

3.2mmx1.6mm SMD CHIP LED LAMP

Part Number: APT3216SYCK Super Bright Yellow

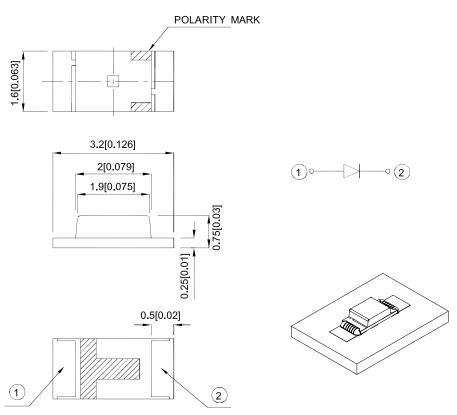
Features

- 3.2mmx1.6mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- 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: DSAA9311

APPROVED: WYNEC

- 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.

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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
APT3216SYCK	Super Bright Yellow (AlGalnP)	Water Clear	80	150	120°

Notes:

- 1. θ 1/2 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	V _F =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 _R =5V		

Notes

- 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 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]	175	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

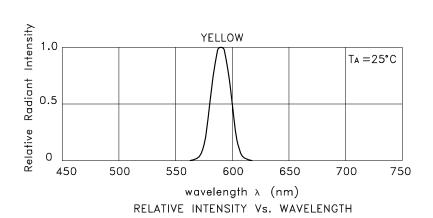
Note:

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

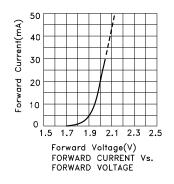
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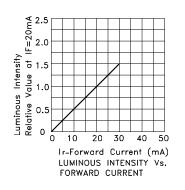
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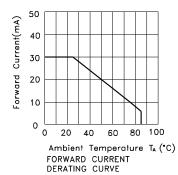
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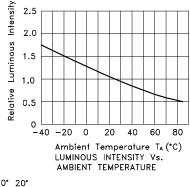


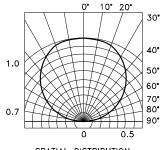
Super Bright Yellow APT3216SYCK











SPATIAL DISTRIBUTION

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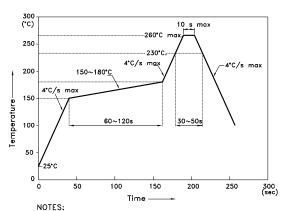
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



- NOTES:

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

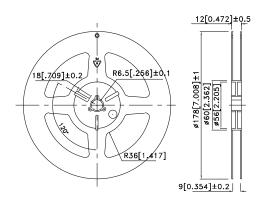
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

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

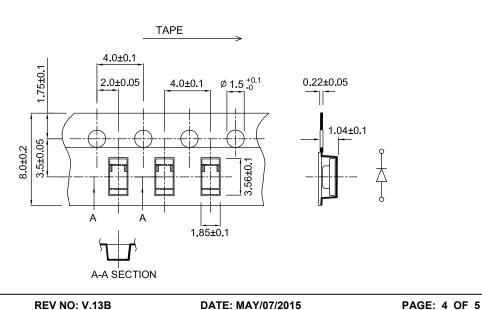
1.75 2.0 1.75

Reel Dimension



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Tape Dimensions (Units: mm)

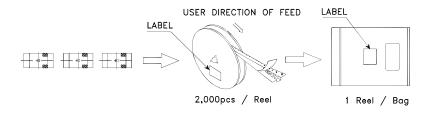


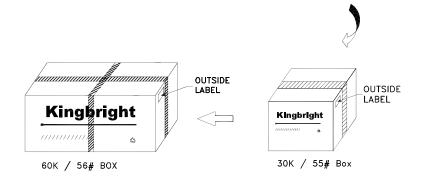
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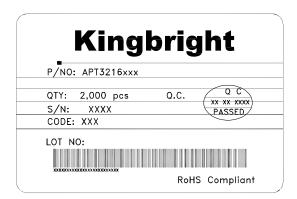


PACKING & LABEL SPECIFICATIONS

APT3216SYCK







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