

### 1.6X0.8mm SMD CHIP LED LAMP

Part Number: APT1608SEC/J4-PRV

Super Bright Orange

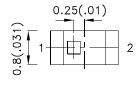
### **Features**

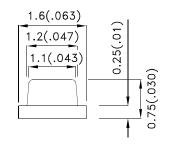
- 1.6mmX0.8mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel .
- Moisture sensitivity level : level 3.
- RoHS compliant.

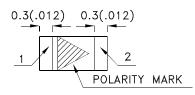
## Description

The Orange source color devices are made with AlGaInP Light Emitting Diode.

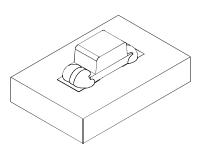
# **Package Dimensions**











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1(0.004")$  unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.

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## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,,	Min.	Тур.	201/2
APT1608SEC/J4-PRV	Super Bright Orange (AlGaInP)	Water Clear	1600	2300	120°
		Water Clear	*400	*600	

- Notes:
  1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
  2. Luminous intensity/ luminous Flux: +/-15%.
  \*Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange	611		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Orange	605		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	17		nm	I=20mA
С	Capacitance	Super Bright Orange	27		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Orange	2.2	2.8	V	I=20mA
IR	Reverse Current	Super Bright Orange		10	uA	V <sub>R</sub> =5V

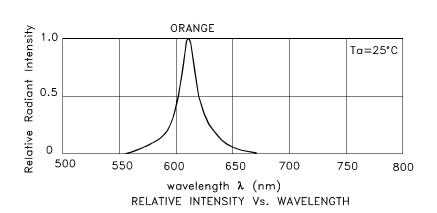
- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
  3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

### Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Orange	Units		
Power dissipation	84	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	150	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

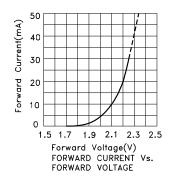
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

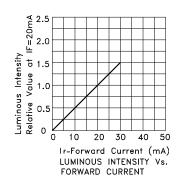
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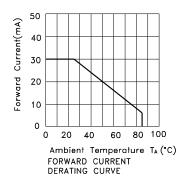


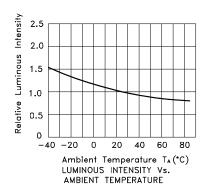
# **Super Bright Orange**

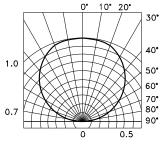
### APT1608SEC/J4-PRV











SPATIAL DISTRIBUTION

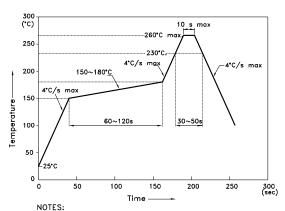
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### APT1608SEC/J4-PRV

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



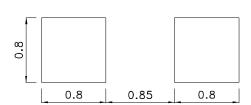
- NOTES:

  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

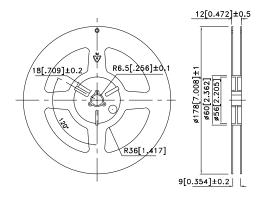
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

  3.Number of reflow process shall be 2 times or less.

## **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



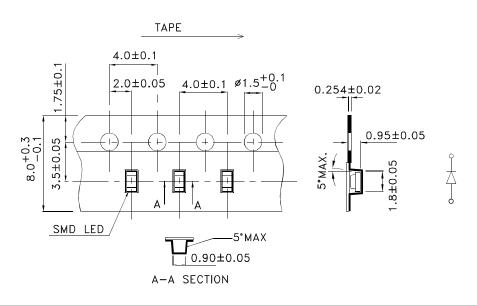
### **Reel Dimension**



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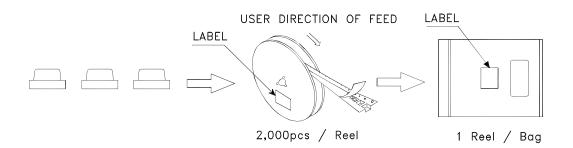
**Tape Dimensions** (Units: mm)

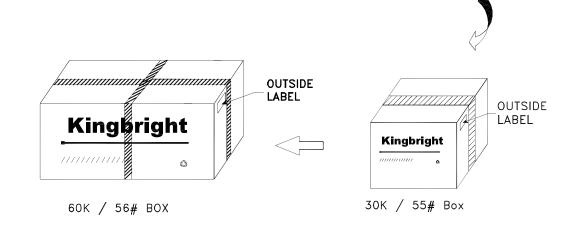


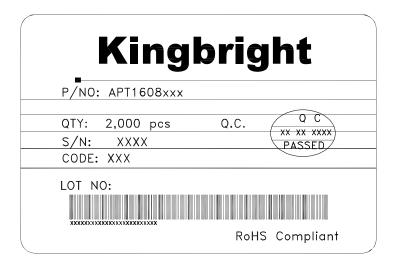
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### **PACKING & LABEL SPECIFICATIONS**

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All design applications should refer to Kingbright application notes available at <a href="http://www.KingbrightUSA.com/ApplicationNotes">http://www.KingbrightUSA.com/ApplicationNotes</a>

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