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### 3.5x2.8mm SMD CHIP LED LAMP

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

Part Number: APED3528ZGC-F01 Green

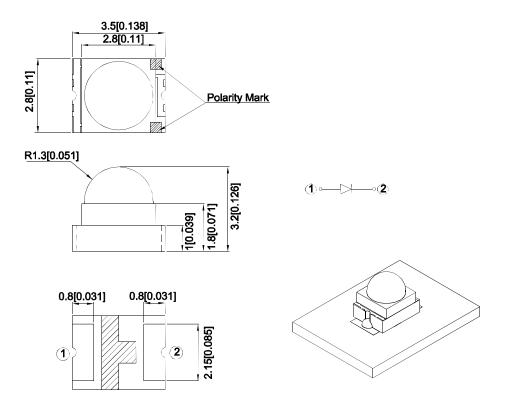
### **Features**

- Single color.
- Suitable for all SMD assembly and solder process.
- · Ideal for backlighting.
- Available on tape and reel.
- Package: 500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### **Descriptions**

- The Green source color devices are made with InGaN on Sapphire Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or antielectrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

### **Package Dimensions**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.

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### **Selection Guide**

Part No.	Part No. Emitting Color (Material) Lens Type		Iv (mcd) [2] @ 20mA		Viewing Angle [1]
		-	Min.	Тур.	201/2
APED3528ZGC-F01	Green (InGaN)	Water Clear	1000	1600	70°

- θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
   Luminous intensity / luminous Flux: +/-15%.
   Luminous intensity value is traceable to CIE127-2007 standards.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	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	VF=0V;f=1MHz
VF [2]	Forward Voltage	Green	3.3	4.1	V	IF=20mA
lr	Reverse Current	Green		50	uA	V <sub>R</sub> =5V

- 1. Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to CIE127-2007 standards.
- Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

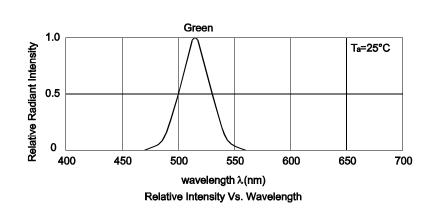
### Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units	
Power dissipation	102.5	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Electrostatic Discharge Threshold (HBM)	450	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature -40°C To +85°C			

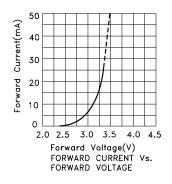
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity Ref JEDEC/JESD625-A and JEDEC/J-STD-033.

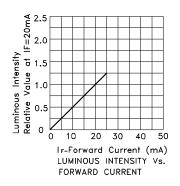
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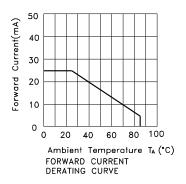
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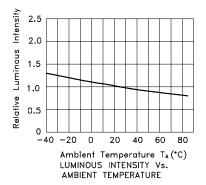


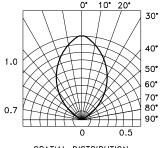
Green APED3528ZGC-F01









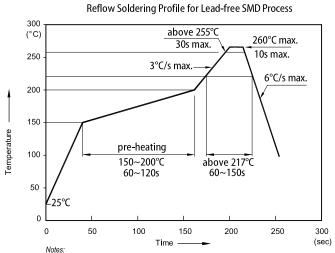


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# **Kingbright**

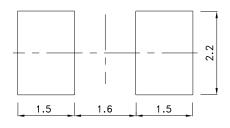
### APED3528ZGC-F01



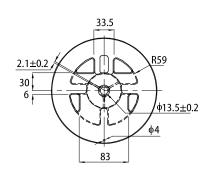
- 1. Don't cause stress to the LEDs while it is exposed to high temperature.
- 2. The maximum number of reflow soldering passes is 2 times.

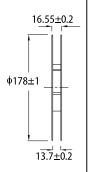
  3. Reflow soldering is recommended. Other soldering methods are not recommended as they might cause damage to the product.

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

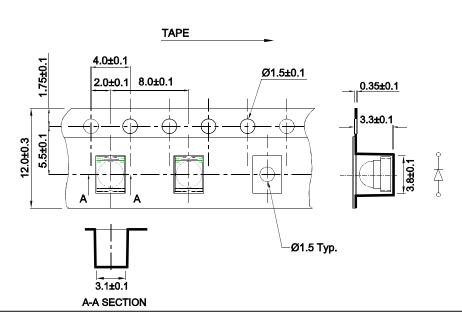


### **Reel Dimension**





### **Tape Dimensions** (Units : mm)



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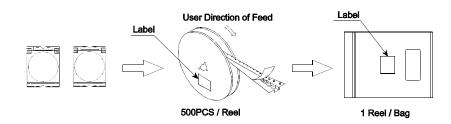
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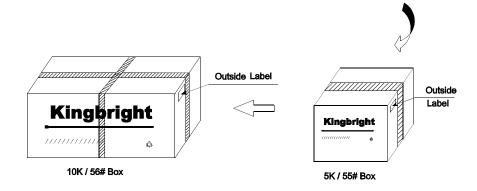
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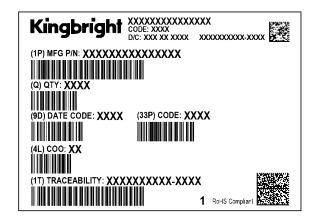
# **Kingbright**

### **PACKING & LABEL SPECIFICATIONS**

### APED3528ZGC-F01







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