

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

Part Number: APED3528SECK/J3

Hyper Red

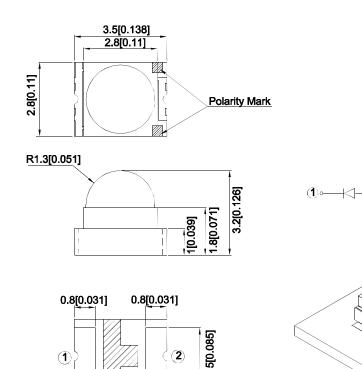
#### **Features**

- 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 Hyper Red device is based on light emitting diode chip made from AlGaInP.

### **Package Dimensions**





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- 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	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		-	Min.	Тур.	201/2
A DE DOSOGO E O 1/1/0	Lhwan Dad (AlCalaD)	Matan Class	3100	3800	40°
APED3528SECK/J3	Hyper Red (AlGaInP)	Water Clear	*1000	*1800	

#### Notes:

- 1.  $\theta$ 1/2 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 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	Hyper Red	640		nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red	625		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	20		nm	IF=20mA
С	Capacitance	Hyper Red	27		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	2.2	2.8	V	IF=20mA
lr	Reverse Current	Hyper Red		10	uA	VR=5V

- 1.Wavelength: +/-1nm.

- 1.vvavelengui. 77-11111.
   Forward Voltage: +/-0.1V.
   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.

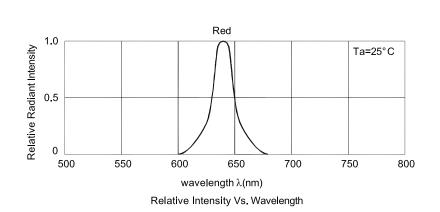
#### Absolute Maximum Ratings at TA=25°C

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Parameter	Values	Units			
Power dissipation	84	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.

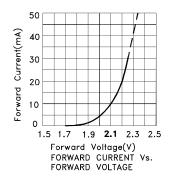
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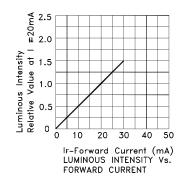
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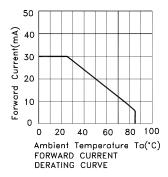


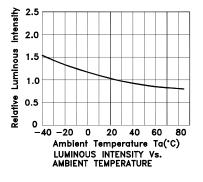
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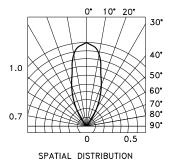
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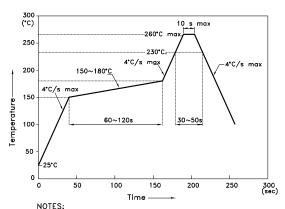
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



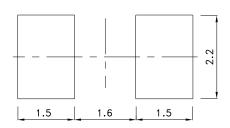
- NOTES:

  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.
  - to high temperature.

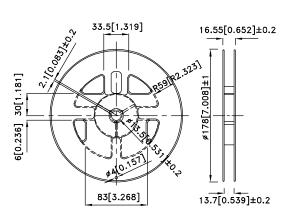
    3.Number of reflow process shall be 2 times or less.

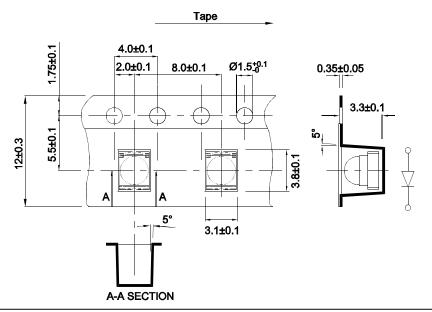
### Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



## Tape Dimensions (Units : mm)

#### **Reel Dimension**



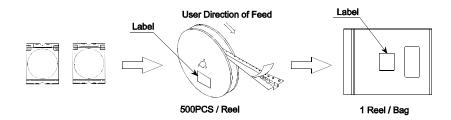


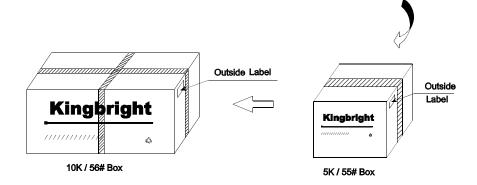
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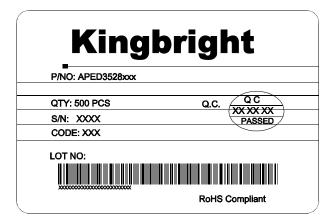


#### **PACKING & LABEL SPECIFICATIONS**

#### APED3528SECK/J3







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