

# Kingbright

## 2.8X1.0mm RIGHT ANGLE SMD CHIP LED LAMP

APKA2810MGC

MEGA GREEN

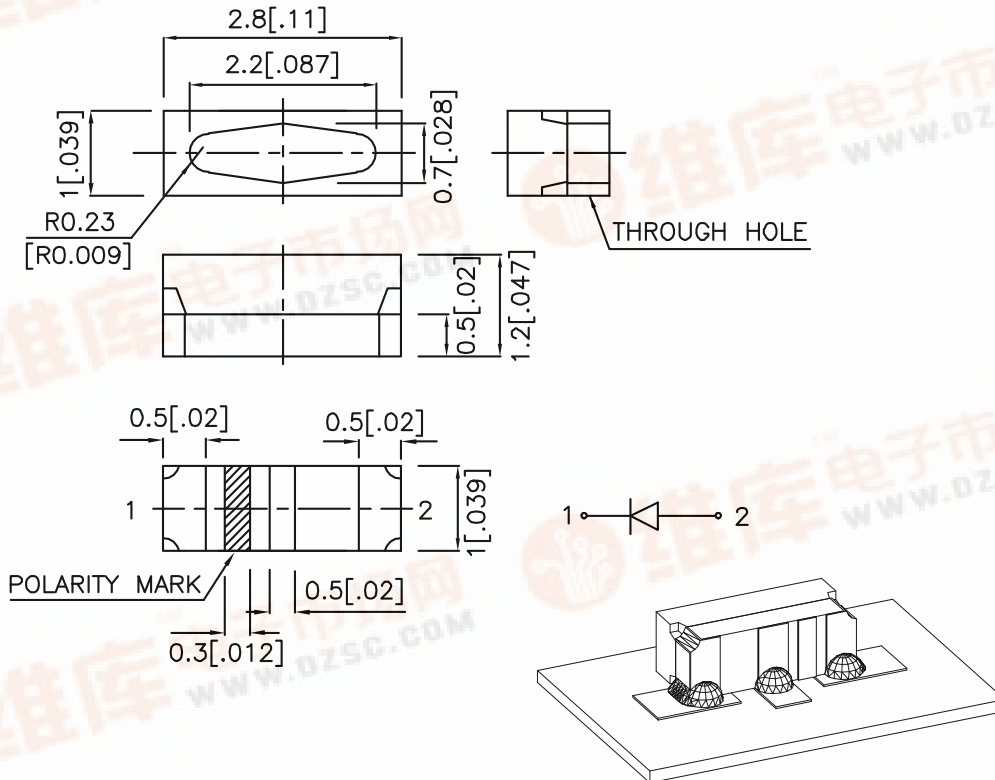
### Features

- 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 Mega Green source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

### 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.



# Kingbright

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
APKA2810MGC	MEGA GREEN (InGaAlP)	WATER CLEAR	18	70	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
λpeak	Peak Wavelength	Mega Green	574		nm	IF=20mA
λD	Dominant Wavelength	Mega Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Mega Green	26		nm	IF=20mA
C	Capacitance	Mega Green	20		pF	VF=0V;f=1MHz
VF	Forward Voltage	Mega Green	2.1	2.5	V	IF=20mA
IR	Reverse Current	Mega Green		10	uA	VR = 5V

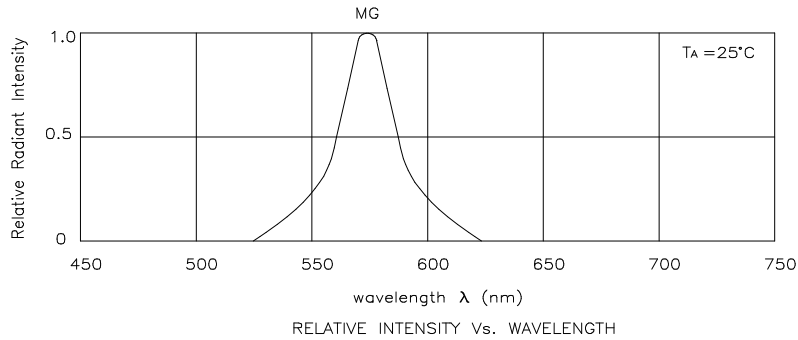
## Absolute Maximum Ratings at TA=25°C

Parameter	Mega Green	Units
Power dissipation	105	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:

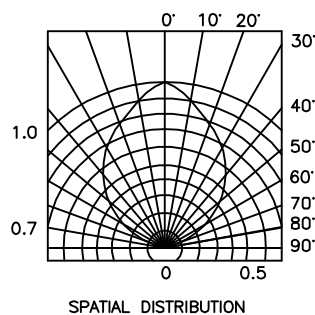
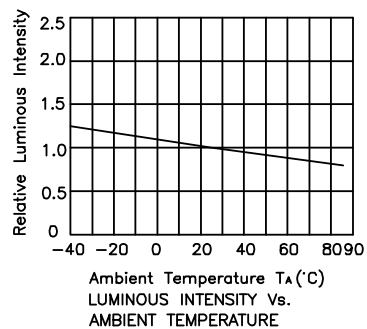
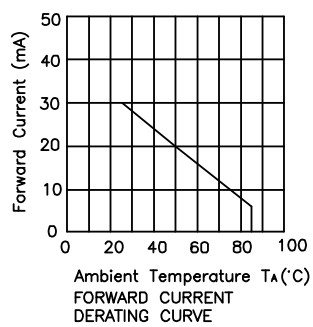
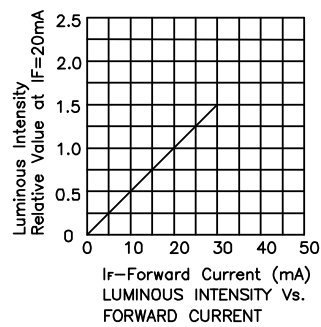
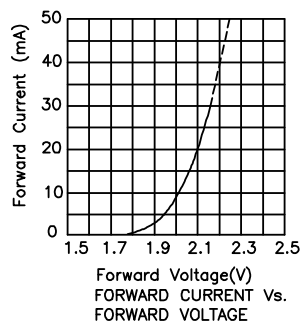
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

# Kingbright



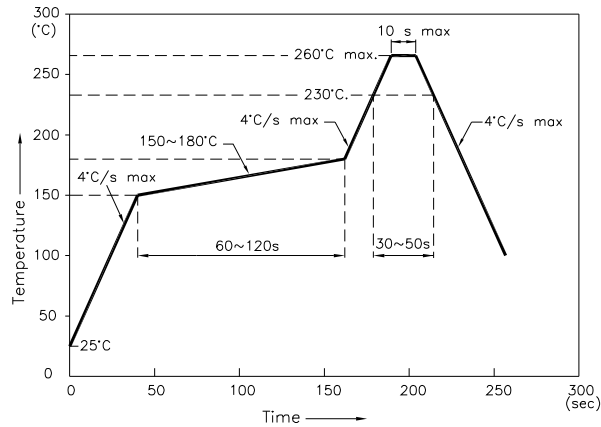
## Mega Green

### APKA2810MGC



## APKA2810MGC

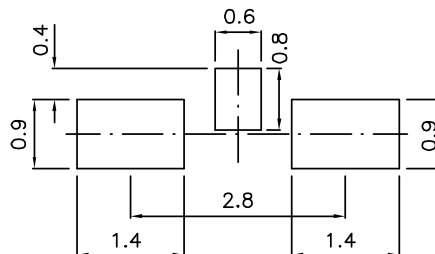
Reflow Soldering Profile For Lead-free SMT Process.



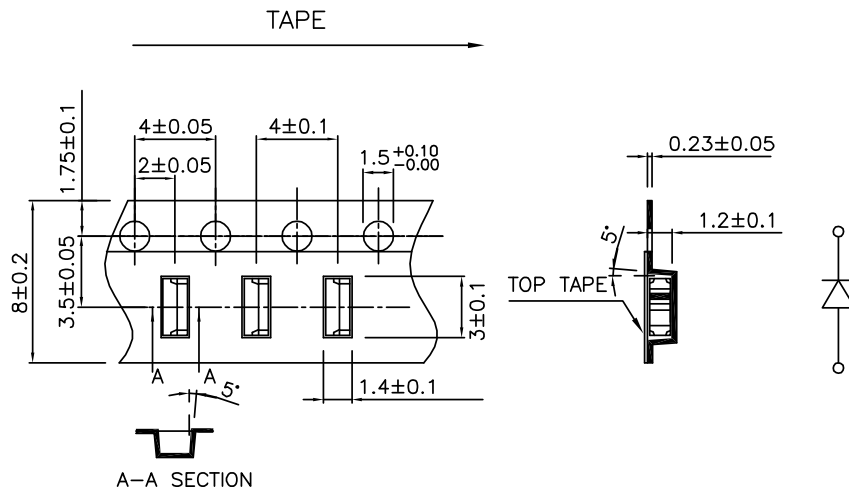
NOTES:

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)



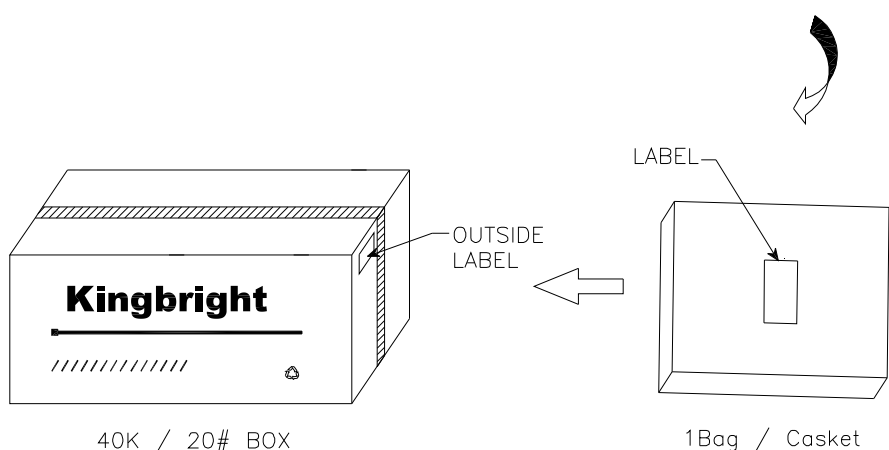
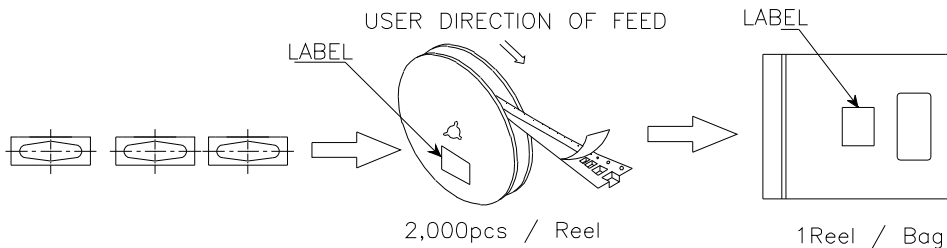
### Tape Specifications (Units : mm)




# Kingbright

## PACKING & LABEL SPECIFICATIONS

## APKA2810MGC



<b>Kingbright</b>	
P/NO: APKA2810xxxx	
QTY: 2,000 pcs	Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C xx xx xx PASSED</span>
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxx	
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: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.