

## 3.2x1.6mm SMD CHIP LED LAMP

Part Number: APTR3216SYCK

Super Bright Yellow

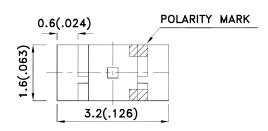
### **Features**

- 3.2mmx1.6mm SMT LED,1.05mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Vavrious colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

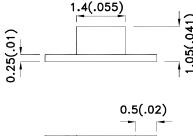
## Description

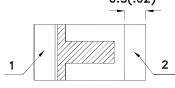
The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

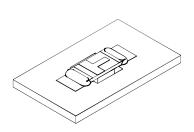
## **Package Dimensions**











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2 (0.008")$  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.

SPEC NO: DSAD1011 **REV NO: V.9B DATE: DEC/10/2011** PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: H.L.Ding ERP: 1203002428

## **Selection Guide**

Part No.	Dice Lens Type		lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
APTR3216SYCK	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%.
  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	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow	2	2.5	V	I=20mA
IR	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> =5V

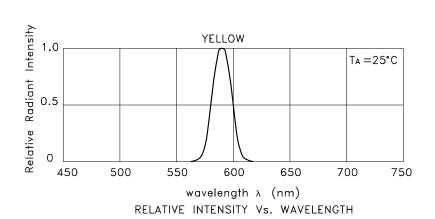
- 1.Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.
   Wavelength value is traceable to the CIE127-2007 compliant national standards.

## Absolute Maximum Ratings at TA=25°C

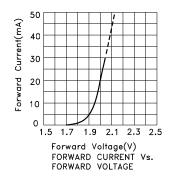
Parameter	Super Bright Yellow	Units		
Power dissipation	75	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	175	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

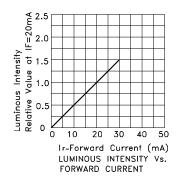
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

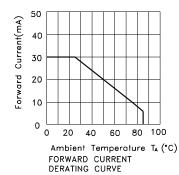
SPEC NO: DSAD1011 **REV NO: V.9B** DATE: DEC/10/2011 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** ERP: 1203002428 DRAWN: H.L.Ding

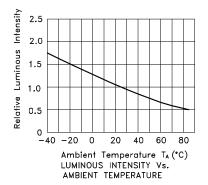


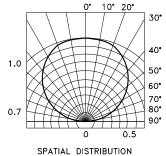
Super Bright Yellow APTR3216SYCK









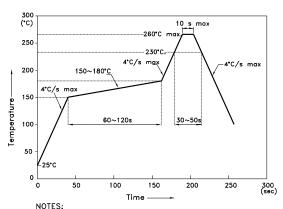


SPEC NO: DSAD1011 REV NO: V.9B DATE: DEC/10/2011 PAGE: 3 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: H.L.Ding ERP: 1203002428

### APTR3216SYCK

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.



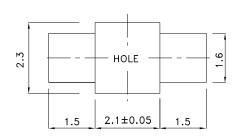
- NOTES:

  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.

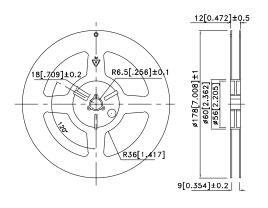
    3.Number of reflow process shall be 2 times or less.

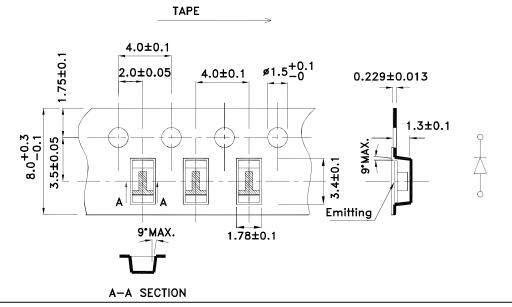
## Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



## Tape Dimensions (Units : mm)

## **Reel Dimension**

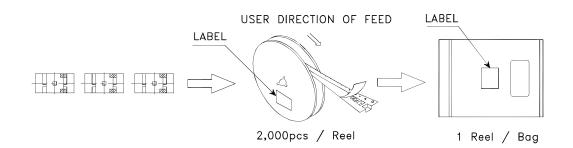


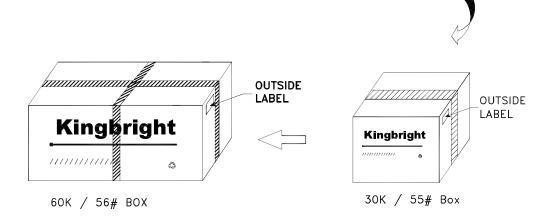


SPEC NO: DSAD1011 APPROVED: WYNEC REV NO: V.9B CHECKED: Allen Liu DATE: DEC/10/2011 DRAWN: H.L.Ding PAGE: 4 OF 5 ERP: 1203002428

# PACKING & LABEL SPECIFICATIONS

## APTR3216SYCK







SPEC NO: DSAD1011 APPROVED: WYNEC REV NO: V.9B CHECKED: Allen Liu DATE: DEC/10/2011 DRAWN: H.L.Ding PAGE: 5 OF 5 ERP: 1203002428