



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

P/N: KPKA-2810TGC

GREEN

### Features

- 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.

### Description

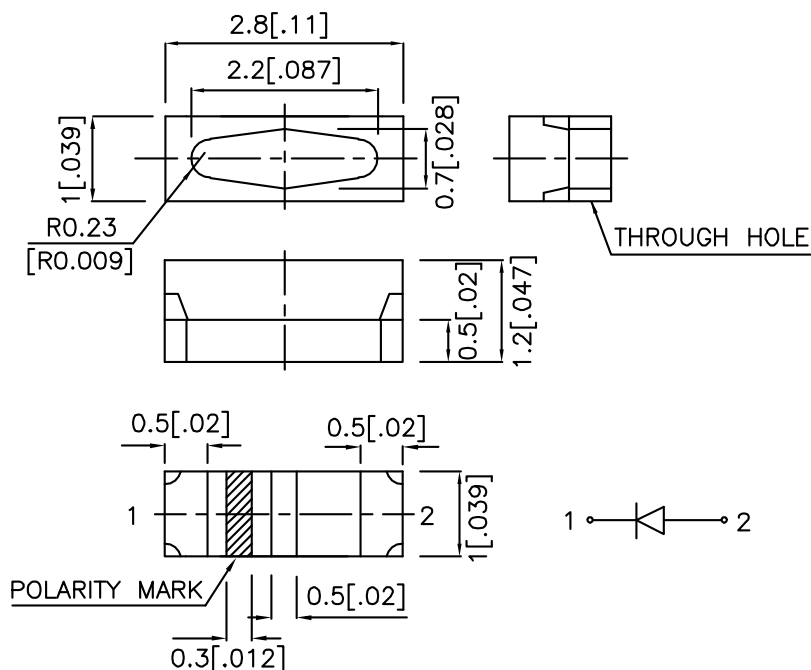
The Green source color devices are made with InGaN on SiC Light Emitting Diode.

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  $\pm 0.25 (\pm 0.01")$  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.	2 $\theta$ 1/2
KPKA-2810TGC	GREEN (InGaN)	WATER CLEAR	70	150	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 T<sub>A</sub>=25°C

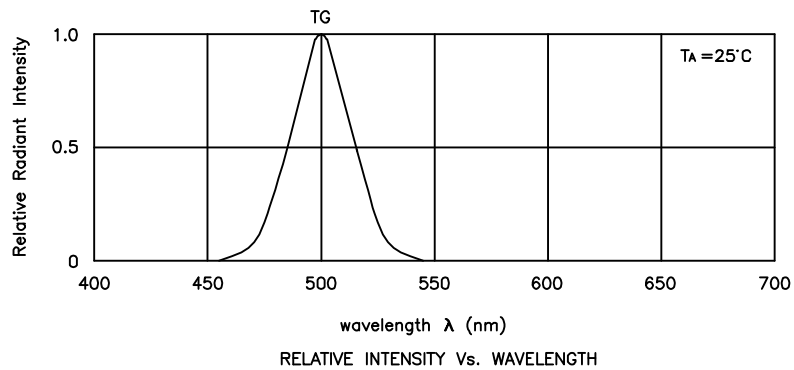
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Green	500		nm	I <sub>F</sub> =20mA
$\lambda_D$	Dominant Wavelength	Green	505		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Green	30		nm	I <sub>F</sub> =20mA
C	Capacitance	Green	56		pF	V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

## Absolute Maximum Ratings at T<sub>A</sub>=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	

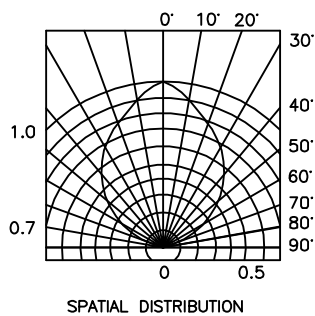
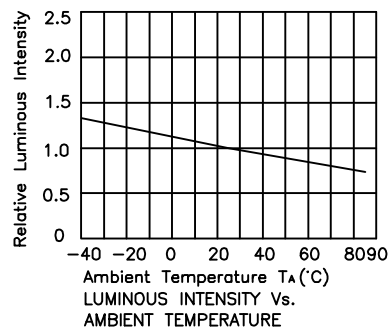
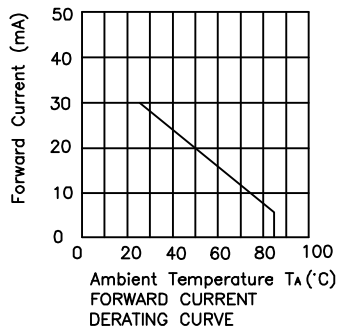
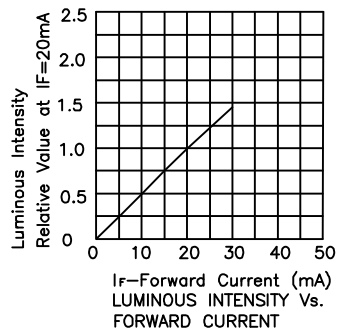
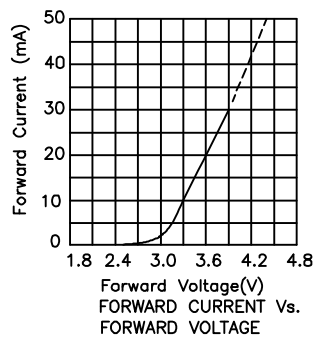
Note:

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



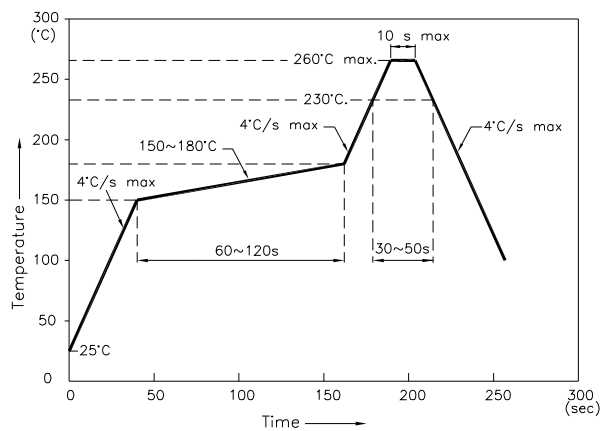
Green

KPKA-2810TGC



## KPKA-2810TGC

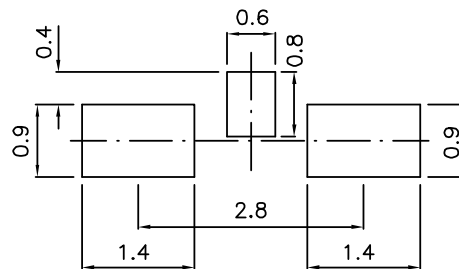
Reflow Soldering Profile For Lead-free SMT Process.



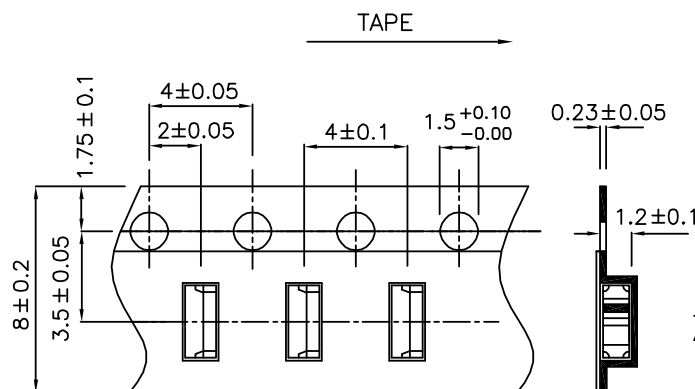
### NOTES:

1. We recommend the reflow temperature  $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$ . The maximum soldering temperature should be limited to  $260^{\circ}\text{C}$ .
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)



### 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:  $\pm 1\text{nm}$
2. Luminous intensity/ luminous flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.