

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

Part Number: APED3528CGCK-F01 Green

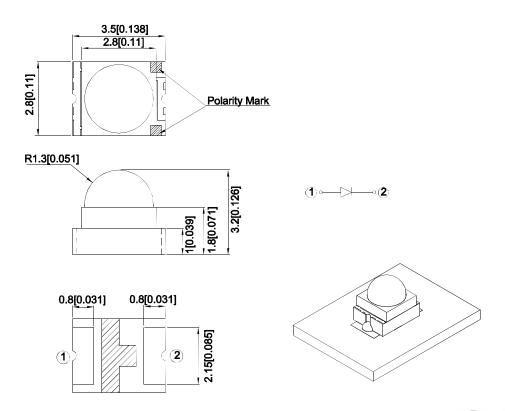
#### **Features**

- 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.

#### Description

The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

#### **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.

SPEC NO: DSAF1182 **REV NO: V.9B** DATE: NOV/04/2015 PAGE: 1 OF 5 ERP: 1203001124 APPROVED: Wynec **CHECKED: Allen Liu** DRAWN: L.Q.Xie

#### **Selection Guide**

Part No.	Emitting Color (Material)	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APED3528CGCK-F01	(-F01 Green (AlGaInP) V		80	200	40°

#### Notes

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

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

Symbol	Parameter	Emitting Color	Тур.	Max.	Units	Test Conditions	
λpeak	Peak Wavelength	Green	574		nm	IF=20mA	
λD [1]	Dominant Wavelength	Green	570		nm	IF=20mA	
Δλ1/2	Spectral Line Half-width	Green	20		nm	IF=20mA	
С	Capacitance	Green	15		pF	VF=0V;f=1MHz	
VF [2]	Forward Voltage	Green	2.1	2.5	V	IF=20mA	
lR	Reverse Current	Green		10	uA	V <sub>R</sub> =5V	

#### Notes

- 1. Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national 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

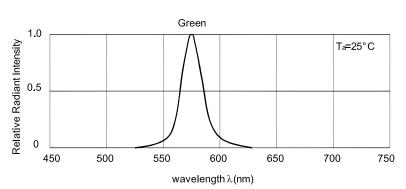
Parameter	Values		
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

#### Note:

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

 SPEC NO: DSAF1182
 REV NO: V.9B
 DATE: NOV/04/2015
 PAGE: 2 OF 5

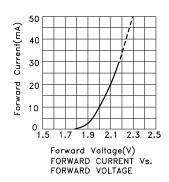
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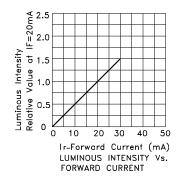


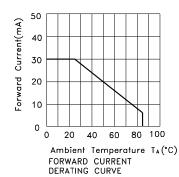
Relative Intensity Vs. Wavelength

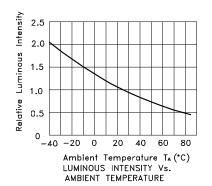
#### Green

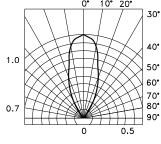
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SPATIAL DISTRIBUTION

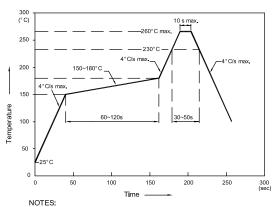
SPEC NO: DSAF1182 RE
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REV NO: V.9B CHECKED: Allen Liu DATE: NOV/04/2015 DRAWN: L.Q.Xie PAGE: 3 OF 5 ERP: 1203001124

#### APED3528CGCK-F01

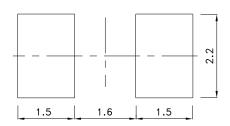
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



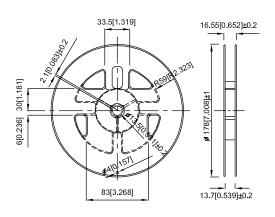
- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed to high temperature
- to high temperature.
  3.Number of reflow process shall be 2 times or less.

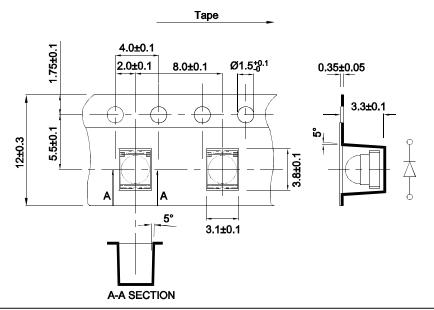
### Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



### Tape Dimensions (Units : mm)

#### **Reel Dimension**

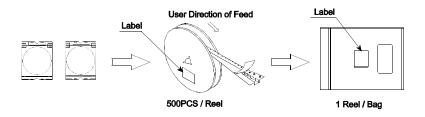


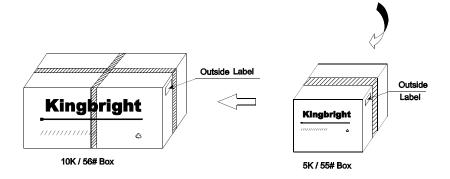


SPEC NO: DSAF1182 APPROVED: Wynec REV NO: V.9B CHECKED: Allen Liu DATE: NOV/04/2015 DRAWN: L.Q.Xie PAGE: 4 OF 5 ERP: 1203001124

#### **PACKING & LABEL SPECIFICATIONS**

#### APED3528CGCK-F01







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 SPEC NO: DSAF1182
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 PAGE: 5 OF 5

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