

2.8X0.8mm RIGHT ANGLE SMD CHIP LED **LAMP**

Super Bright Yellow Part Number: AA2810ASYSK

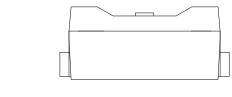
Features

- 2.8mmX0.8mm right angle SMT LED, 1.2mm thickness.
- Low power consumption.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

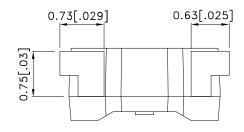
Description

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

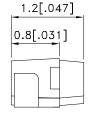
Package Dimensions

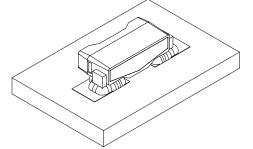












- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.1(0.0039") unless otherwise noted.
- 3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

 4. The device has a single mounting surface. The device must be mounted according to the specifications.

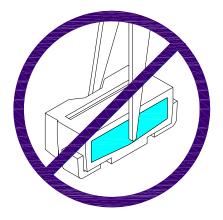
SPEC NO: DSAK2446 **REV NO: V.1 DATE: DEC/19/2009** PAGE: 1 OF 6 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: S.P.Chen ERP: 1201005914

Handling Precautions

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.

As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might leads to damage and premature failure of the LED.

Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.



 SPEC NO: DSAK2446
 REV NO: V.1
 DATE: DEC/19/2009
 PAGE: 2 OF 6

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: S.P.Chen
 ERP: 1201005914

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,,	Min.	Тур.	201/2
AA2810ASYSK	Super Bright Yellow (AlGaInP)	WATER CLEAR	110	200	110°

- 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%.

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		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

1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

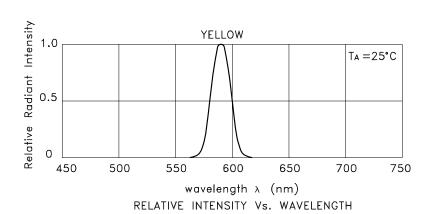
Absolute Maximum Ratings at TA=25°C

Absolute maximum ratings at 1A-20 0				
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			

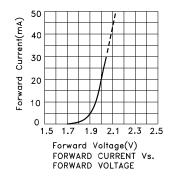
Note:

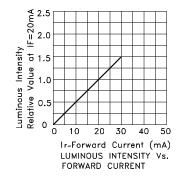
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

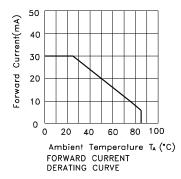
SPEC NO: DSAK2446 **REV NO: V.1** DATE: DEC/19/2009 PAGE: 3 OF 6 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: S.P.Chen ERP: 1201005914

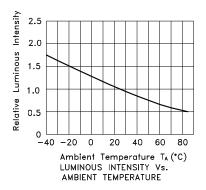


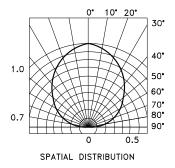
Super Bright Yellow AA2810ASYSK











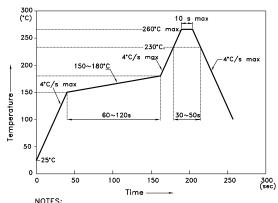
 SPEC NO: DSAK2446
 REV NO: V.1
 DATE: DEC/19/2009
 PAGE: 4 OF 6

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: S.P.Chen
 ERP: 1201005914

AA2810ASYSK

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:

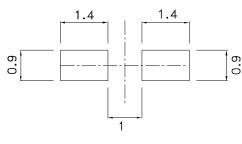
 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

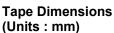
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
- to high temperature.

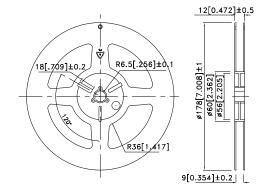
 3.Number of reflow process shall be 2 times or less.

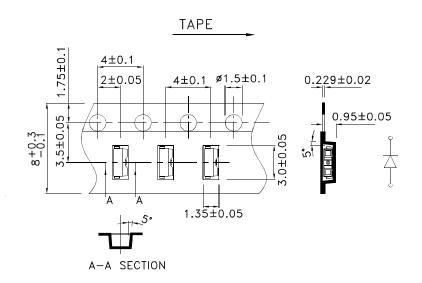
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

Reel Dimension

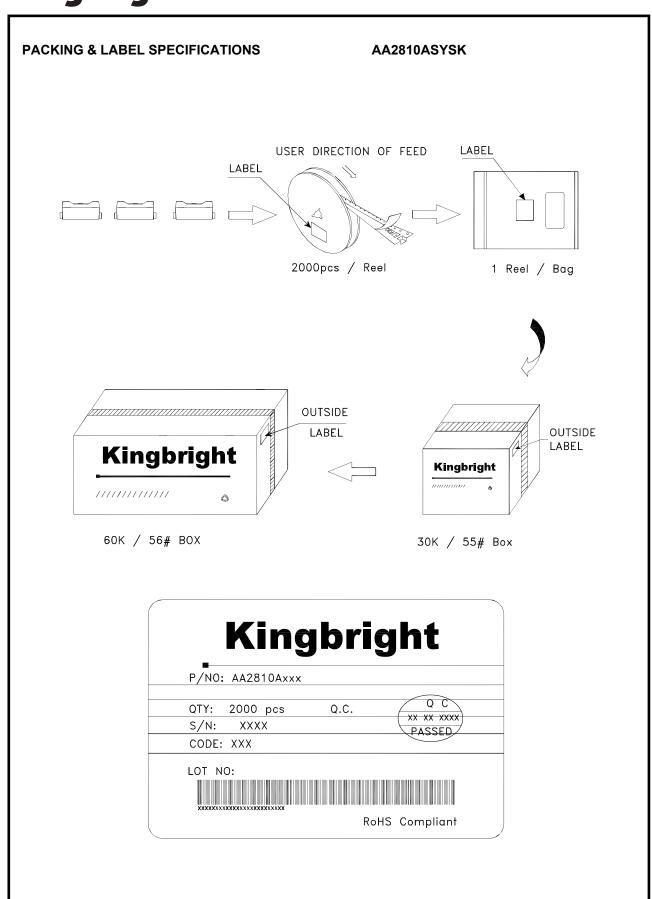








SPEC NO: DSAK2446 APPROVED: WYNEC REV NO: V.1 CHECKED: Allen Liu DATE: DEC/19/2009 DRAWN: S.P.Chen PAGE: 5 OF 6 ERP: 1201005914



SPEC NO: DSAK2446 APPROVED: WYNEC REV NO: V.1 CHECKED: Allen Liu DATE: DEC/19/2009 DRAWN: S.P.Chen PAGE: 6 OF 6 ERP: 1201005914

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Kingbright:

AA2810ASYSK