

3.5x2.8mm SURFACE MOUNT LED LAMP

Part Number: KA-3528SYCKT

Super Bright Yellow

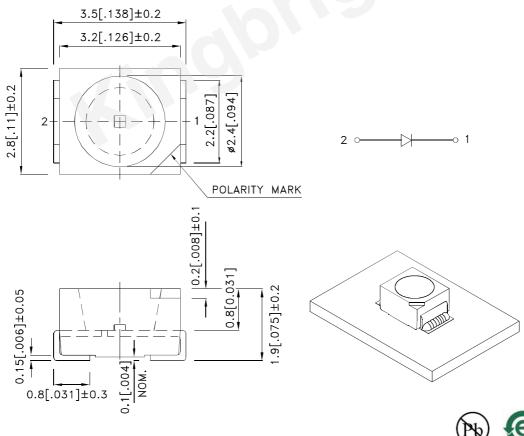
Features

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

Description

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

Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25(0.01") 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.

DATE: APR/20/2013 SPEC NO: DSAI7040 **REV NO: V.7B** PAGE: 1 OF 5 APPROVED: WYNEC DRAWN: Y.Liu **CHECKED: Allen Liu** ERP: 1201004973

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
KA-3528SYCKT	Super Bright Yellow (AlGaInP)	Water Clear	80	200	120°

Notes:

- 1. θ 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	Device	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	A	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
IR	Reverse Current	Super Bright Yellow		10	uA	VR=5V

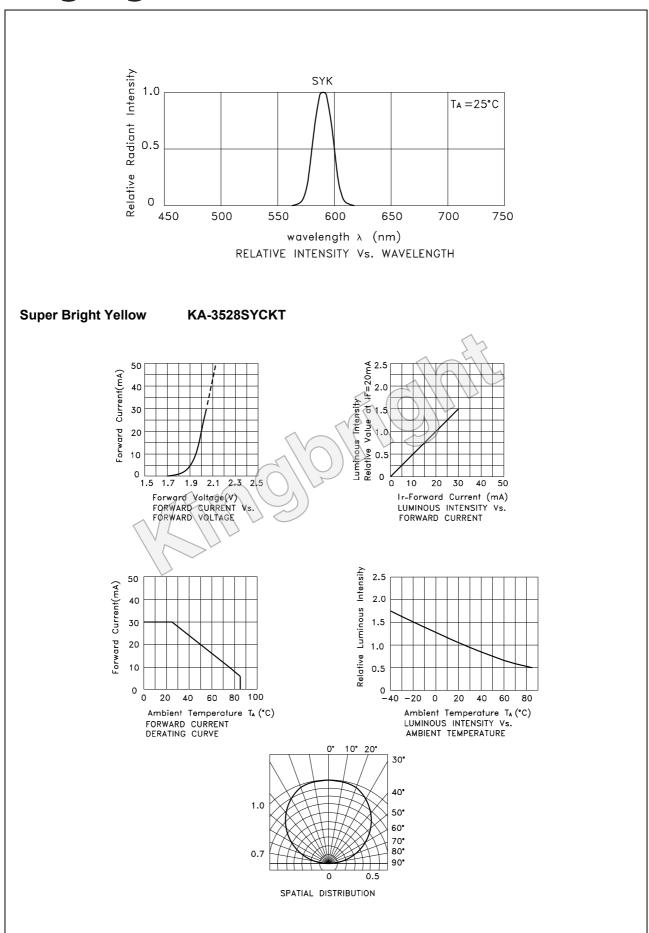
- 1.Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.
 Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Yellow	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		
Storage Temperature	-40°C To +85°C		

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

SPEC NO: DSAI7040 **REV NO: V.7B** DATE: APR/20/2013 PAGE: 2 OF 5 **APPROVED: WYNEC CHECKED: Allen Liu** DRAWN: Y.Liu ERP: 1201004973

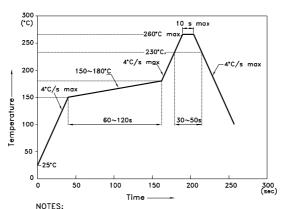


SPEC NO: DSAI7040 REV NO: V.7B DATE: APR/20/2013 PAGE: 3 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Y.Liu ERP: 1201004973

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.

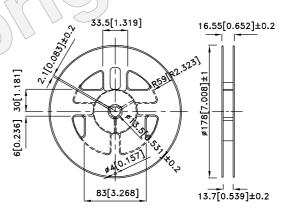
3.Number of reflow process shall be 2 times or less.

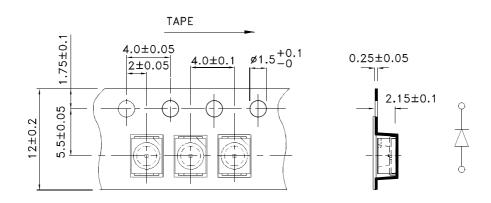
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

1.5

Tape Dimensions (Units: mm)

Reel Dimension





SPEC NO: DSAI7040 **REV NO: V.7B DATE: APR/20/2013** PAGE: 4 OF 5 DRAWN: Y.Liu APPROVED: WYNEC **CHECKED: Allen Liu** ERP: 1201004973

PACKING & LABEL SPECIFICATIONS KA-3528SYCKT USER DIRECTION OF FEED LABEL 2,000PCS / REEL 1 REEL / BAG OUTSIDE LABEL Kingbright Kingbright Kingbright ABEL Kingbright



Detailed application notes are listed on our website. http://www.kingbright.com/application notes

40K / 56# BOX

SPEC NO: DSAI7040 APPROVED: WYNEC REV NO: V.7B CHECKED: Allen Liu DATE: APR/20/2013 DRAWN: Y.Liu

20K / 55# BOX

PAGE: 5 OF 5 ERP: 1201004973