

Kingbright

3.0mmx1.0 mm RIGHT ANGLE SMD CHIP LED LAMP

APA3010SEC

SUPER BRIGHT ORANGE

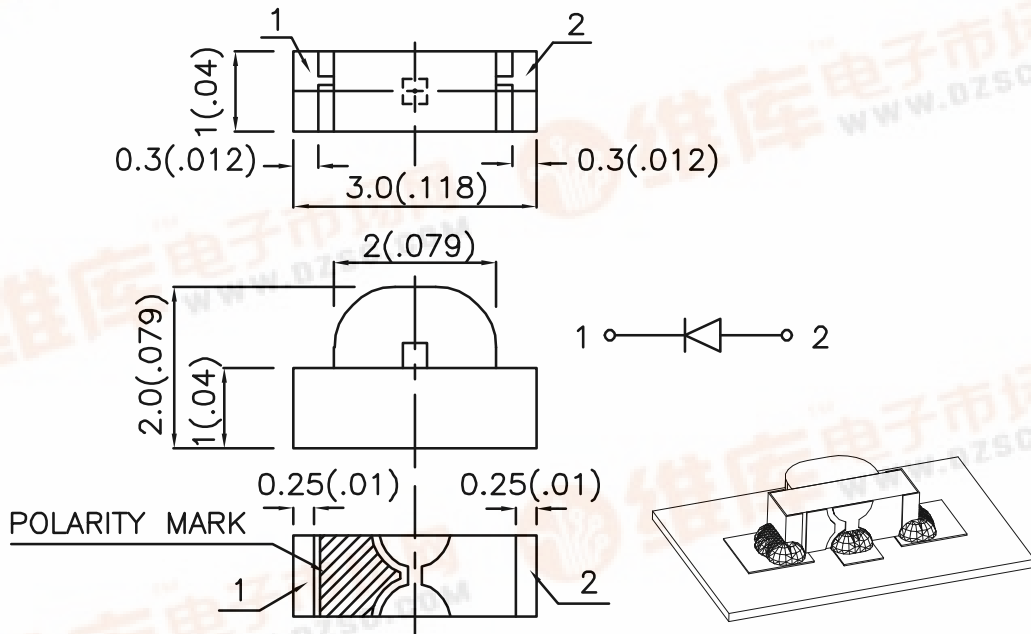
Features

- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

Description

The Super Bright Orange device is made with DH InGaAlP (on GaAs substrate) light emitting diode chip.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.15(0.006")$ 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 θ 1/2
APA3010SEC	SUPER BRIGHT ORANGE (InGaAlP)	WATER CLEAR	70	300	120°

Note:

1. θ 1/2 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
λ_{peak}	Peak Wavelength	Super Bright Orange	610		nm	I _F =20mA
λ_D	Dominant Wavelength	Super Bright Orange	601		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Orange	29		nm	I _F =20mA
C	Capacitance	Super Bright Orange	30		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Super Bright Orange	2.0	2.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Orange		10	uA	V _R = 5V

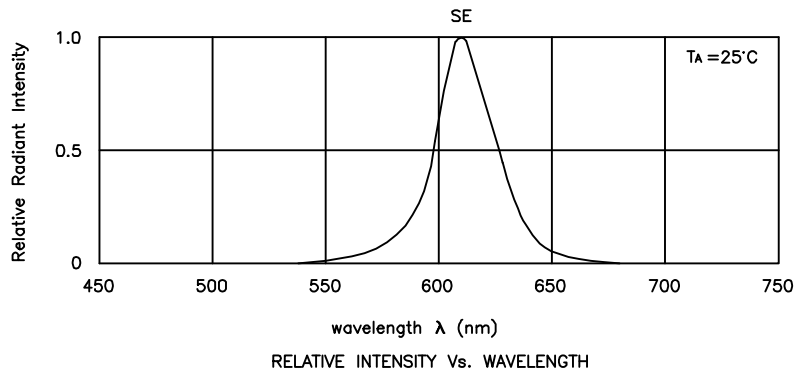
Absolute Maximum Ratings at T_A=25°C

Parameter	Super Bright Orange	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	195	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

Note:

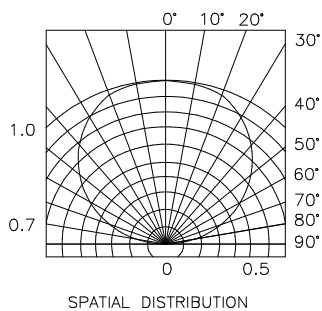
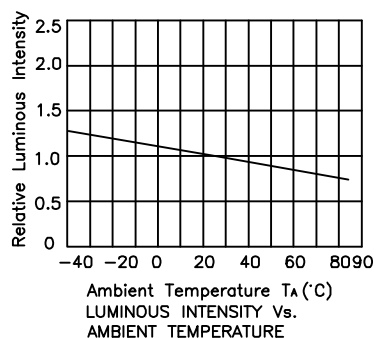
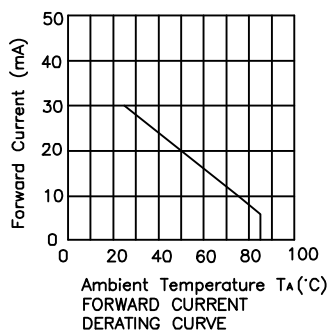
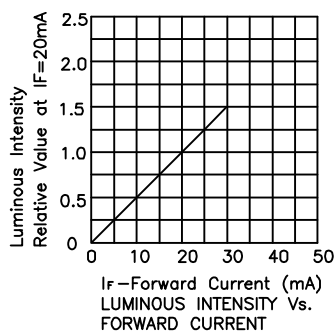
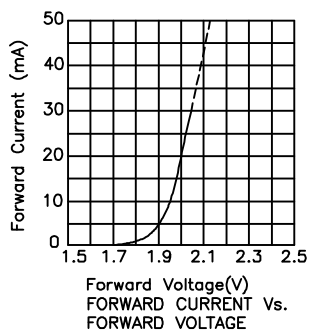
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

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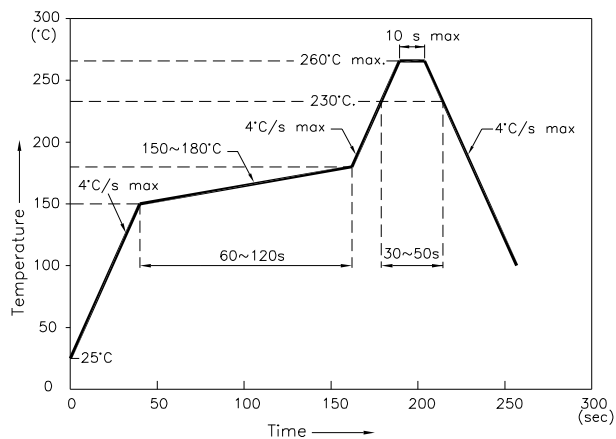
Super Bright Orange

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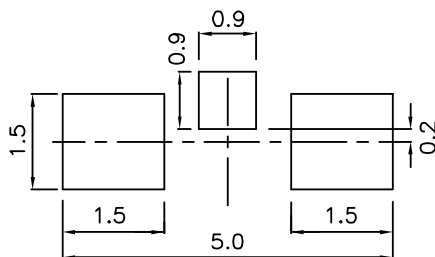
Reflow Soldering Profile For Lead-free SMT Process.



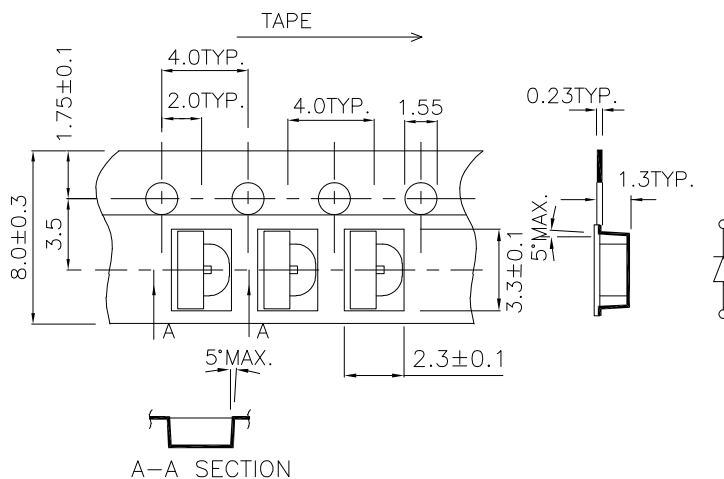
NOTES:

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)



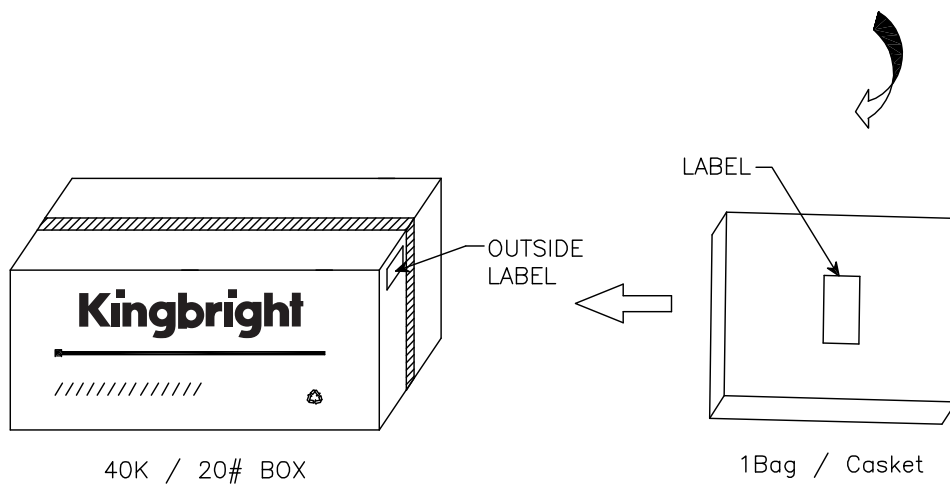
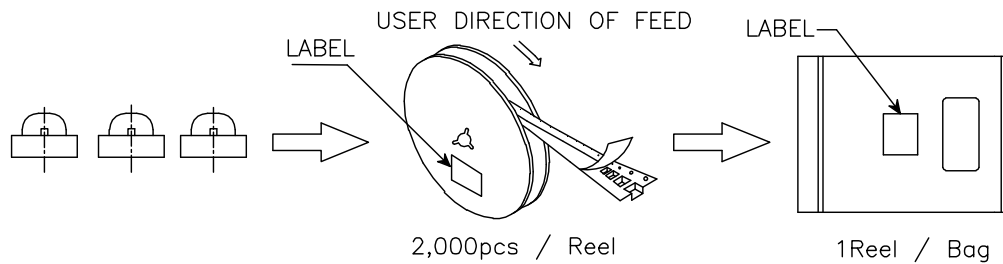
Tape Specifications (Units : mm)




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PACKING & LABEL SPECIFICATIONS

APA3010SEC



Kingbright	
P/NO: APA3010xxx	
QTY: 2,000 pcs	Q.C. Q C xx xx. xxxx PASSED
S/N: XXXX	Date
CODE: XXX	
LOT NO:	
 <small>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</small>	
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.