

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

Part Number: AA4040YC Yellow

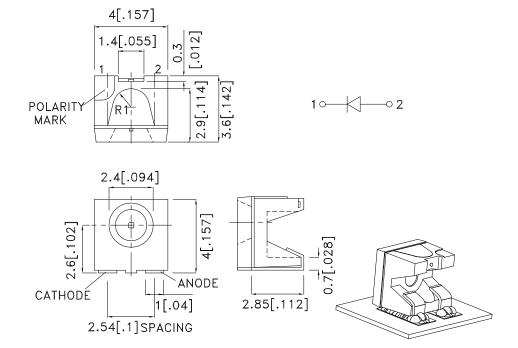
### **Features**

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

# Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

# **Package Dimensions**



- 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.4. The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAA4909 **REV NO: V.9 DATE: JAN/13/2009** PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: D.M.Su ERP: 1201004623

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
AA4040YC	Yellow (GaAsP/GaP)	WATER CLEAR	4	9	90°

### Notes:

- 1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous intensity/ luminous Flux: +/-15%.

# Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Yellow	590		nm	IF=20mA
λD [1]	Dominant Wavelength	Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Yellow	35		nm	IF=20mA
С	Capacitance	Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Yellow	2.1	2.5	V	IF=20mA
lr	Reverse Current	Yellow		10	uA	V <sub>R</sub> =5V

- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

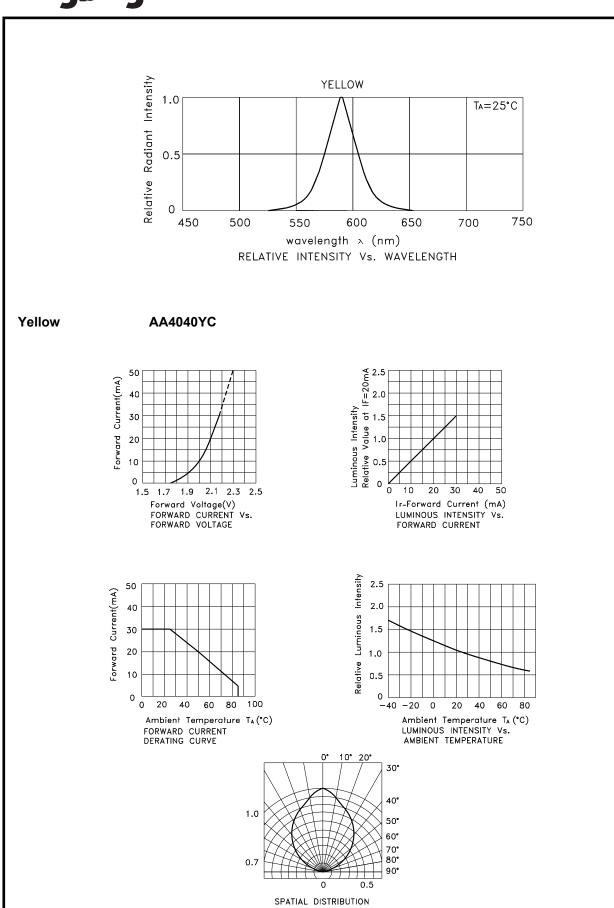
## Absolute Maximum Ratings at TA=25°C

A sociate maximum reamings at the 200					
Parameter	Yellow	Units			
Power dissipation	75	mW			
DC Forward Current	30	mA			
Peak Forward Current [1]	140	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.

SPEC NO: DSAA4909 **REV NO: V.9** DATE: JAN/13/2009 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: D.M.Su ERP: 1201004623



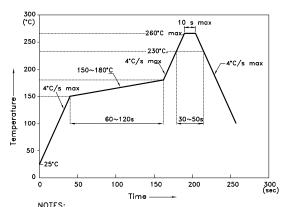
 SPEC NO: DSAA4909
 REV NO: V.9
 DATE: JAN/13/2009
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: D.M.Su
 ERP: 1201004623

### AA4040YC

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.



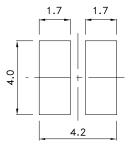
- NOTES:

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

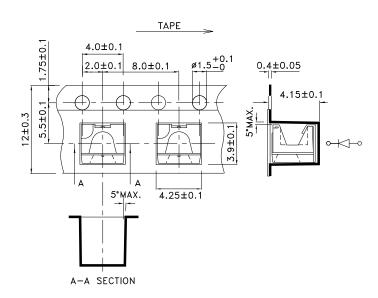
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

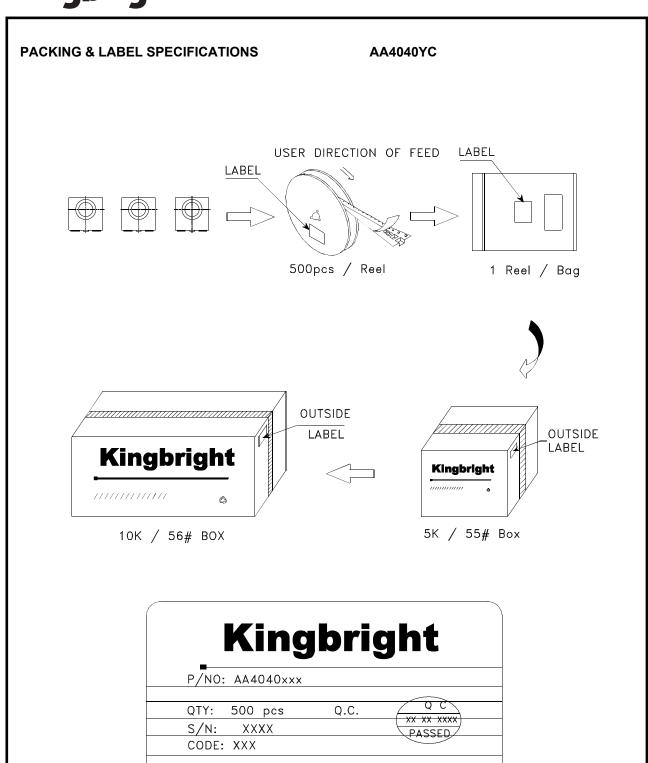
**Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



**Tape Dimensions** (Units: mm)



SPEC NO: DSAA4909 **REV NO: V.9 DATE: JAN/13/2009** PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: D.M.Su ERP: 1201004623



SPEC NO: DSAA4909 APPROVED: WYNEC REV NO: V.9 CHECKED: Allen Liu

LOT NO:

DATE: JAN/13/2009 DRAWN: D.M.Su

RoHS Compliant

PAGE: 5 OF 5 ERP: 1201004623