

3.5x2.8mm SURFACE MOUNT LED LAMP

Part Number: KA-3528SYCKT

Super Bright Yellow

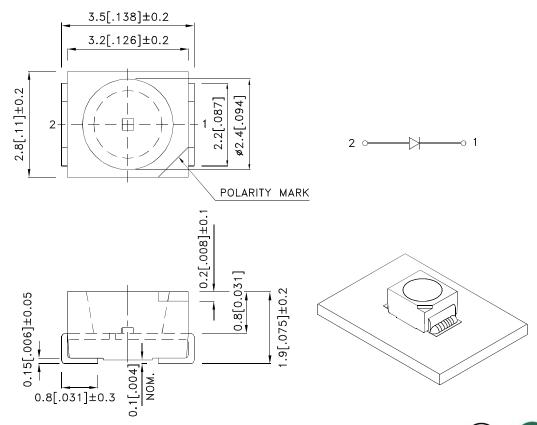
Features

- 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:

- 1. All dimensions are in millimeters (inches).
 2. 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.

SPEC NO: DSAI7040 **REV NO: V.9B** DATE: FEB/25/2016 PAGE: 1 OF 5 APPROVED: Wynec **CHECKED: Allen Liu** DRAWN: M.Liu ERP: 1201004973



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 (AlGalnP)	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

Electrical 7 Optical Characteristics at 1A 20 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	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

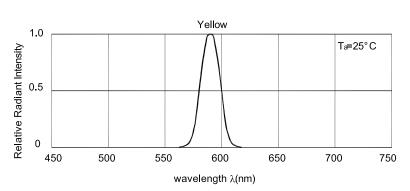
Parameter	Values	Units		
Power dissipation	75	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	175	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C	-40°C To +85°C		
Storage Temperature	-40°C To +85°C			

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.

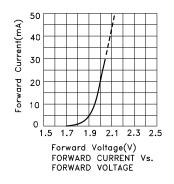
SPEC NO: DSAI7040 **REV NO: V.9B** DATE: FEB/25/2016 PAGE: 2 OF 5 **APPROVED: Wynec CHECKED: Allen Liu** DRAWN: M.Liu ERP: 1201004973

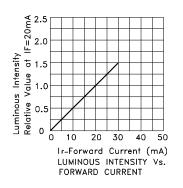
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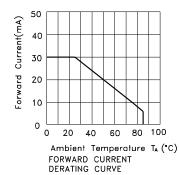


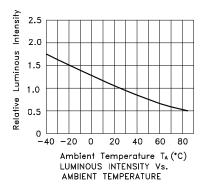
Relative Intensity Vs. Wavelength

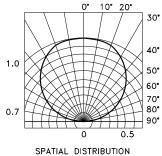
Super Bright Yellow KA-3528SYCKT











DATE: FEB/25/2016 PAGE: 3 OF 5

ERP: 1201004973

SPEC NO: DSAI7040 REV NO: V.9B DATE: FEB/25/2016

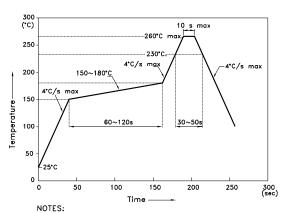
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



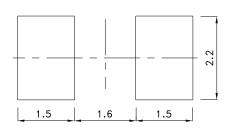
- NOTES:

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

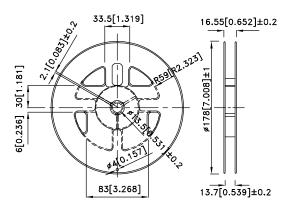
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

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



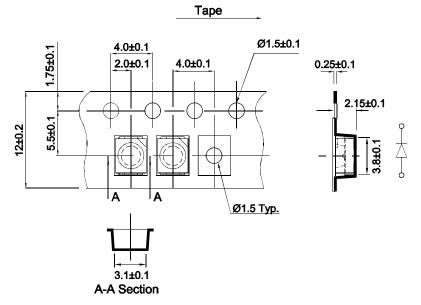
Reel Dimension



PAGE: 4 OF 5

ERP: 1201004973

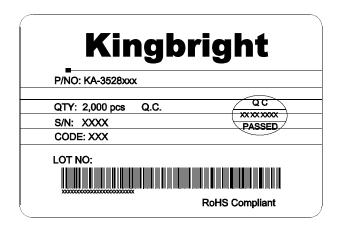
Tape Dimensions (Units: mm)



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PACKING & LABEL SPECIFICATIONS KA-3528SYCKT USER DIRECTION OF FEED LABEL 2,000PCS / REEL OUTSIDE LABEL Kingbright Kingbright Kingbright LABEL COUTSIDE LABEL Kingbright LABEL LABEL OUTSIDE LABEL Kingbright LABEL OUTSIDE LABEL LABEL OUTSIDE LABEL Kingbright



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 SPEC NO: DSAI7040
 REV NO: V.9B
 DATE: FEB/25/2016
 PAGE: 5 OF 5

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