

2.0x1.25mm SMD CHIP LED LAMP

PRELIMINARY SPEC



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

Part Number: APTK2012VGC/A-F01

Green

Features

- 2.0mmx1.25mm SMT LED, 0.75mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 2000PCS/REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

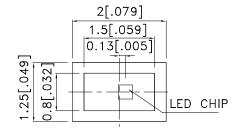
The Green source color devices are made with InGaN on G-SiC Light Emitting Diode.

Static electricity and surge damage the LEDS.

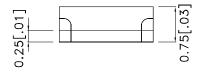
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

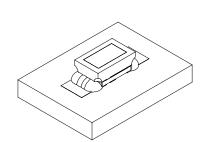
All devices, equipment and machinery must be electrically grounded.

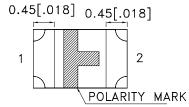
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.1(0.004") 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]
			Min.	Тур.	201/2
APTK2012VGC/A-F01	Green (InGaN)	WATER CLEAR	70	200	100°

- 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	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	V _R =5V

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

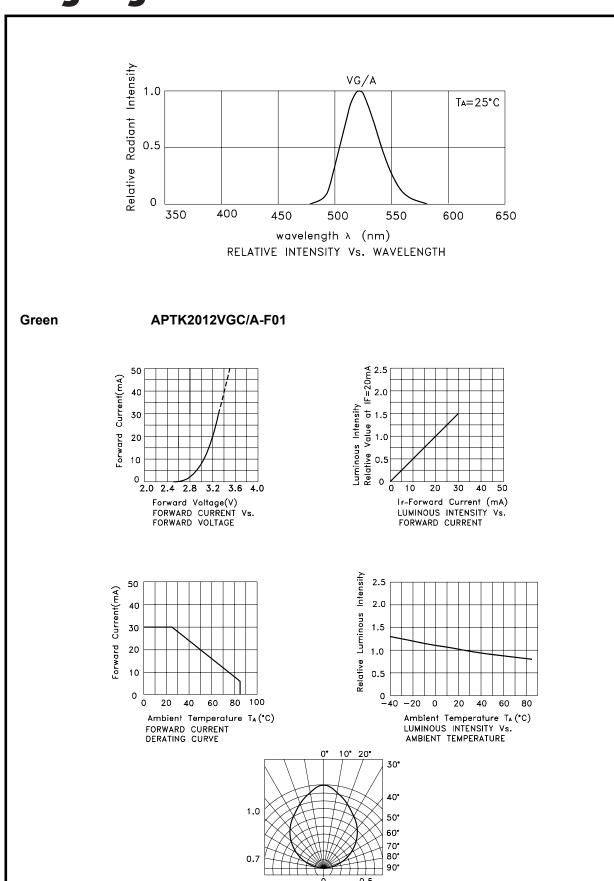
Absolute Maximum Ratings at TA=25°C

A too o tate maximum reasings at 17. 20 c					
Parameter	Green				
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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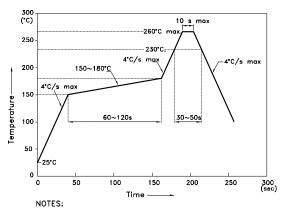
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SPATIAL DISTRIBUTION

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Reflow Soldering Profile For Lead-free SMT Process.



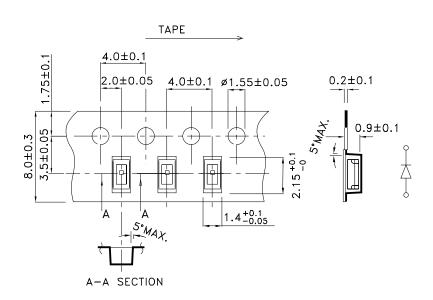
- NOTES:

 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 Specifications (Units: mm)



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PACKING & LABEL SPECIFICATIONS APTK2012VGC/A-F01 LABEL USER DIRECTION OF FEED LABEL 2,000pcs / Reel 1 Reel / Bag OUTSIDE LABEL OUTSIDE LABEL Kingbright Kingbright 30K / 55# Box 60K / 20# BOX



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Mouser Electronics

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