

3.5x2.8mm SMD CHIP LED LAMP

Part Number: APED3528SYCK/J3

Super Bright Yellow

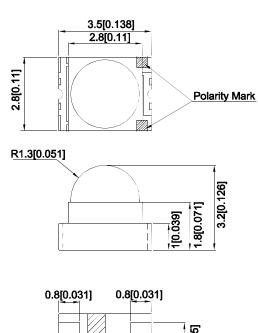
Features

- 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.

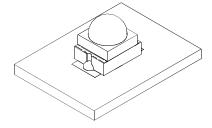
Description

The Super Bright Yellow device is based on light emitting diode chip made from AlGaInP.

Package Dimensions







- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.

(1

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.

(2)





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Selection Guide

| Part No. | Emitting Color (Material) | Lens Type | lv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|-----------------|-------------------------------|-------------|------------------------|------|----------------------|
| | | 2. | Min. | Тур. | 201/2 |
| APED3528SYCK/J3 | Super Bright Yellow (AlGaInP) | Water Clear | 700 | 1300 | 40° |

Notes:

- 1. 01/2 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 | Super Bright Yellow | 590 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Super Bright Yellow | 590 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Super Bright Yellow | 20 | | nm | IF=20mA |
| С | Capacitance | Super Bright Yellow | 45 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Super Bright Yellow | 2 | 2.5 | V | IF=20mA |
| lR | Reverse Current | Super Bright Yellow | | 10 | uA | V _R =5V |

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

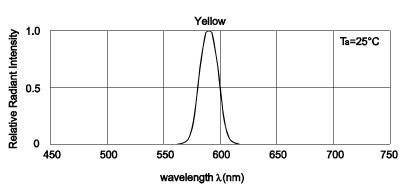
Absolute Maximum Ratings at TA=25°C

| Parameter | Values | Units | | |
|--------------------------|----------------|----------------|--|--|
| Power dissipation | 75 | mW | | |
| DC Forward Current | 30 | mA | | |
| Peak Forward Current [1] | 140 | mA | | |
| Reverse Voltage | 5 | V | | |
| Operating Temperature | -40°C To +85°C | -40°C To +85°C | | |
| Storage Temperature | -40°C To +85°C | -40°C To +85°C | | |

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

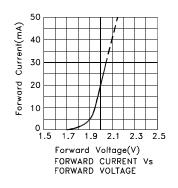
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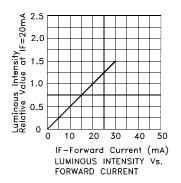
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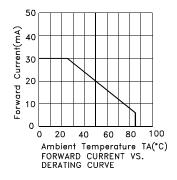


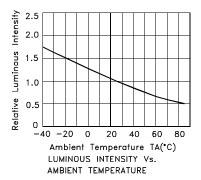
Relative Intensity Vs. Wavelength

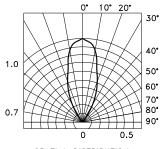
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SPATIAL DISTRIBUTION

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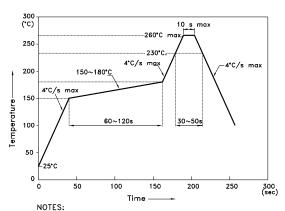
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



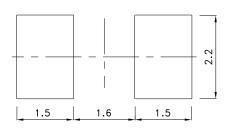
- NOTES:

 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.

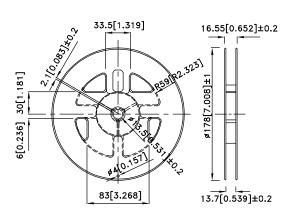
 3.Number of reflow process shall be 2 times or less.

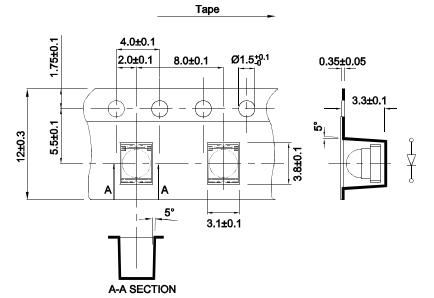
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)

Reel Dimension





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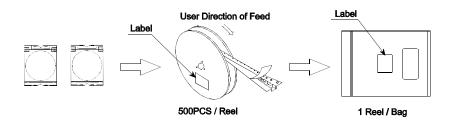
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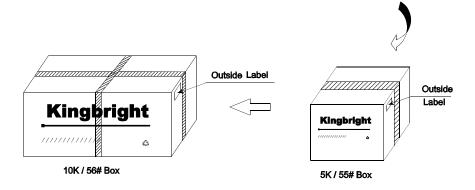
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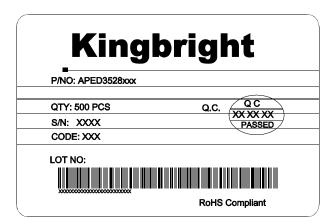
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PACKING & LABEL SPECIFICATIONS

APED3528SYCK/J3







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