

## 2.0x1.25mm SMD CHIP LED LAMP

Part Number: APT2012SYCK Super Bright Yellow

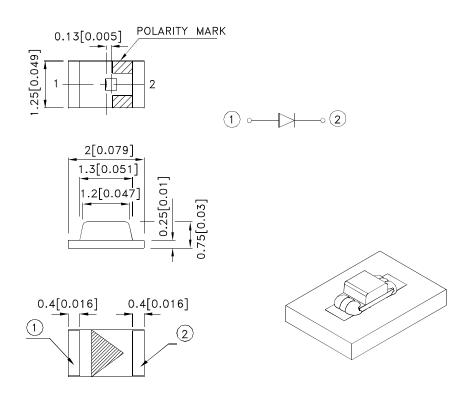
### **Features**

- 2.0mm x1.25mm 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 Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

# **Package Dimensions**



SPEC NO: DSAD0949

APPROVED: WYNEC

- 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	Dice Lens Type lv (mcd) [2] @ 20mA		,	Viewing Angle [1]
			Min.	Тур.	201/2
APT2012SYCK	Super Bright Yellow (AlGaInP)	Water Clear	80	150	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%.

# 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	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.

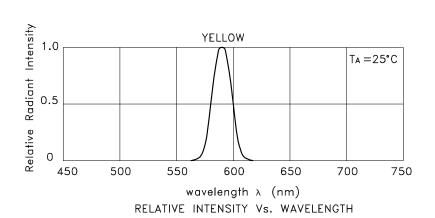
# Absolute Maximum Ratings at TA=25°C

Super Bright Yellow		
75	mW	
30	mA	
175	mA	
5	V	
-40°C To +85°C		
-40°C To +85°C		
	75 30 175 5 -40°C To +85°C	

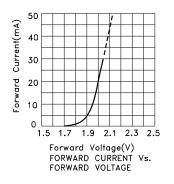
### Note:

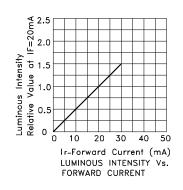
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

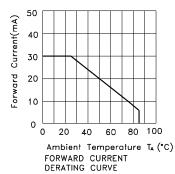
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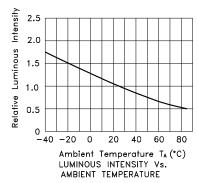


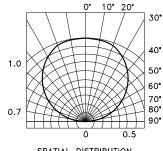
Super Bright Yellow APT2012SYCK











SPATIAL DISTRIBUTION

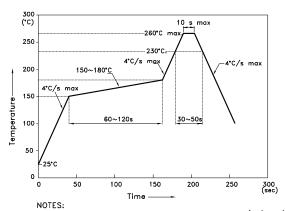
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## APT2012SYCK

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.



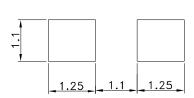
- NOTES:

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

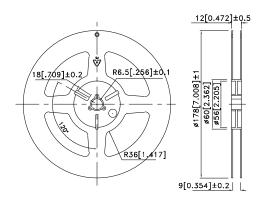
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
  - to high temperature.

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

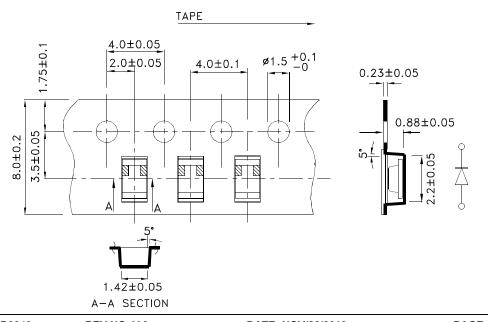
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



# **Reel Dimension**

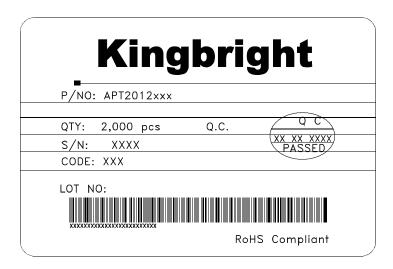


Tape Dimensions (Units: mm)



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# **PACKING & LABEL SPECIFICATIONS** APT2012SYCK USER DIRECTION OF FEED LABEL LABEL 2,000PCS / REEL 1 REEL / BAG OUTSIDE OUTSIDE LABEL LABEL **Kingbright Kingbright** 30K / 55# BOX 60K / 56# BOX



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