

Kingbright

3.5x2.8 mm SMD CHIP LED LAMP

Part Number: AA3528ASYCK

Super Bright Yellow

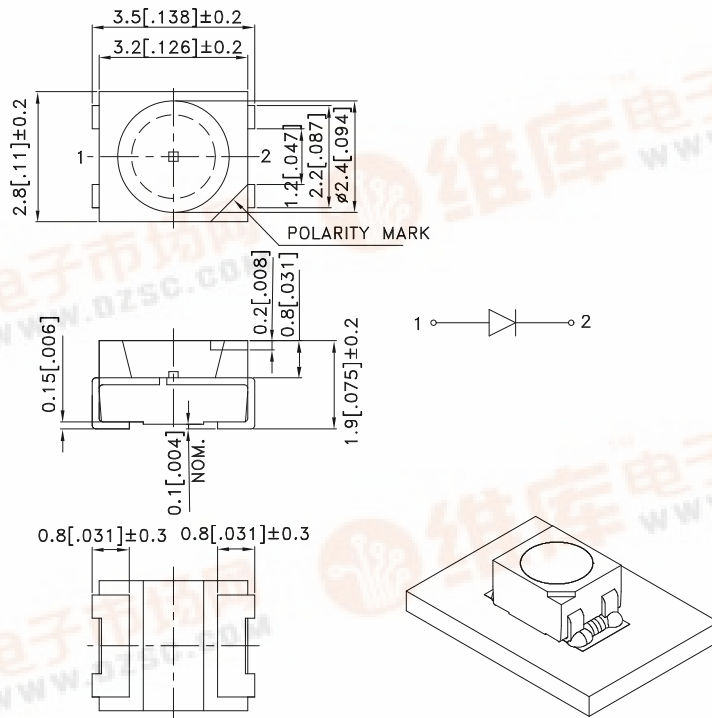
Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

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

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
AA3528ASYCK	Super Bright Yellow (InGaAlP)	WATER CLEAR	50	150	120°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Yellow	590		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Super Bright Yellow	590		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Yellow	20		nm	I _F =20mA
C	Capacitance	Super Bright Yellow	20		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Super Bright Yellow	2	2.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Yellow		10	uA	V _R =5V

Notes:

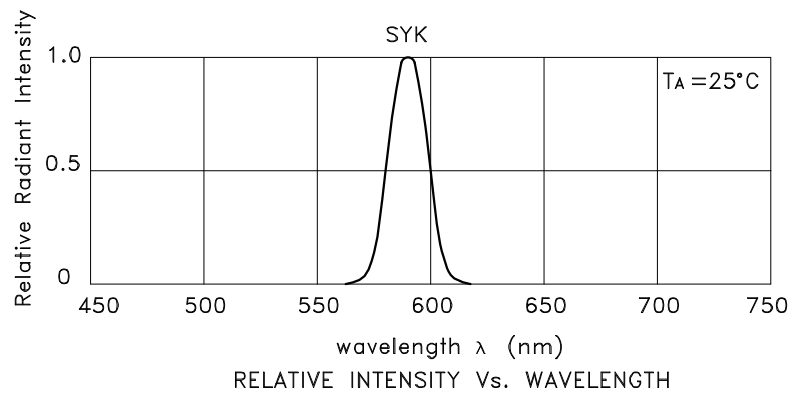
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

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	

Note:

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



Super Bright Yellow AA3528ASYCK

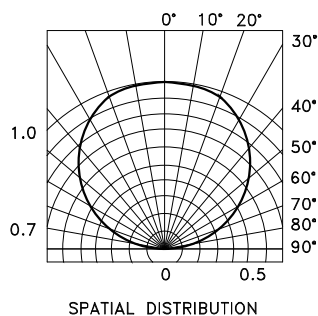
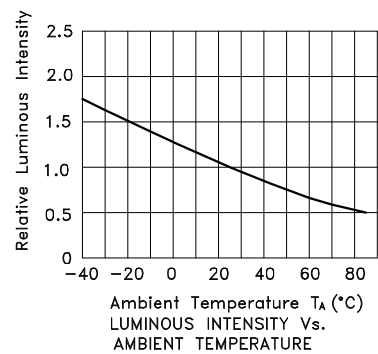
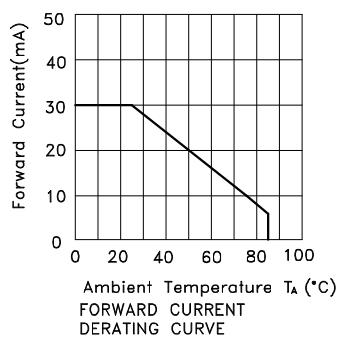
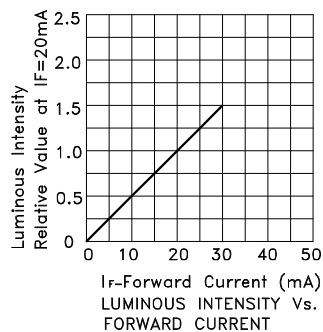
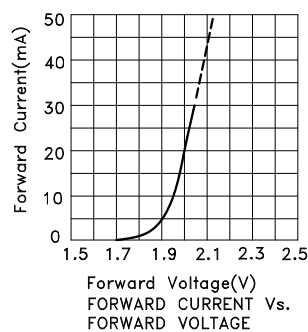


Figure 1 is a graph showing the temperature profile of the sample during the DSC measurement. The y-axis represents Temperature (°C) from 0 to 300, and the x-axis represents Time (sec) from 0 to 300. The profile starts at 25°C, rises at 4°C/s to 150~180°C (60~120s), then rises at 4°C/s to 260°C (30~50s), holds at 260°C for 10s, and finally cools at 4°C/s.

NOTES:

1. We recommend the reflow temperature $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$. 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.

Technical drawing of a tape component, showing a top view and a cross-section A-A.

Top View Dimensions:

- Total Width: 12 ± 0.3
- Total Height: 4.0 ± 0.1
- Component Width: 2 ± 0.05
- Component Height: 3.1 ± 0.15
- Hole Diameter: $\varnothing 1.55 \pm 0.05$
- Distance between component centers: 4.0 ± 0.1
- Distance from top edge to component center: 5.5 ± 0.05
- Distance from bottom edge to component center: 3.95 ± 0.15

Cross-section A-A Dimensions:

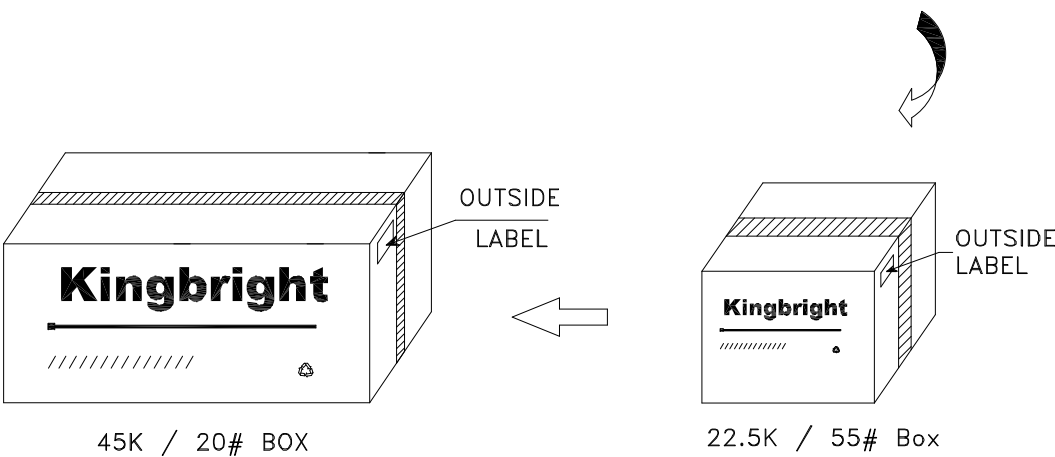
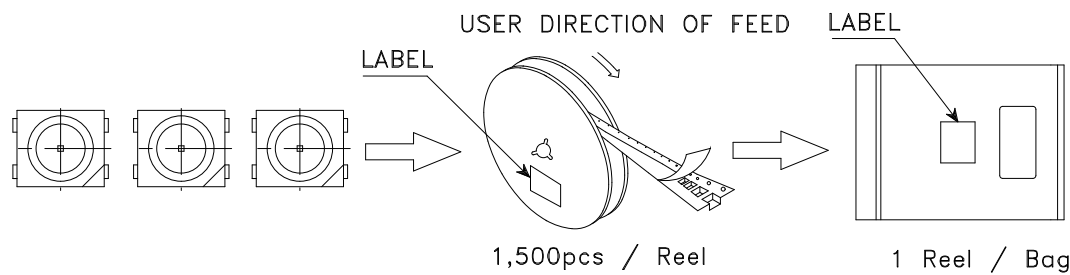
- Total Height: 3.95 ± 0.15
- Component Height: 2.15 ± 0.1
- Angle: 5° MAX.

TAPE (indicated by an arrow pointing right)

A-A SECTION

PACKING & LABEL SPECIFICATIONS

AA3528ASYCK



Kingbright	
P/NO: AA3528Axxx	
QTY: 1,500 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	