

### 3.2x1.6mm SMD CHIP LED LAMP

APT3216SYC

SUPER BRIGHT YELLOW

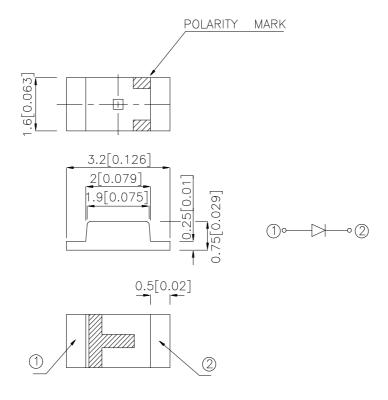
#### **Features**

- •3.2mmx1.6mm 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.
- •RoHS COMPLIANT.

### **Description**

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

## **Package Dimensions**



### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2 (0.0079")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

SPEC NO: DSAD0993 APPROVED: J. Lu REV NO: V.5 CHECKED: Allen Liu DATE: MAR/12/2005 DRAWN: Y.CHENG PAGE: 1 OF 4 ERP: 1203001983

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## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
APT3216SYC	SUPER BRIGHT YELLOW (InGaAIP)	WATER CLEAR	36	150	120°

Note

# 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	Dominant Wavelength	Super Bright Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	28		nm	IF=20mA
С	Capacitance	Super Bright Yellow	25		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Yellow	2.0	2.5	V	IF=20mA
IR	Reverse Current	Super Bright Yellow		10	uA	VR = 5V

## Absolute Maximum Ratings at Ta=25°C

Parameter	Super Bright Yellow	Units
Power dissipation	125	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note

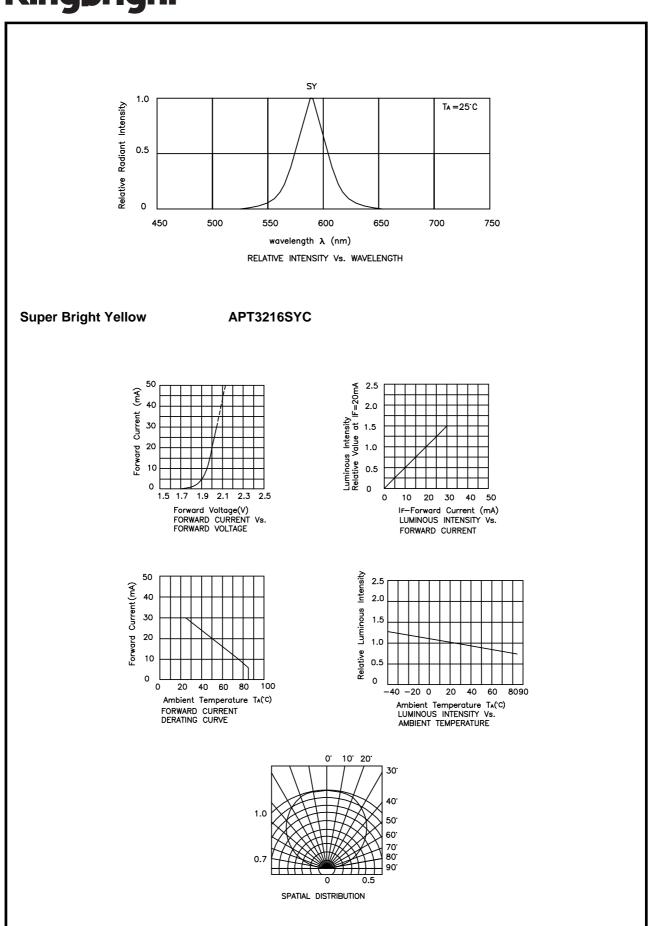
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 $<sup>1.\,\</sup>theta1/2$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.

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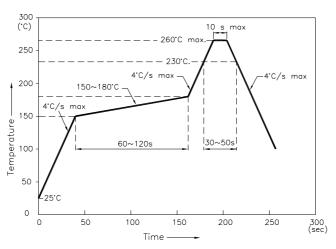
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### APT3216SYC

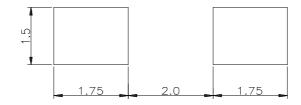
Reflow Soldering Profile For Lead-free SMT Process.



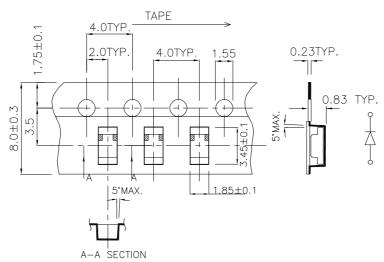
#### NOTES:

- 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)



# Tape Specifications (Units: mm)



### Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
- 2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).
- 3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).

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