

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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









3.0x2.0mm SURFACE MOUNT LED LAMP

Part Number: AA3020AYC Yellow

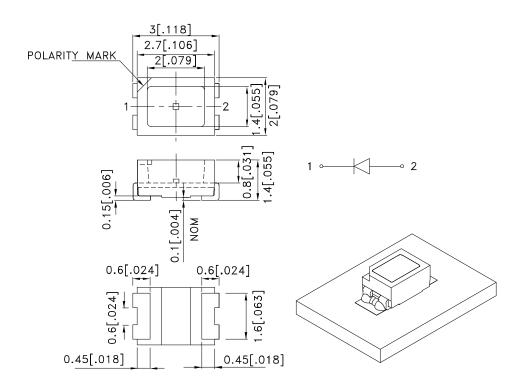
Features

- 3.0mm x 2.0mm, 1.4mm high, only minimum space required.
- Suitable for compact optoelectronic applications.
- Low power consumption.
- Package: 2000pcs / 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: DSAH4213 **REV NO: V.4 DATE: NOV/26/2008** PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: D.M.Su ERP: 1201004313

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
AA3020AYC	Yellow (GaAsP/GaP)	WATER CLEAR	4	15	90°

- 1. 01/2 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	VR=5V

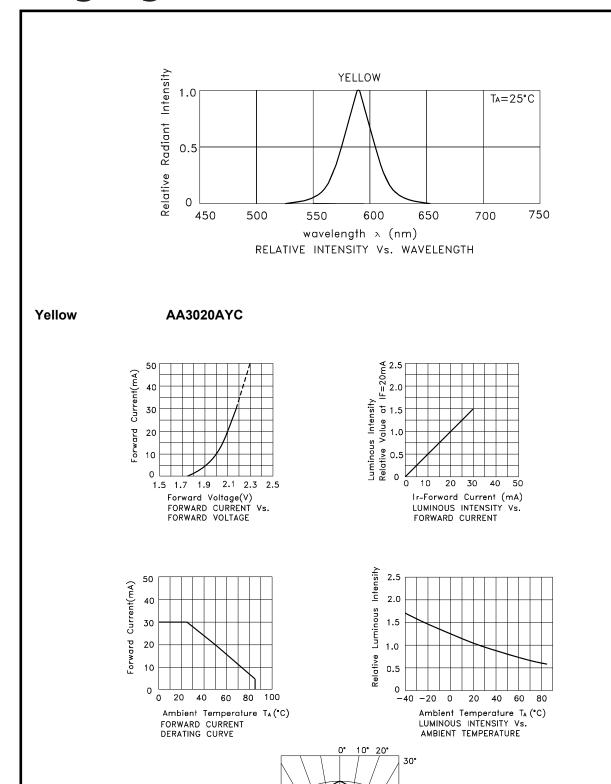
- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

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: DSAH4213 **REV NO: V.4 DATE: NOV/26/2008** PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: D.M.Su ERP: 1201004313



 SPEC NO: DSAH4213
 REV NO: V.4
 DATE: NOV/26/2008
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: D.M.Su
 ERP: 1201004313

SPATIAL DISTRIBUTION

1.0

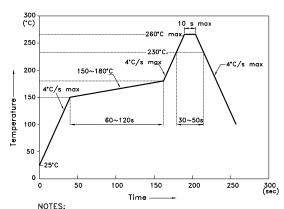
40°

50° 60° 70° 80° 90°

AA3020AYC

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.



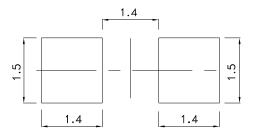
- NOTES:

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

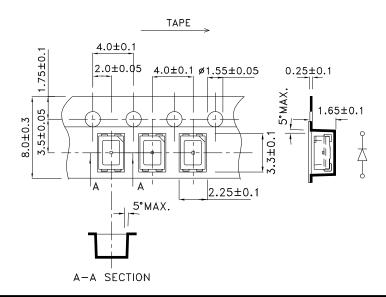
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

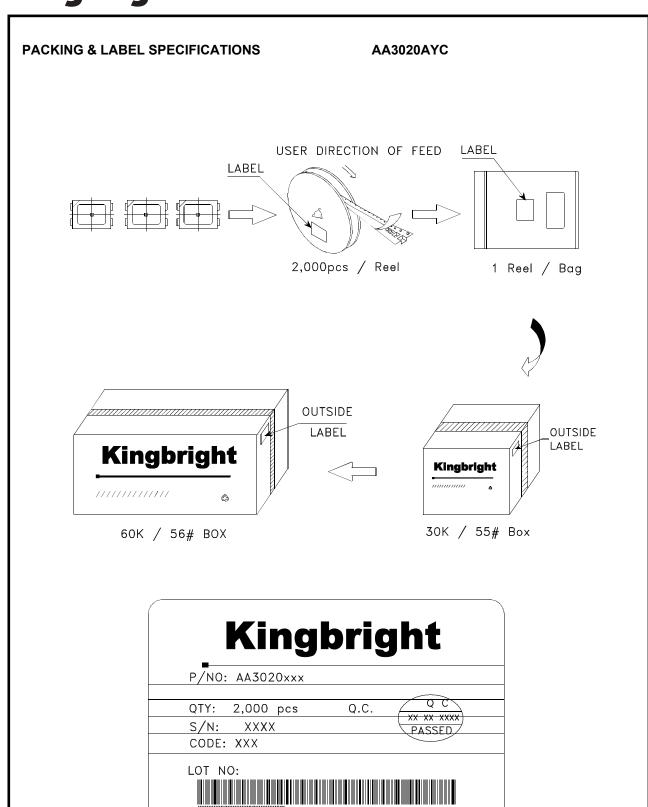
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)



SPEC NO: DSAH4213 **REV NO: V.4 DATE: NOV/26/2008** PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: D.M.Su ERP: 1201004313



SPEC NO: DSAH4213 APPROVED: WYNEC REV NO: V.4 CHECKED: Allen Liu DATE: NOV/26/2008 DRAWN: D.M.Su

RoHS Compliant

PAGE: 5 OF 5 ERP: 1201004313