

Kingbright

2.0x1.25mm SMD CHIP LED LAMP

AP2012SEC

SUPER BRIGHT ORANGE

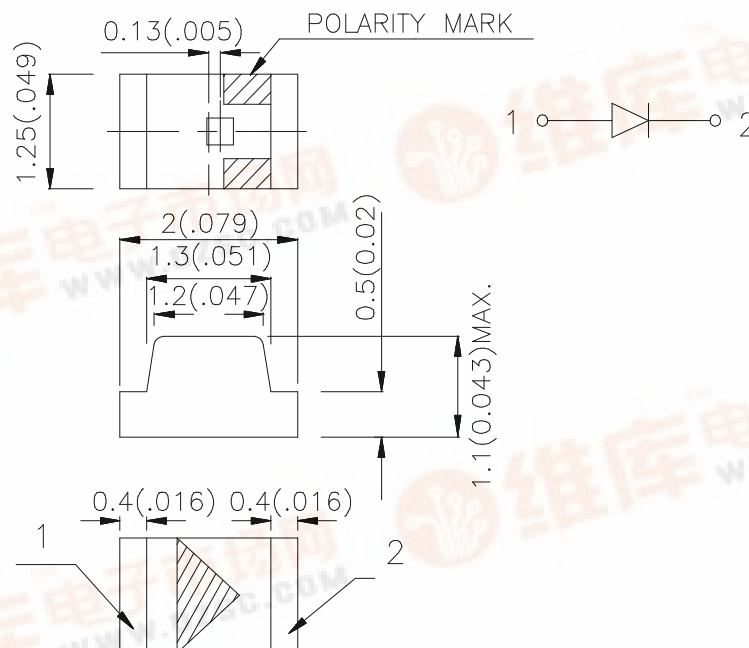
Features

- 2.0mmx1.25mm SMT LED,1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT 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 ± 0.1 (0.004") 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.	θ1/2
AP2012SEC	SUPER BRIGHT ORANGE (InGaAlP)	WATER CLEAR	70	200	120°

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

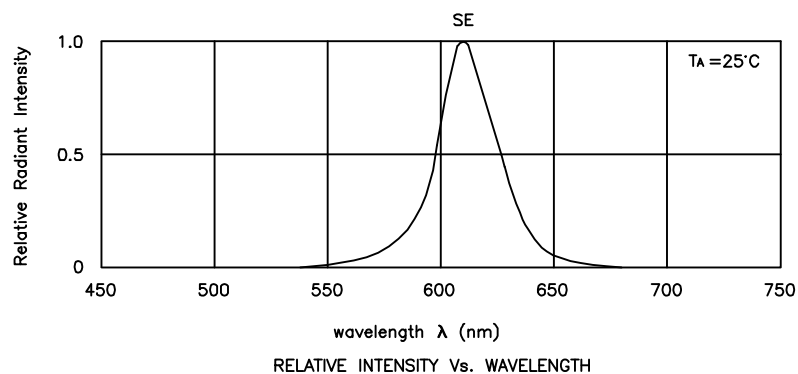
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Orange	610		nm	IF=20mA
λ_D	Dominant Wavelength	Super Bright Orange	601		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Orange	29		nm	IF=20mA
C	Capacitance	Super Bright Orange	30		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Orange	2.0	2.5	V	IF=20mA
IR	Reverse Current	Super Bright Orange		10	uA	VR = 5V

Absolute Maximum Ratings at TA=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	

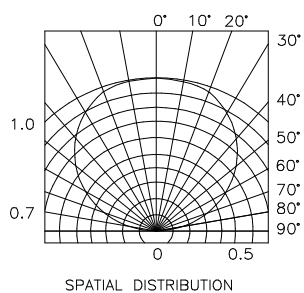
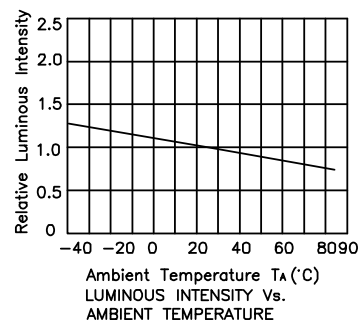
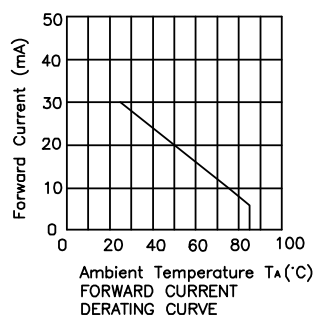
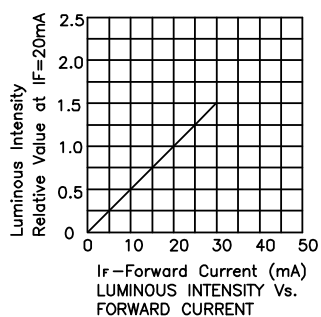
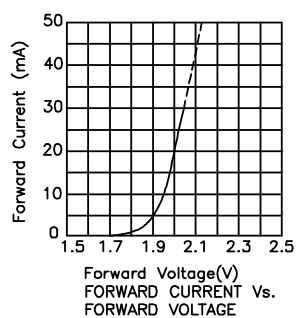
Note:

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



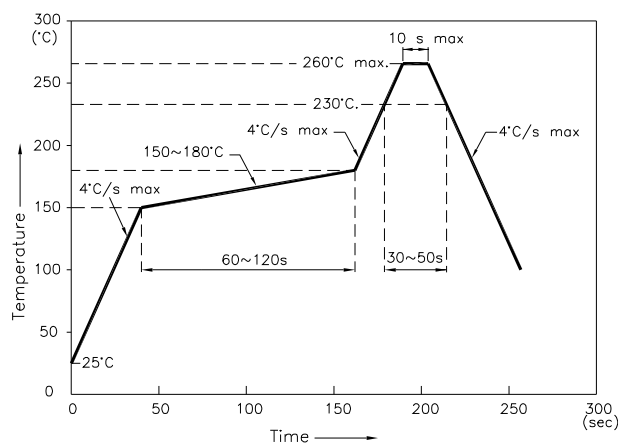
Super Bright Orange

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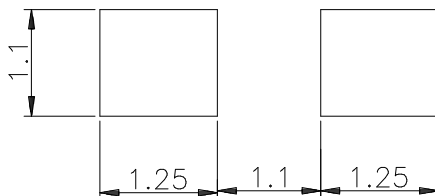
Reflow Soldering Profile For Lead-free SMT Process.



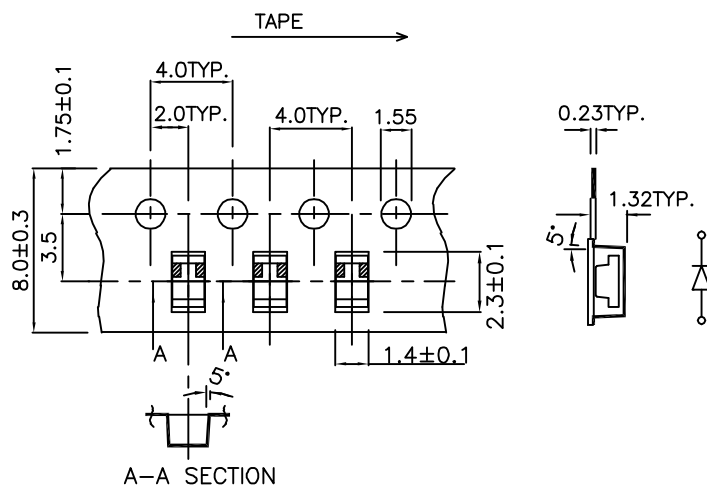
NOTES:

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)



Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1.Wavelength: $\pm 1\text{nm}$ (Test condition is based on the sorting standard).
- 2.Luminous intensity: $\pm 15\%$ (Test condition is based on the sorting standard).
- 3.Forward voltage: $\pm 0.1\text{V}$ (Test condition is based on the sorting standard).