

# Kingbright

## 4.0x4.0mm RIGHT ANGLE SURFACE MOUNT LED LAMP

AA4040SYC SUPER BRIGHT YELLOW

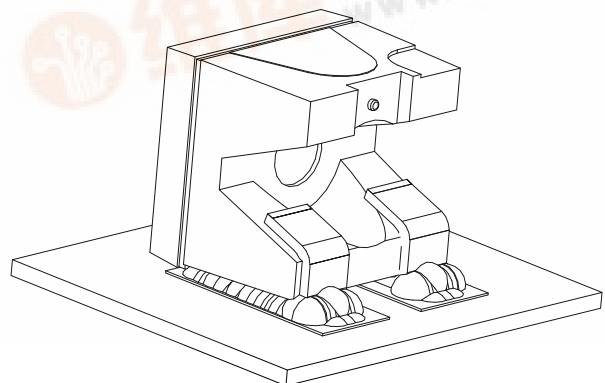
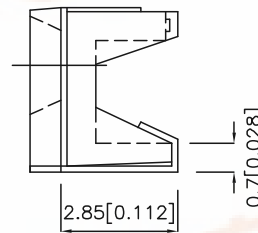
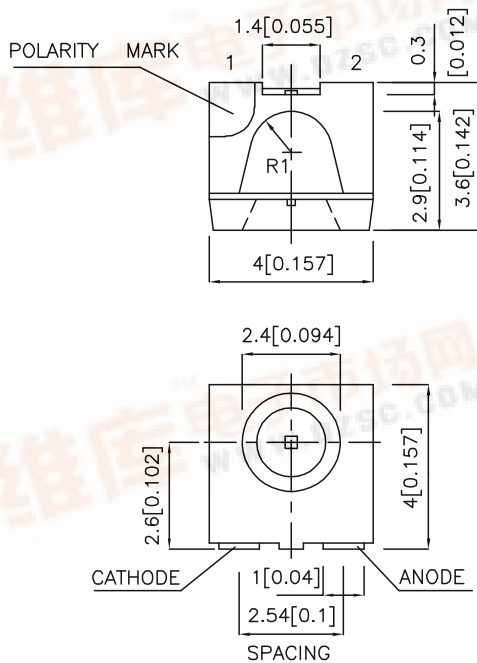
### Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 500PCS / REEL
- RoHS COMPLIANT.

### Description

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

### Package Dimensions



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
3. Specifications are subject to change without notice.

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## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 $\theta$ 1/2
AA4040SYC	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	50	120	90°

Note:

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

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

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Super Bright Yellow	590		nm	I <sub>F</sub> =20mA
$\lambda_D$	Dominant Wavelength	Super Bright Yellow	588		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Yellow	28		nm	I <sub>F</sub> =20mA
C	Capacitance	Super Bright Yellow	25		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Yellow	2.0	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> = 5V

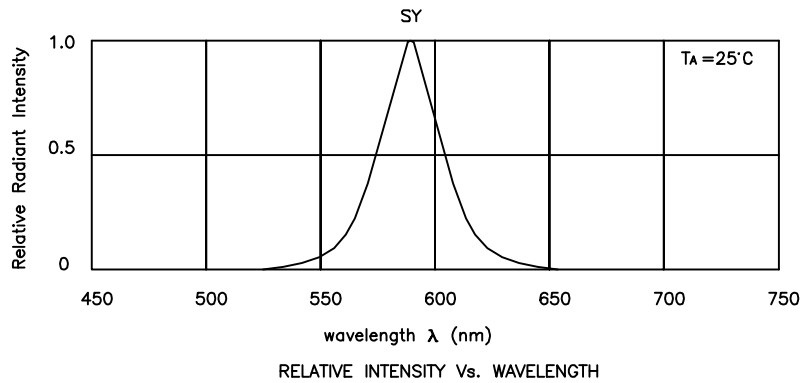
## Absolute Maximum Ratings at T<sub>A</sub>=25°C

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

Note:

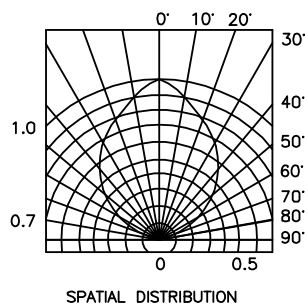
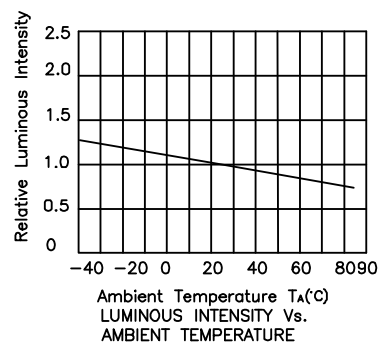
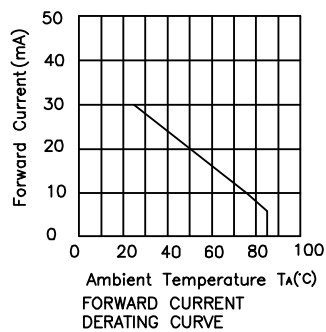
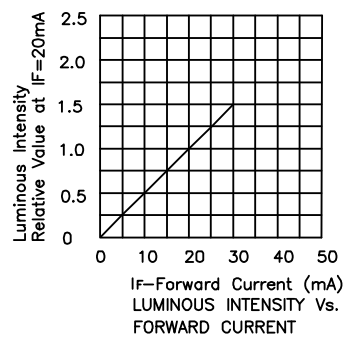
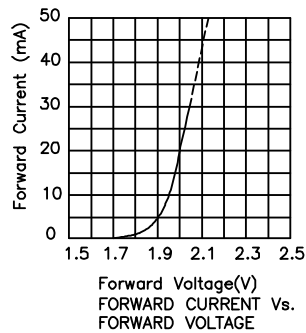
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

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## Super Bright Yellow

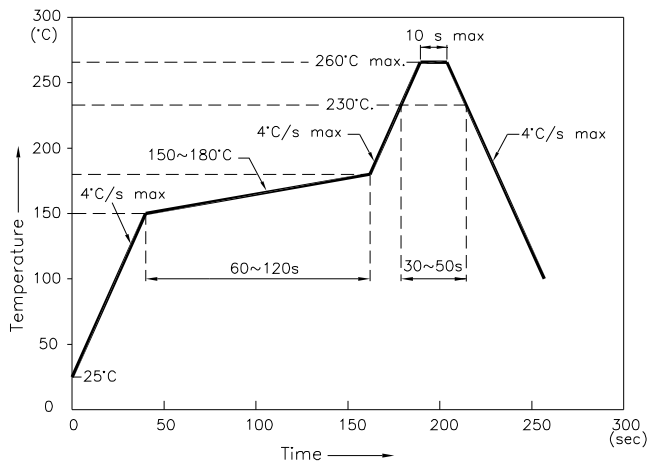
## AA4040SYC



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## AA4040SYC

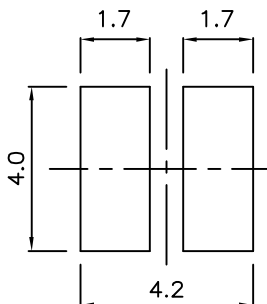
Reflow Soldering Profile For Lead-free SMT Process.



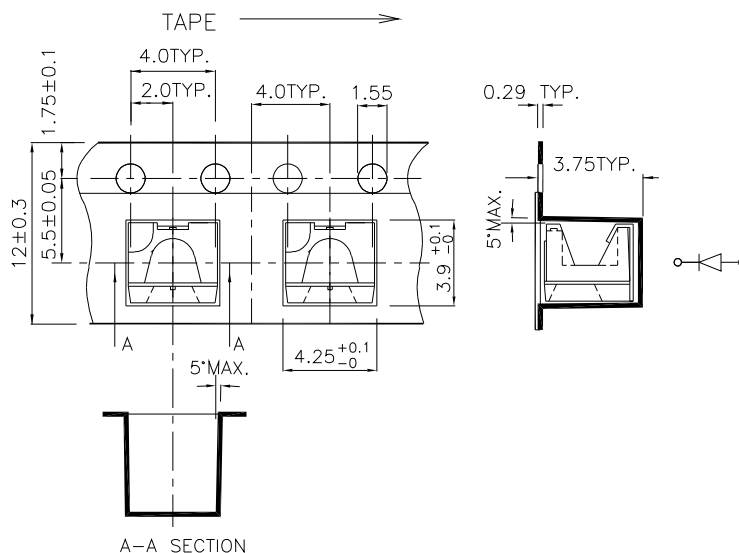
NOTES:

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)



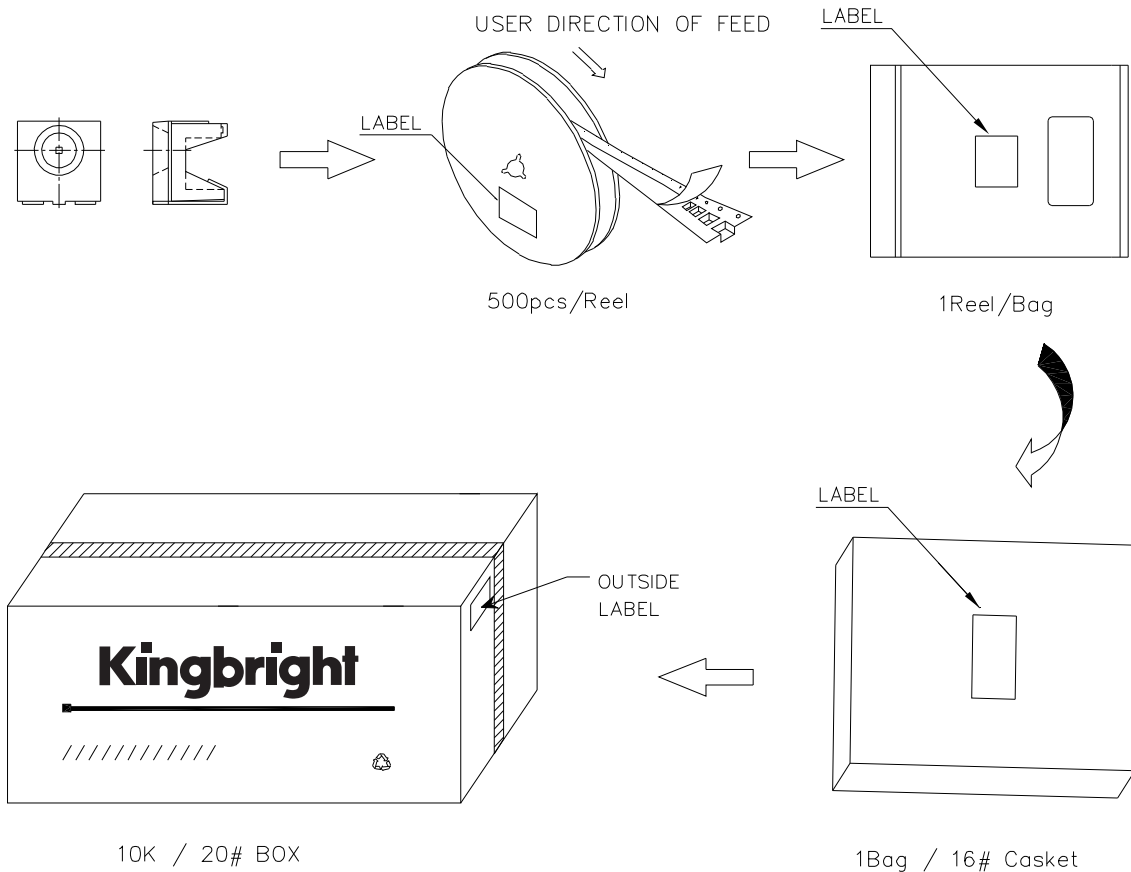
### Tape Specifications (Units : mm)




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## PACKING & LABEL SPECIFICATIONS

AA4040SYC



<b>Kingbright</b>	
P/N0: AA4040XXX	Q C
QTY: 500 pcs	Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">xx xx. xxxx</span>
S/N: XXXX	PASSED <span style="font-size: small;">Date</span>
CODE: XXX	
LOT NO:	
	
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	

**Remarks:**

If special sorting is required (e.g. binning based on forward voltage, luminous intensity or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.