Kingbright

2.8X1.0mm RIGHT ANGLE SMD CHIP LED LAMP

APKA2810MGCK MEGA GREEN

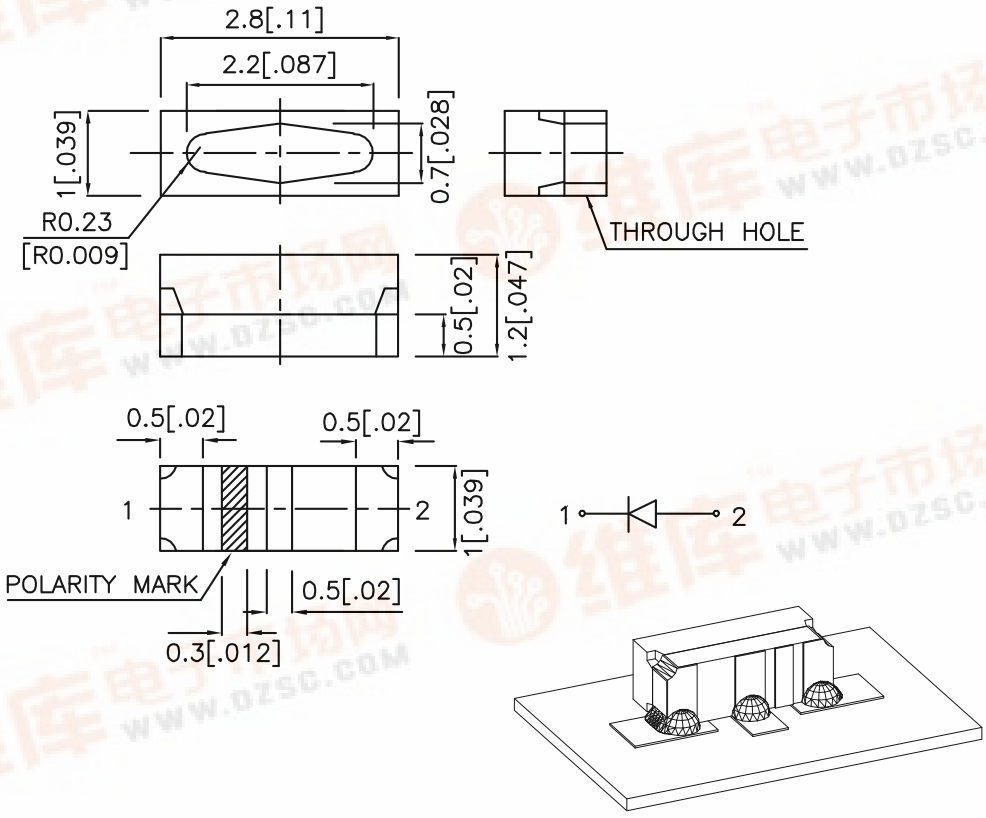
Features

- ●2.8mmX1.0mm RIGHT ANGLE SMT LED, 1.2mm THICK-NESS.
- ●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 ±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.	2θ1/2
APKA2810MGCK	MEGA GREEN (InGaAlP)	WATER CLEAR	36	80	90°

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

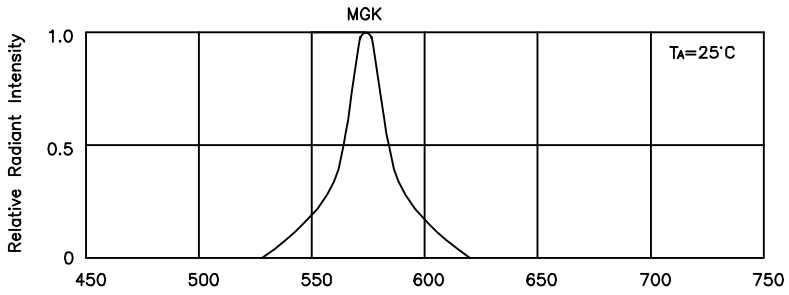
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Mega Green	574		nm	I_F=20mA
λD	Dominant Wavelength	Mega Green	570		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Mega Green	20		nm	I_F=20mA
C	Capacitance	Mega Green	15		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Mega Green	2.1	2.5	V	I_F=20mA
I_R	Reverse Current	Mega Green		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

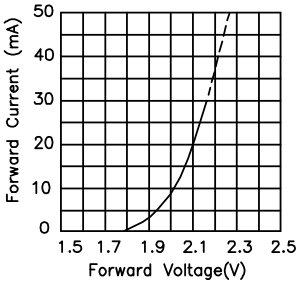
Parameter	Mega Green	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

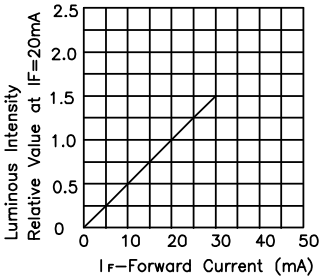


RELATIVE INTENSITY Vs. WAVELENGTH

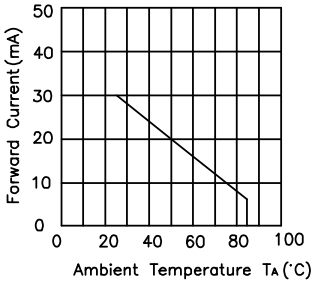
Mega Green **APKA2810MGCK**



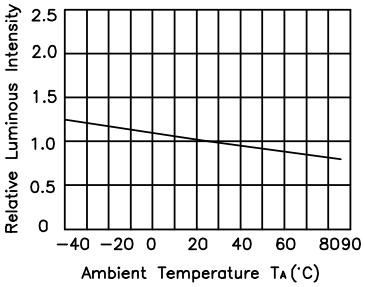
FORWARD CURRENT Vs.
FORWARD VOLTAGE



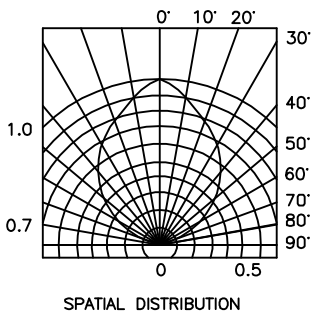
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



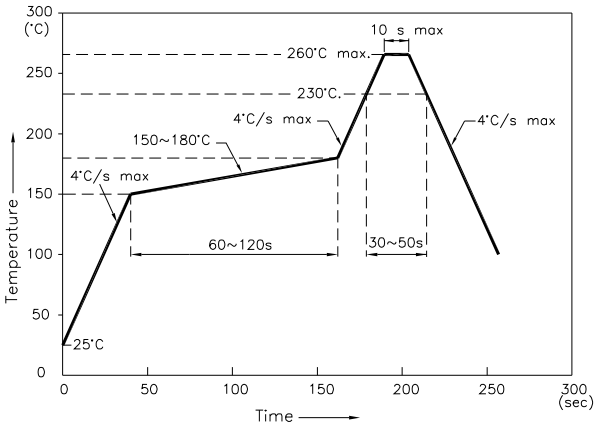
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

APKA2810MGCK

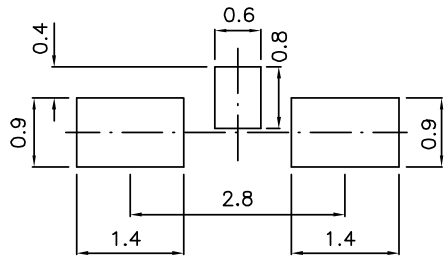
Reflow Soldering Profile For Lead-free SMT Process.



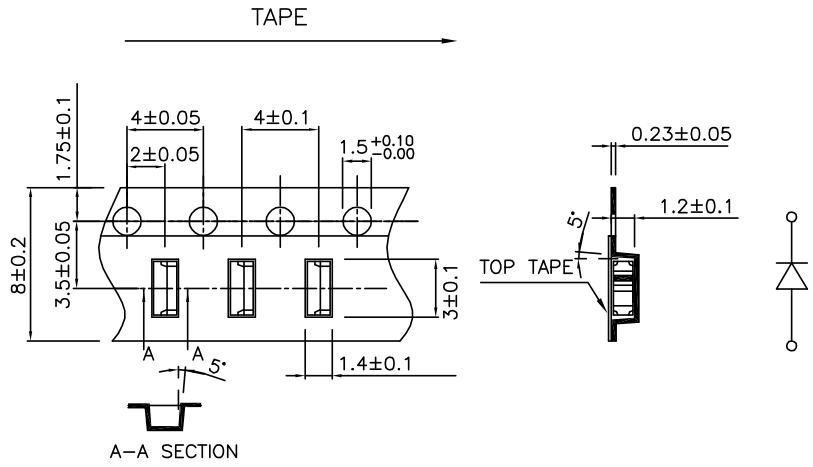
NOTES:

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.

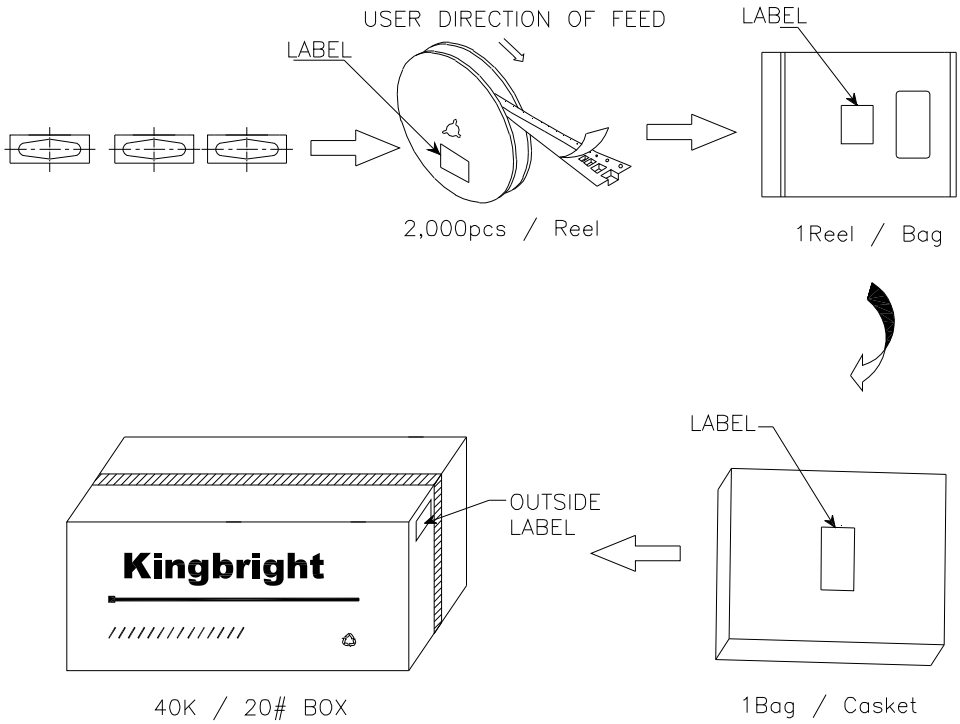
Recommended Soldering Pattern
(Units : mm)

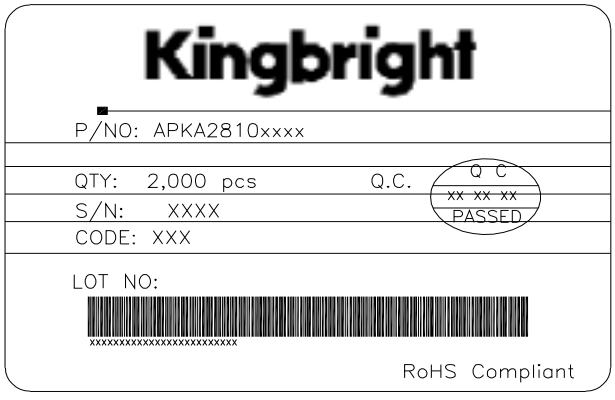


Tape Specifications
(Units : mm)



PACKING & LABEL SPECIFICATIONS **APKA2810MGCK**





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.