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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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#### 3.0x2.0mm SURFACE MOUNT LED LAMP

Part Number: AA3020ASGC

Super Bright Green

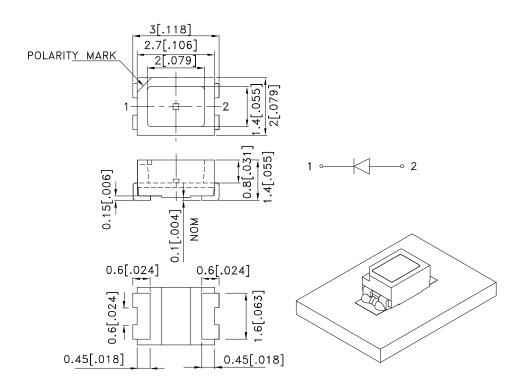
#### **Features**

- 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 Super Bright Green source color devices are made with Gallium Phosphide Green 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.





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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
AA3020ASGC	Super Bright Green (GaP)	WATER CLEAR	7	30	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	Super Bright Green	565		nm	I==20mA
λD [1]	Dominant Wavelength	Super Bright Green	568		nm	I==20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	I==20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Green	2.2	2.5	V	I==20mA
lR	Reverse Current	Super Bright Green		10	uA	V <sub>R</sub> =5V

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

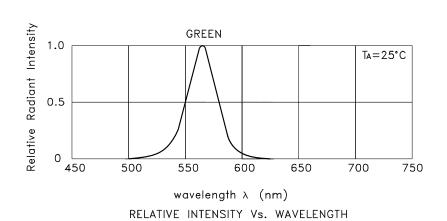
### Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Green	Units	
Power dissipation	62.5	mW	
DC Forward Current	25	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		

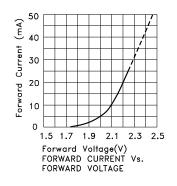
#### Note:

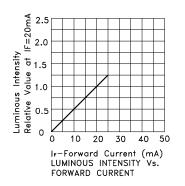
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

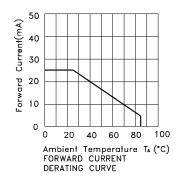
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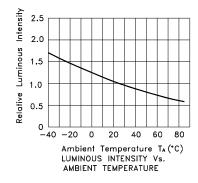


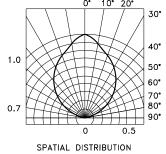
Super Bright Green AA3020ASGC











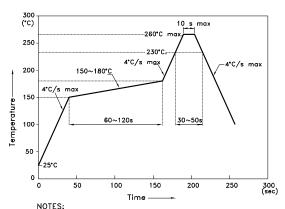
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#### AA3020ASGC

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.



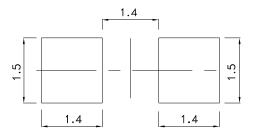
- NOTES:

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

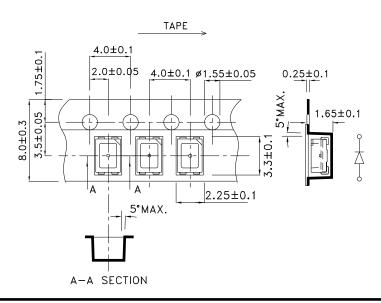
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

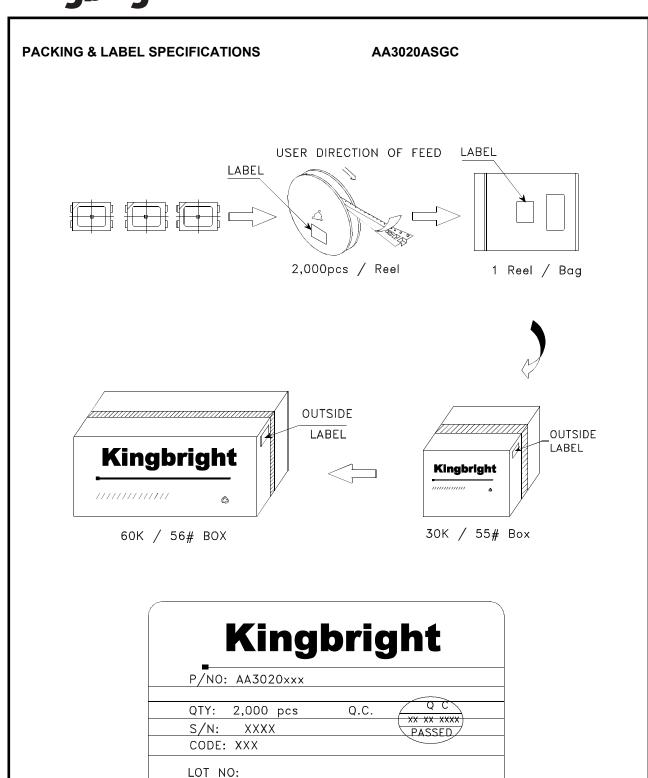
**Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



**Tape Dimensions** (Units: mm)



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RoHS Compliant

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