

3.5x2.8mm SURFACE MOUNT LED LAMP

Part Number: KA-3528SYCKT

Super Bright Yellow

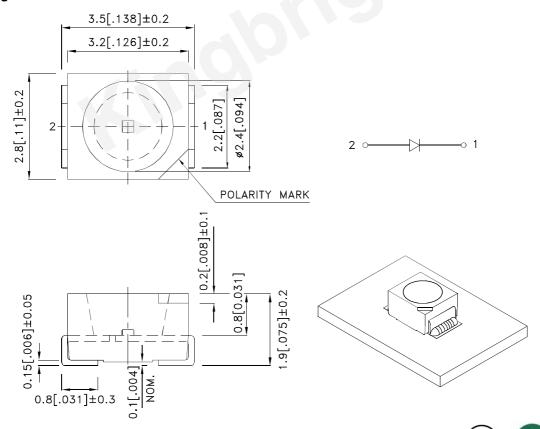
Features

- Single color.
- Suitable for all SMD assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

Package Dimensions



Notes:

- All dimensions are in millimeters (inches).
 Tolerance is ±0.25(0.01") unless otherwise noted.
- 3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

 4. 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	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
KA-3528SYCKT	Super Bright Yellow (AlGaInP)	Water Clear	120 250		120°

Notes:

- 1. θ 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 CIE127-2007 standards.

Electrical / Optical Characteristics at TA=25°C

Liectrical / Optical Grianacteristics at TA-23 G									
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	20		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:

- Wavelength: +/-1nm.
 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

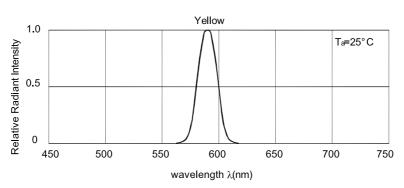
Parameter	Values	Units		
Power dissipation	75	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	175	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C	-40°C To +85°C		
Storage Temperature	-40°C To +85°C			

Notes:

- 1.1/10 Duty Cycle, 0.1ms Pulse Width.
 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.

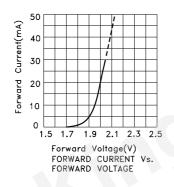
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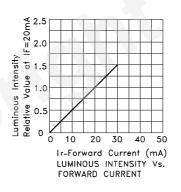
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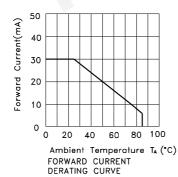


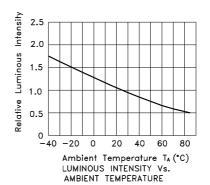
Relative Intensity Vs. Wavelength

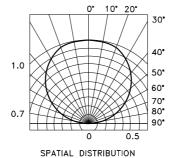
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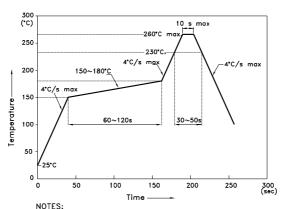
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KA-3528SYCKT

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.



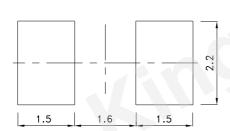
- NOTES:

 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

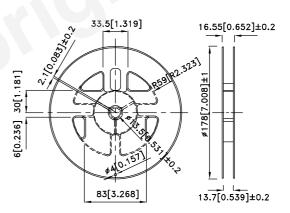
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

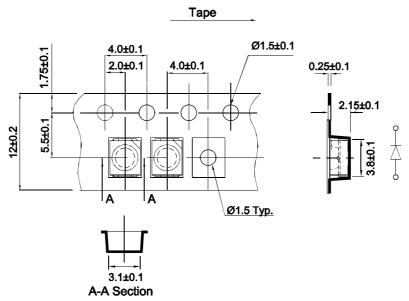
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension



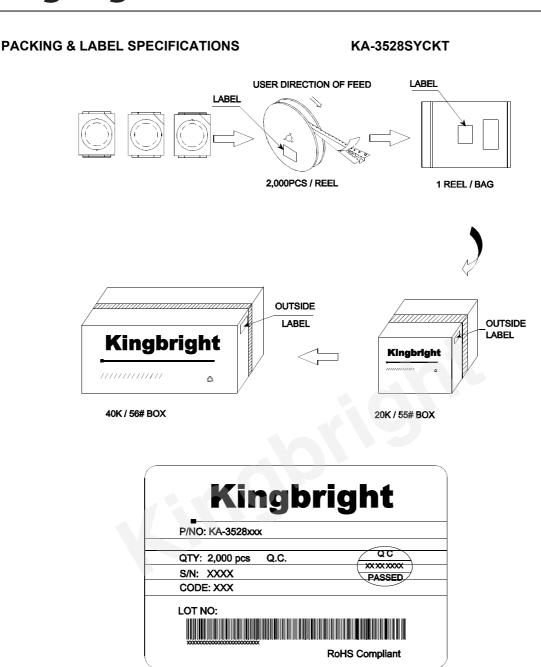
Tape Dimensions (Units: mm)



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