

#### 3.0x2.0 mm SMD CHIP LED LAMP

AA3020SYCK SUPER BRIGHT YELLOW

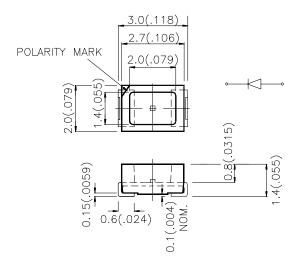
#### **Features**

- •3.0MM X 2.0MM, 1.4MM HIGH, ONLY MINIMUM SPACE REQUIRED.
- •SUITABLE FOR COMPACT OPTOELECTRONIC APPLICATIONS.
- •LOW POWER CONSUMPTION.
- •EMBOSSED TAPING.
- •PACKAGE: 2000PCS/REEL.

### **Description**

The Super Bright Yellow source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

### **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25 (0.01\mbox{"})$  unless otherwise noted.
- $3. \ \mbox{Lead}$  spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

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#### **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (mcd)</b> @ 20 mA		Viewing Angle
			Min.	Тур.	201/2
AA3020SYCK	SUPER BRIGHT YELLOW (InGaAIP)	WATER CLEAR	30	100	90°

Note:

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	IF=20mA
λD	Dominate Wavelength	Super Bright Yellow	590		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	Super Bright Yellow	20		nm	IF=20mA
С	Capacitance	Super Bright Yellow	20		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Yellow	2.0	2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	Super Bright Yellow		10	uA	VR = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

Parameter	Super Bright Yellow	Units	
Power dissipation	125	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	175	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		

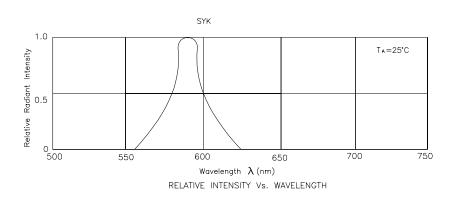
Note

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

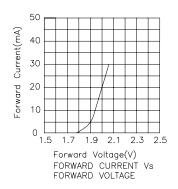
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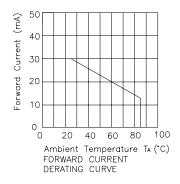
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

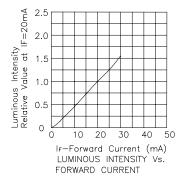


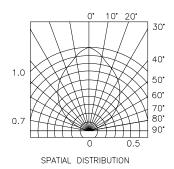


# Super Bright Yellow AA3020SYCK









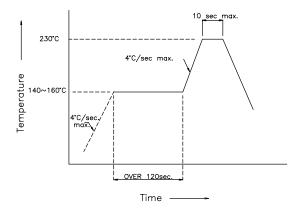
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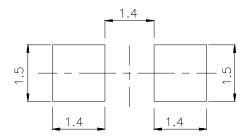
# Kingbright

# AA3020SYCK SMT Reflow Soldering Instructions

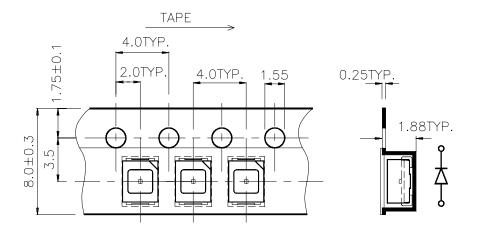
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



# Recommended Soldering Pattern (Units:mm)



# Tape Specifications (Units:mm)



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