

3.5x2.8mm SMD CHIP LED LAMP

ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Part Number: APED3528ZGC-F01 Green

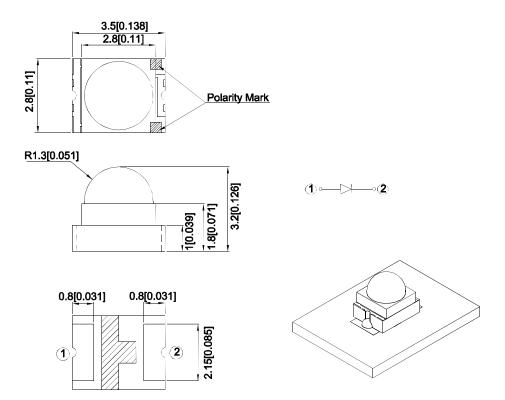
Features

- 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.	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	VR=5V			

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

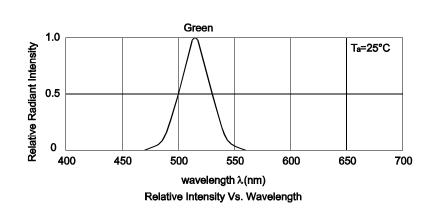
Absolute Maximum Ratings at TA=25°C

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		

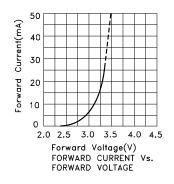
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity Ref JEDEC/JESD625-A and JEDEC/J-STD-033.

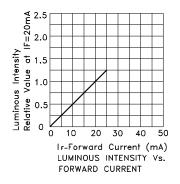
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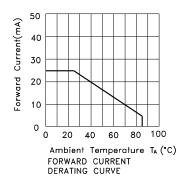
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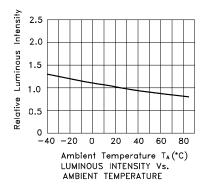


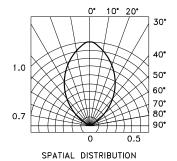
Green APED3528ZGC-F01









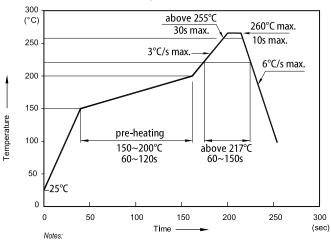


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Reflow Soldering Profile for Lead-free SMD Process



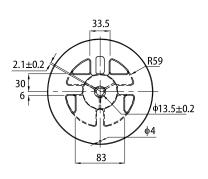
- 1. Don't cause stress to the LEDs while it is exposed to high temperature.
- 2. The maximum number of reflow soldering passes is 2 times.

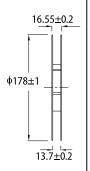
 3. Reflow soldering is recommended. Other soldering methods are not recommended as they might cause damage to the product.

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

1.5 1.6 1.5

Reel Dimension





Tape Dimensions (Units : mm)

TAPE 4.0±0.1 Ø1.5±0.1 2.0±0.1 8.0±0.1 0.35±0.1 3.3±0.1 12.0±0.3 Ø1.5 Typ.

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A-A SECTION

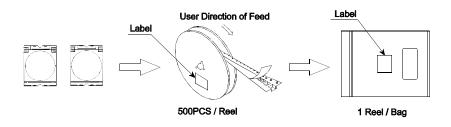
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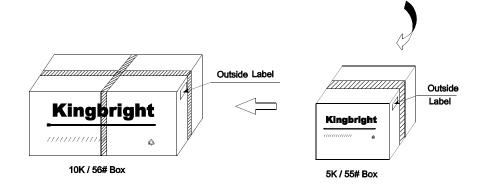
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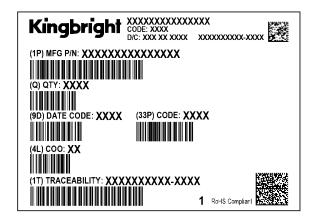
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PACKING & LABEL SPECIFICATIONS

APED3528ZGC-F01







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