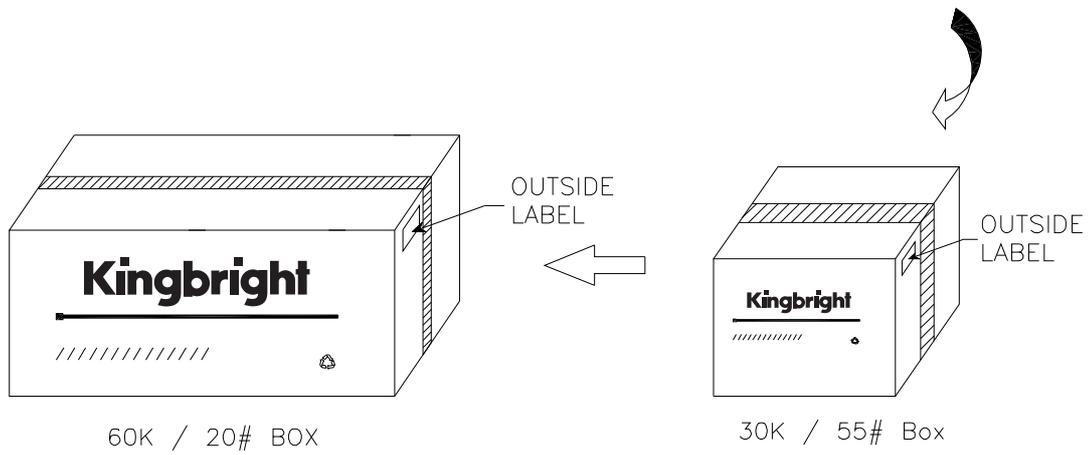
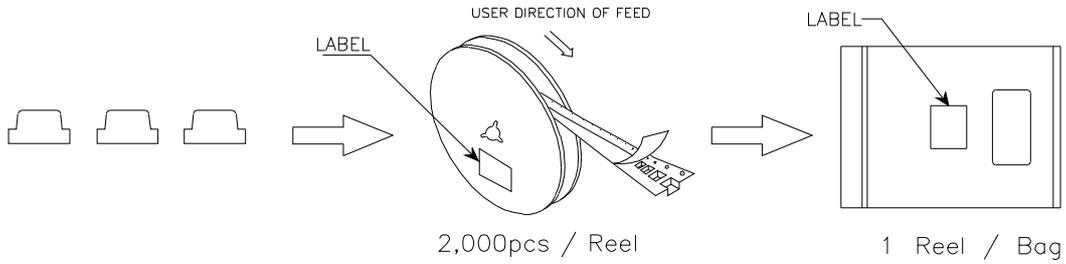
(Units : mm)



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PACKING & LABEL SPECIFICATIONS

APT1608VGC/A



Kingbright	
P/NO: APT1608xxxx	
QTY: 2,000 pcs	Q.C. Q C xx xx xx PASSED
S/N: XXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	