

#### 2.8X1.0mm RIGHT ANGLE SMD CHIP **LED LAMP**

Part Number: APKA2810SYCK-F01

Super Bright Yellow

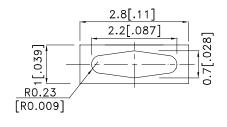
#### **Features**

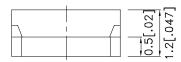
- 2.8mmX1.0mm right angle SMT LED, 1.2mm thickness.
- Low power consumption.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

#### Description

The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

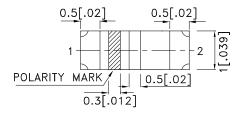
### **Package Dimensions**

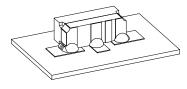












- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(\pm 0.01")$  unless otherwise noted.
- Specifications are subject to change without notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.





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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APKA2810SYCK-F01	Super Bright Yellow (AlGaInP)	WATER CLEAR	70	180	90°

- 1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous intensity/ luminous Flux: +/-15%.

### 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	20		pF	V <sub>F</sub> =0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow	2	2.5	V	I=20mA
lr	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> =5V

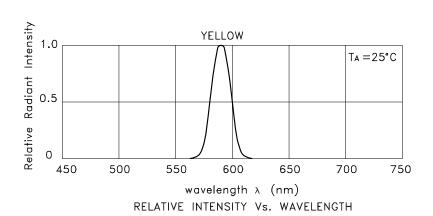
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

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

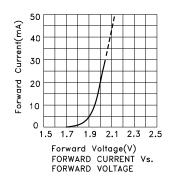
Parameter	Super Bright Yellow	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	175	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

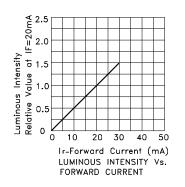
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

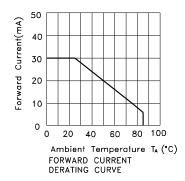
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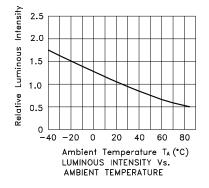


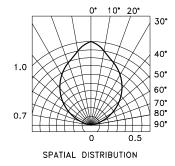
Super Bright Yellow APKA2810SYCK-F01











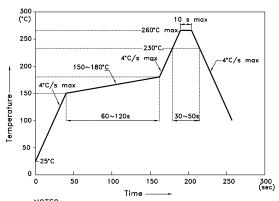
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#### APKA2810SYCK-F01

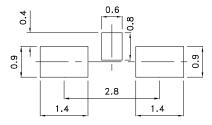
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

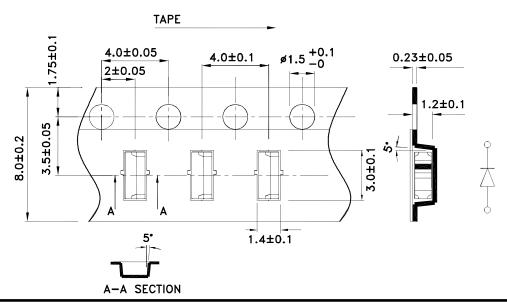


NOTES: 1.We recommend the reflow temperature  $245^{\circ}\text{C}(+/-5^{\circ}\text{C})$ .The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 3.Number of reflow process shall be 2 times or less.

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

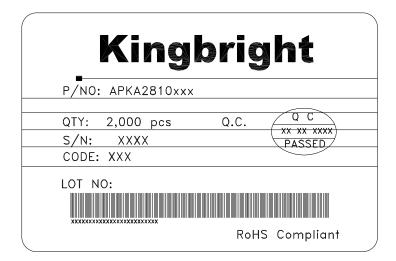


### **Tape Dimensions** (Units : mm)



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## **PACKING & LABEL SPECIFICATIONS** APKA2810SYCK-F01 USER DIRECTION OF FEED LABEL LABEL 2,000pcs / Reel 1 Reel / Bag OUTSIDE LABEL OUTSIDE LABEL Kingbright Kingbright 30K / 55# Box 60K / 56# BOX



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