

### 2.1x0.6mm RIGHT ANGLE SURFACE LED **LAMP**

Part Number: APA2106SYCK/J3-PRV

Super Bright Yellow

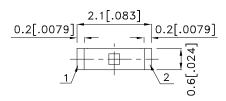
### **Features**

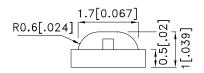
- 2.1mmX0.6mm right angle SMT LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

### Description

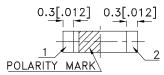
The Super Bright Yellow device is based on light emitting diode chip made from AlGaInP.

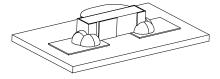
### **Package Dimensions**











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

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**REV NO: V.1B CHECKED: Allen Liu**  DATE: OCT/14/2013 DRAWN: Q.M.Chen

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### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
APA2106SYCK/J3-PRV	Super Bright Yellow (AlGalnP)	Water Clear	200	350	120°

### 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%.
  3. 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 Yellow	590		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow	590		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	20		nm	IF=20mA
С	Capacitance	Super Bright Yellow	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow	2	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> =5V

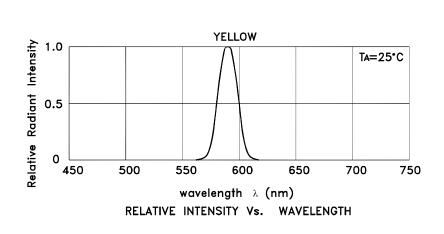
- Notes:
  1.Wavelength: +/-1nm.
  2. Forward Voltage: +/-0.1V.
  3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

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

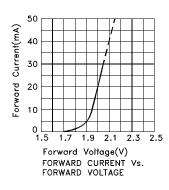
Abbolato maximum ratingo at 171 20 0				
Parameter	Super Bright Yellow	Units		
Power dissipation	75	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	140	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

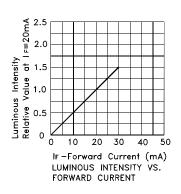
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

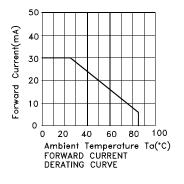
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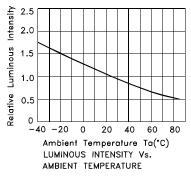


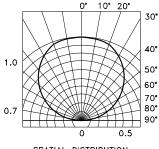
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SPATIAL DISTRIBUTION

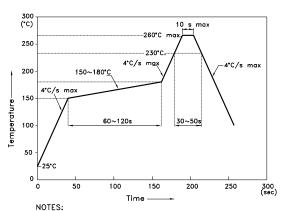
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### APA2106SYCK/J3-PRV

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.



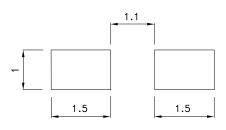
- NOTES:

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

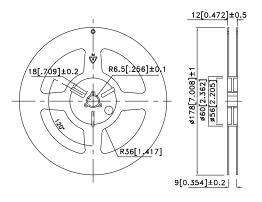
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

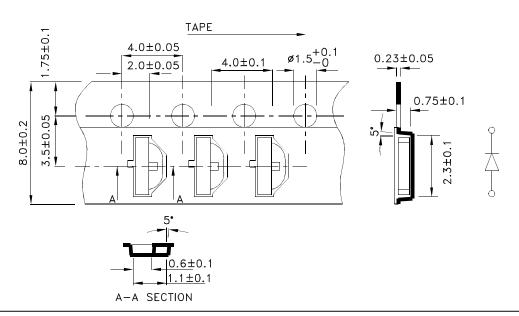
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



### **Reel Dimension**



**Tape Dimensions** (Units: mm)



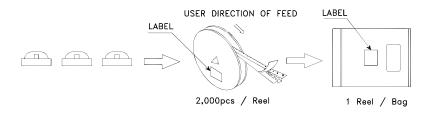
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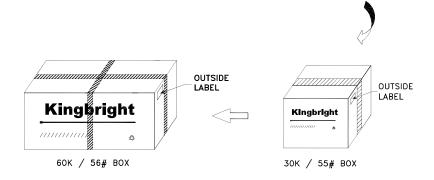
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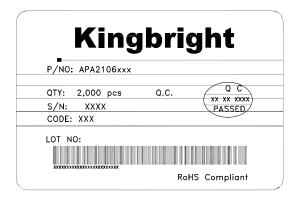
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### **PACKING & LABEL SPECIFICATIONS**

### APA2106SYCK/J3-PRV







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