

# **Excellent Integrated System Limited**

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Kingbright APA2107LSYCK/J3-PRV

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

PRELIMINARY SPEC

Part Number: APA2107LSYCK/J3-PRV

Super Bright Yellow

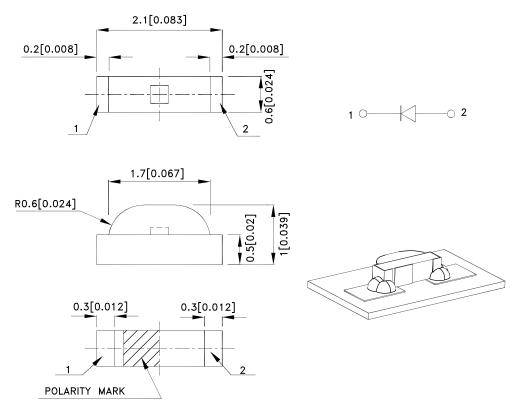
### **Features**

- 2.1mmX0.6mm right angle SMT LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- Low current IF=2mA operating.
- RoHS compliant.

## **Description**

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

# **Package Dimensions**



Notes:

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- 1. All dimensions are in millimeters (inches).
- 2.Tolerance is ±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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# **Distributor of Kingbright: Excellent Integrated System Limited**

Datasheet of APA2107LSYCK/J3-PRV - LED YELLOW CLEAR 2SMD R/A

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# Kingbright

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 2mA		Viewing Angle [1]
		-	Min.	Тур.	201/2
APA2107LSYCK/J3-PRV	Super Bright Yellow (AlGaInP)	Water Clear	15	30	120°

- 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	Min.	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow		590		nm	IF=2mA
λD [1]	Dominant Wavelength	Super Bright Yellow		590		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow		20		nm	IF=2mA
С	Capacitance	Super Bright Yellow		45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow	1.5	1.85	2.1	V	IF=2mA
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.

  4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

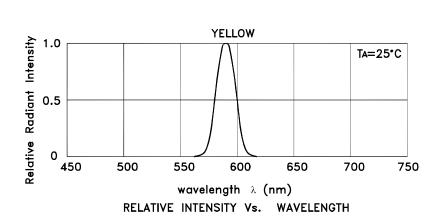
# Absolute Maximum Ratings at TA=25°C

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.

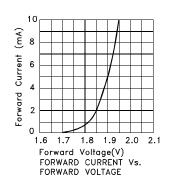
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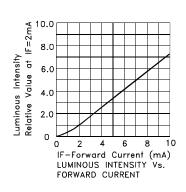


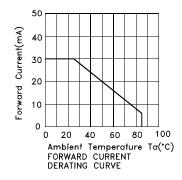


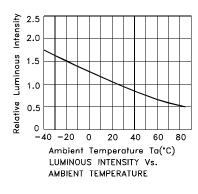
# **Super Bright Yellow**

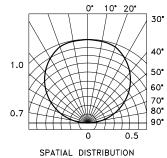
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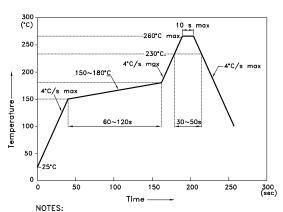
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



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.

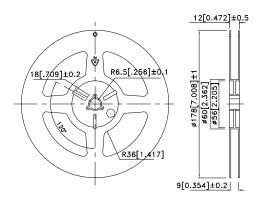
# Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

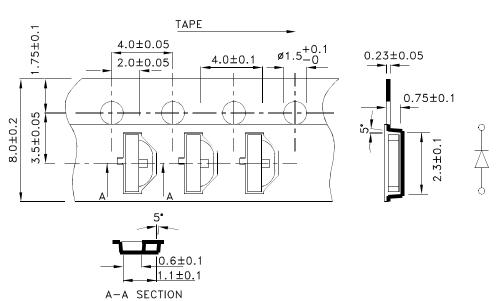
# 1.1

# Tape Dimensions

(Units: mm)

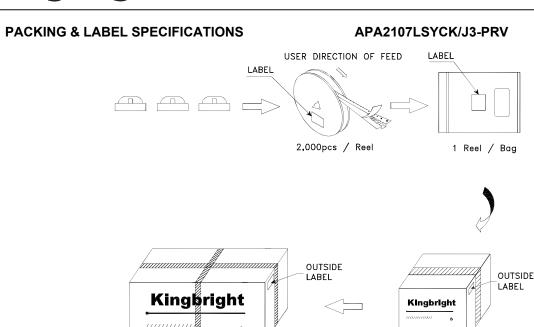
## **Reel Dimension**





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30K / 55# BOX

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