

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## 3.2x1.6mm SMD CHIP LED LAMP

AP3216SYC

SUPER BRIGHT YELLOW

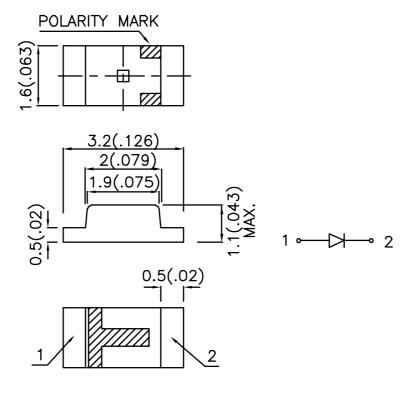
#### **Features**

- •3.2mmx1.6mm SMT LED, 1.1mm 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 InGaAlP (on GaAs substrate) light emitting diode chip.

## **Package Dimensions**



#### Notes:

- All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

 SPEC NO: DSAB1130
 REV NO: V.5
 DATE: MAR/10/2005
 PAGE: 1 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: Y.CHENG
 ERP: 1203000427

# Kingbright

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
		,	Min. Typ.		2 θ 1/2
AP3216SYC	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

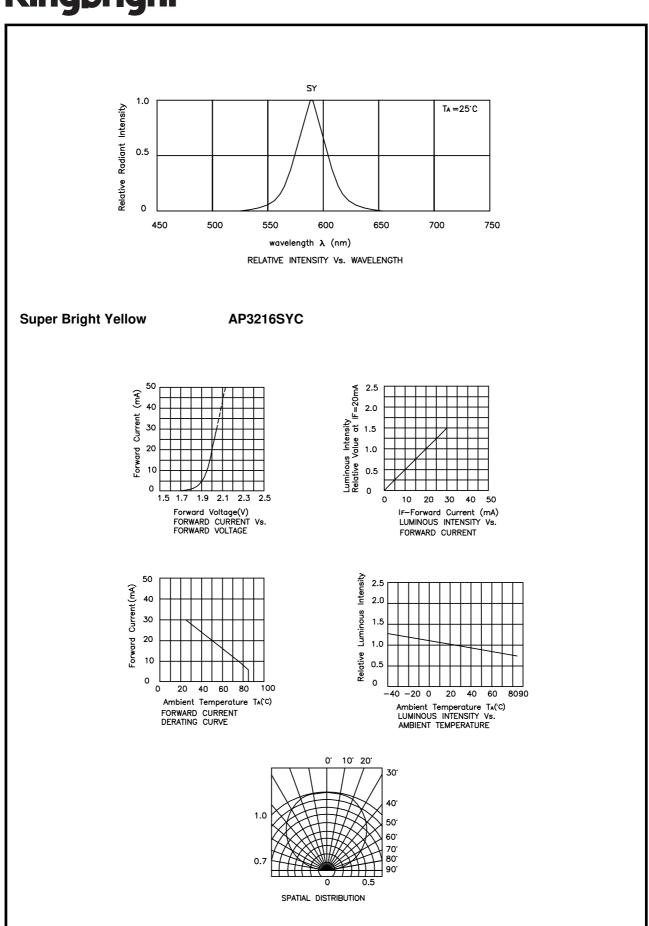
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

 SPEC NO: DSAB1130
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 PAGE: 2 OF 4

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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.

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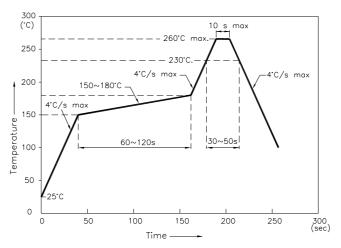
 SPEC NO: DSAB1130
 REV NO: V.5
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 PAGE: 3 OF 4

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# **Kingbright**

### AP3216SYC

Reflow Soldering Profile For Lead-free SMT Process.



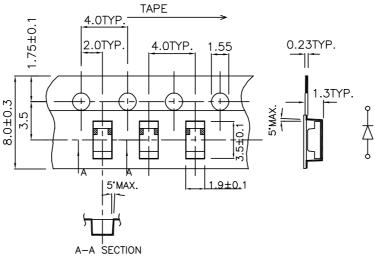
#### NOTES:

- 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).

 SPEC NO: DSAB1130
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