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

Green

Part Number: AA4040ZGC



**ATTENTION** OBSERVE PRECAUTIONS FOR HANDLING **ELECTROSTATIC** DISCHARGE SENSITIVE **DEVICES** 

#### **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

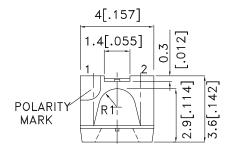
The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.

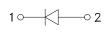
Static electricity and surge damage the LEDS.

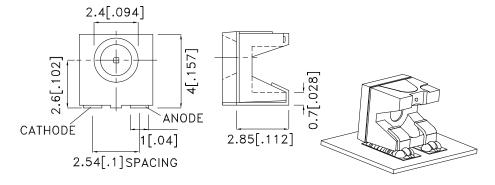
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

### **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	lv (mcd) [2] Dice Lens Type @ 20mA		,	Viewing Angle [1]
		2.	Min.	Тур.	201/2
AA4040ZGC	Green (InGaN)	WATER CLEAR	380	600	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	Green	515		nm	IF=20mA
λD [1]	Dominant Wavelength	Green	525		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Green	30		nm	IF=20mA
С	Capacitance	Green	45		pF	V <sub>F</sub> =0V;f=1MHz
VF [2]	Forward Voltage	Green	3.3	4.1	V	I=20mA
lr	Reverse Current	Green		10	uA	V <sub>R</sub> =5V

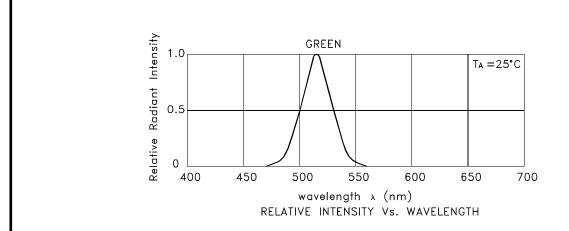
- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

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

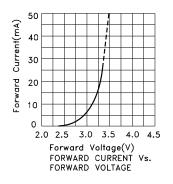
Parameter	Green	Units	
Power dissipation	102.5	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

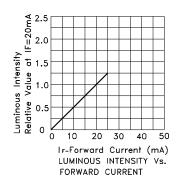
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

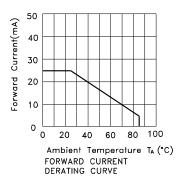
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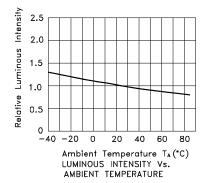


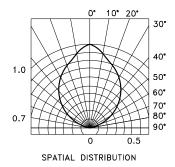
Green AA4040ZGC











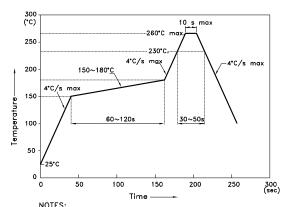
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#### AA4040ZGC

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.



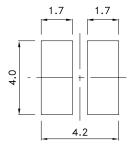
- NOTES:

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

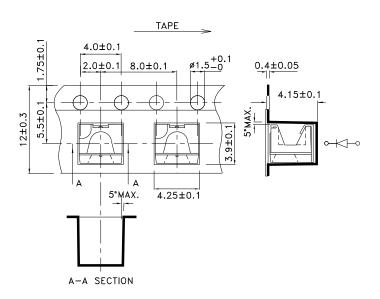
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

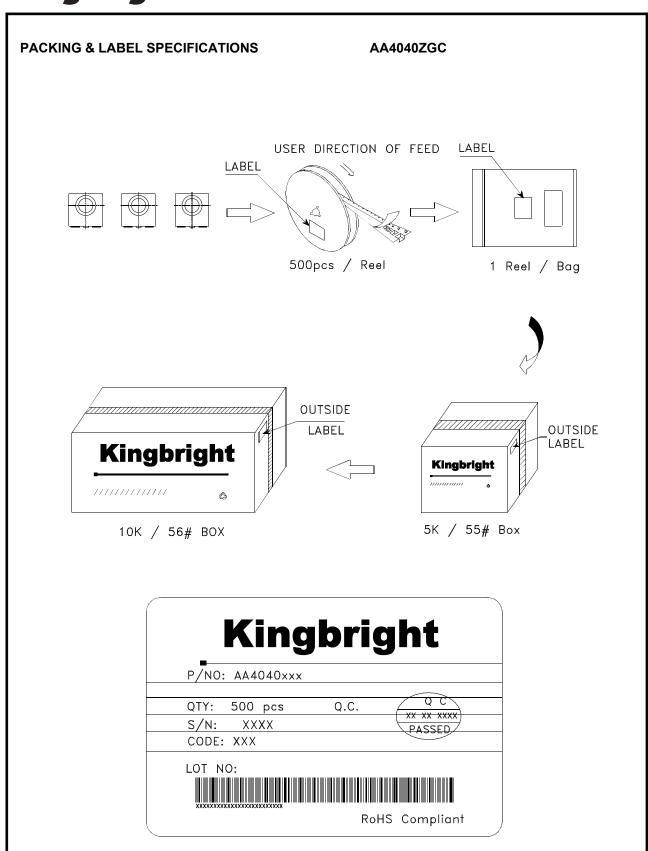
**Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



**Tape Dimensions** (Units : mm)



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