

GREEN

- 2.8mmX1.0mm RIGHT ANGLE SMT LED, 1.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

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

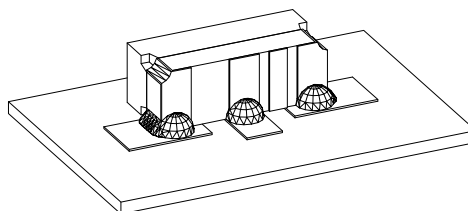
Static electricity and surge damage the LEDS.

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.

Technical drawing of a diode package showing three views: top, side, and end views. Dimensions are given in inches with tolerances in brackets.

- Top View:**
 - Overall width: $2.8[.11]$
 - Width of central feature: $2.2[.087]$
 - Distance from left edge to centerline: $1[.039]$
 - Distance from right edge to centerline: $0.7[.028]$
 - Radius of central feature: $R0.23$
 - Radius of corner: $R0.009$
- Side View:**
 - Overall height: $1.2[.047]$
 - Height of central feature: $0.5[.02]$
- End View:**
 - Distance from left edge to centerline: $0.5[.02]$
 - Distance from right edge to centerline: $0.5[.02]$
 - Overall width: $1[.039]$
 - Distance from left edge to centerline (bottom): $0.3[.012]$
 - Distance from right edge to centerline (bottom): $0.5[.02]$
- Labels:**
 - THROUGH HOLE:** Points to the central feature in the top view.
 - POLARITY MARK:** Points to the shaded area in the end view.
- Diagram:** A schematic symbol for a diode with terminals 1 and 2, and a polarity arrow pointing from 1 to 2.



NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(\pm 0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
APKA2810TGC	GREEN (InGaN)	WATER CLEAR	70	150	90°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

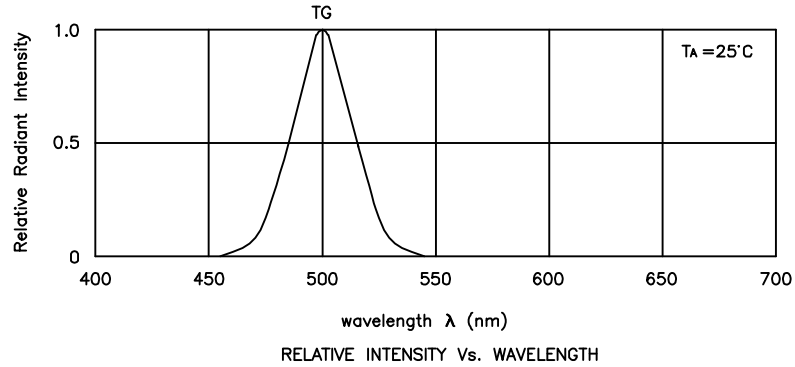
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Green	500		nm	IF=20mA
λ_D	Dominant Wavelength	Green	505		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Green	30		nm	IF=20mA
C	Capacitance	Green	56		pF	VF=0V;f=1MHz
VF	Forward Voltage	Green	3.6	4.4	V	IF=20mA
IR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

Absolute Maximum Ratings at TA=25°C

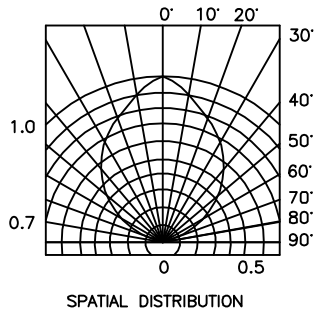
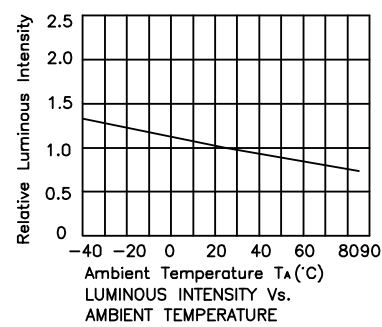
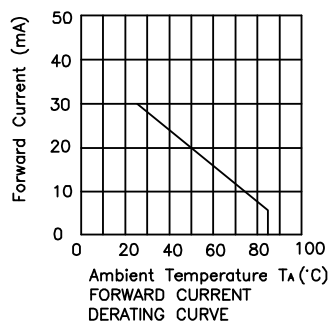
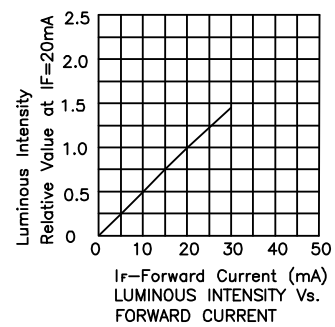
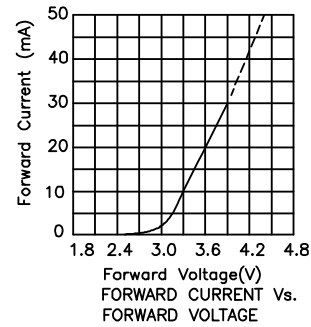
Parameter	Green	Units
Power dissipation	110	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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

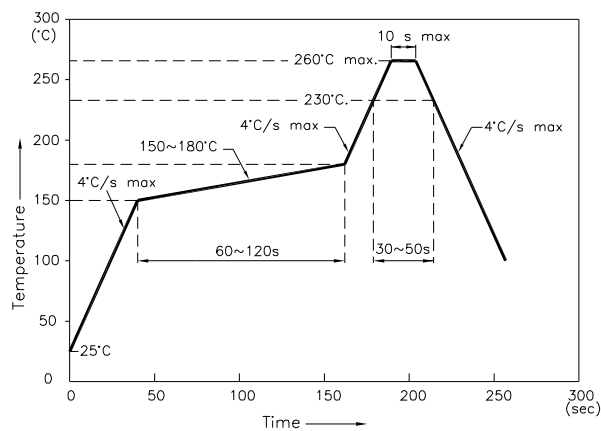


Green APKA2810TGC



APKA2810TGC

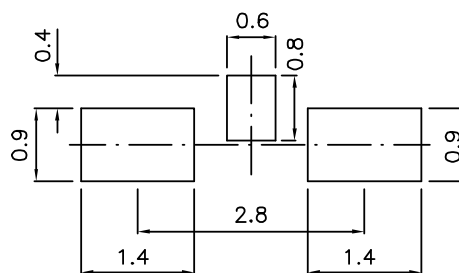
Reflow Soldering Profile For Lead-free SMT Process.



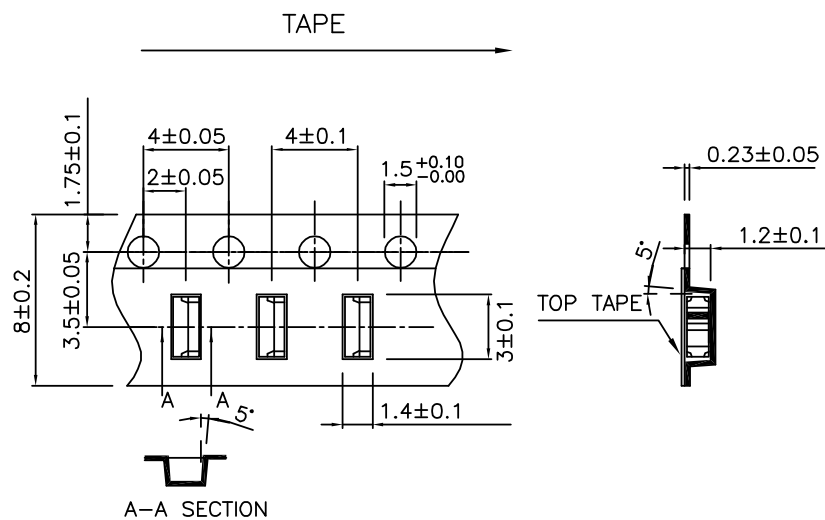
NOTES:

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)

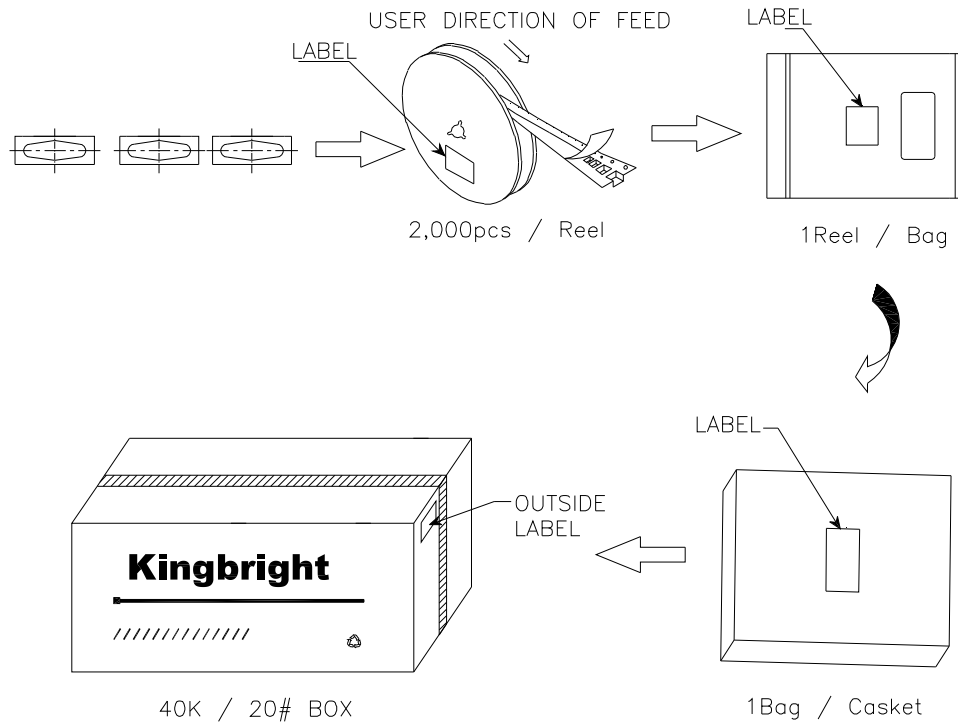


Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

APKA2810TGC



Kingbright	
P/NO: APKA2810xxxx	
QTY: 2,000 pcs	Q.C. Q C xx xx xx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:  xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	

Remarks:

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

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.