

# Kingbright

## 4.1 x 1.0mm RIGHT ANGLE SMD CHIP LED LAMP



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

APKA4110TGC

GREEN

### Features

- 4.1mm x 1.0mm RIGHT ANGLE SMT LED, 1.52mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 2000PCS/REEL.
- RoHS COMPLIANT.

### Description

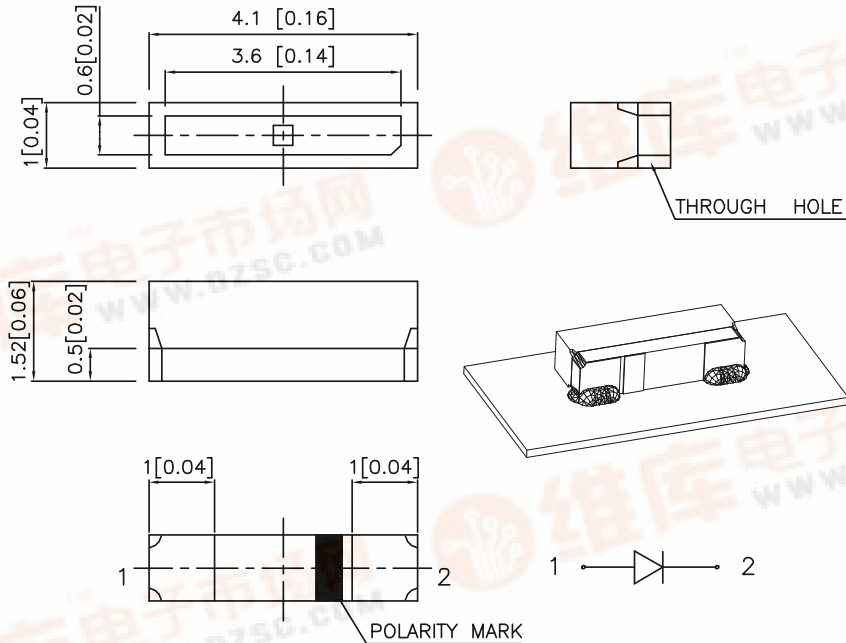
The Green source color devices are made with InGaN on SiC Light Emitting Diode.

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  $\pm 0.25(0.01)$  unless otherwise noted.
3. Specifications are subject to change without notice.



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## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 $\theta$ 1/2
APKA4110TGC	GREEN (InGaN)	WATER CLEAR	36	100	90°

Note:

1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Green	500		nm	IF=20mA
$\lambda_D$	Dominant Wavelength	Green	505		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Green	30		nm	IF=20mA
C	Capacitance	Green	56		pF	VF=0V;f=1MHz
VF	Forward Voltage	Green	3.6	4.4	V	IF=20mA
IR	Reverse Current	Green		10	uA	VR = 5V

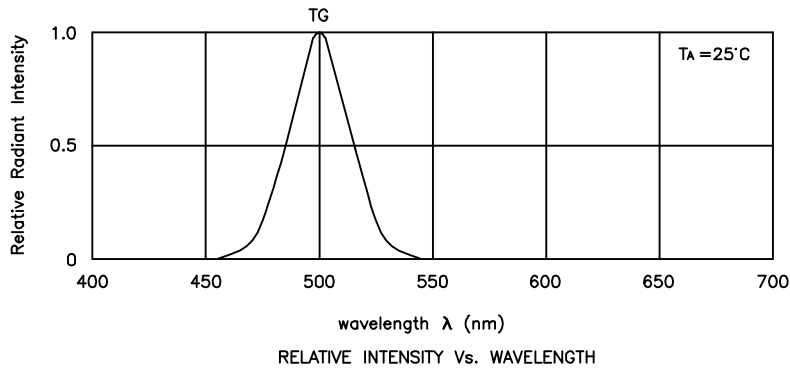
## Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units
Power dissipation	110	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

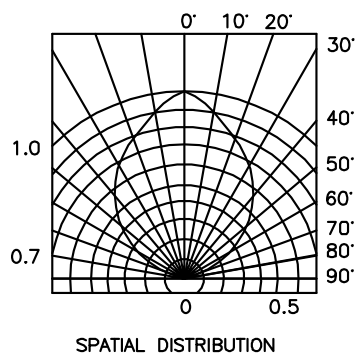
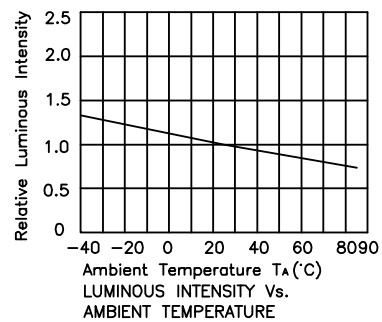
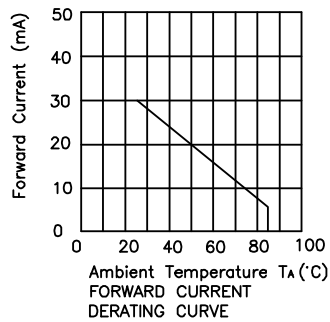
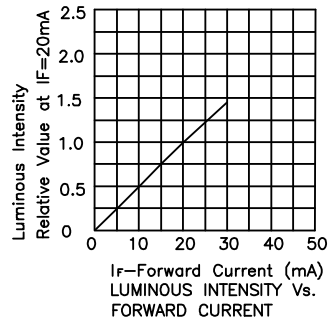
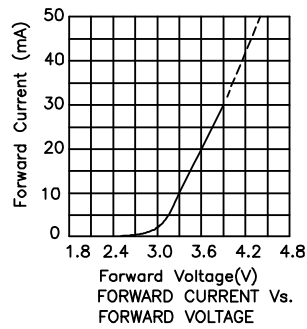
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

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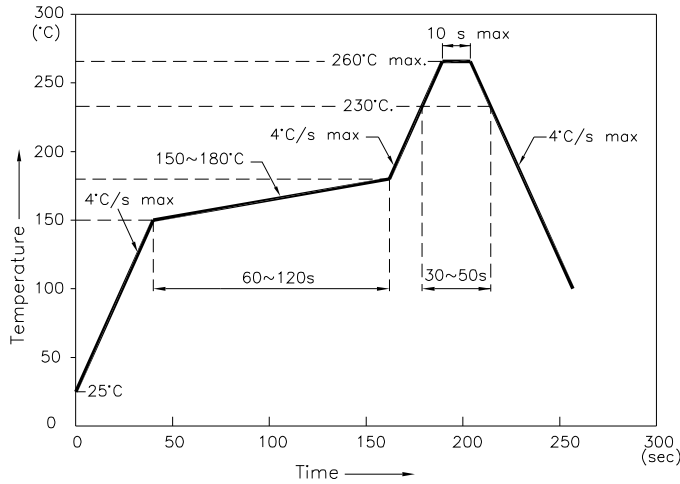
Green

APKA4110TGC



## APKA4110TGC

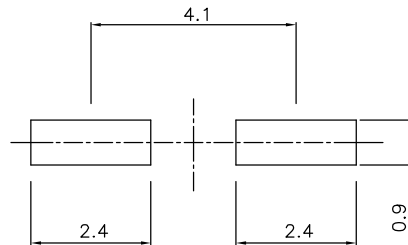
Reflow Soldering Profile For Lead-free SMT Process.



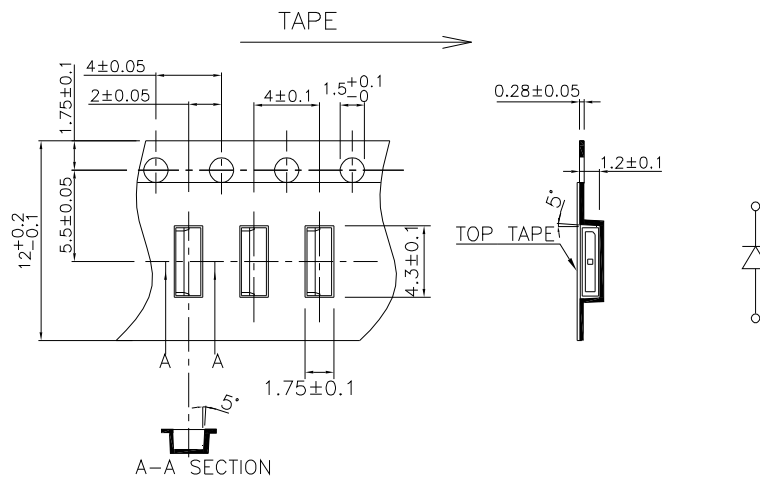
**NOTES:**

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)**



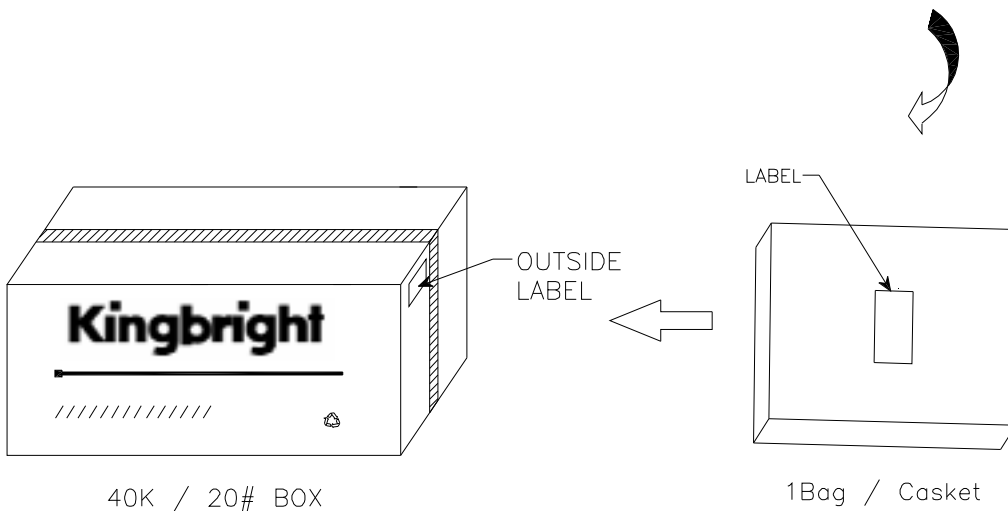
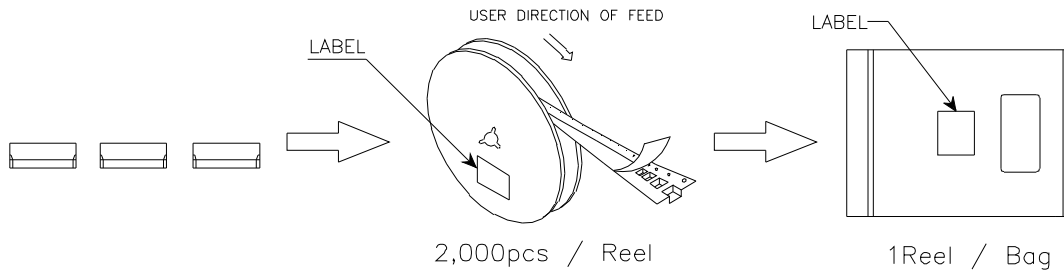
**Tape Specifications  
(Units : mm)**




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## PACKING & LABEL SPECIFICATIONS

## APKA4110TGC



<b>Kingbright</b>	
P/NO: APKA4110XX	
QTY: 2,000 pcs	Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C xx xx xxxx PASSED</span>
S/N: XXXX	
CODE: XXX	
LOT NO:	
	
MADE IN CHINA	RoHS Compliant

### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.