

Kingbright

3.5x2.8 mm SMD CHIP LED LAMP

Part Number: AA3528AYC

Yellow

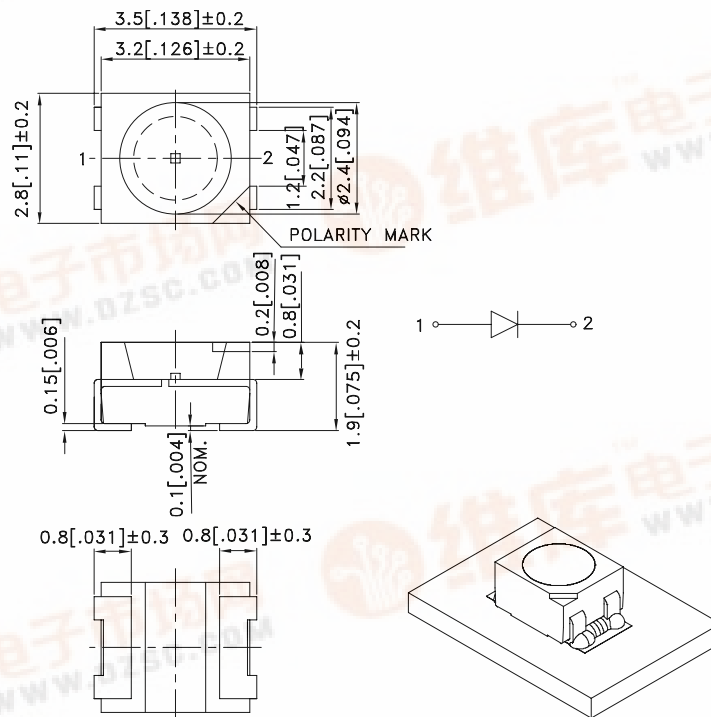
Features

- 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 Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

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
AA3528AYC	Yellow (GaAsP/GaP)	WATER CLEAR	4	15	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
λpeak	Peak Wavelength	Yellow	590		nm	IF=20mA
λD [1]	Dominant Wavelength	Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Yellow	35		nm	IF=20mA
C	Capacitance	Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Yellow	2.1	2.5	V	IF=20mA
IR	Reverse Current	Yellow		10	uA	VR=5V

Notes:

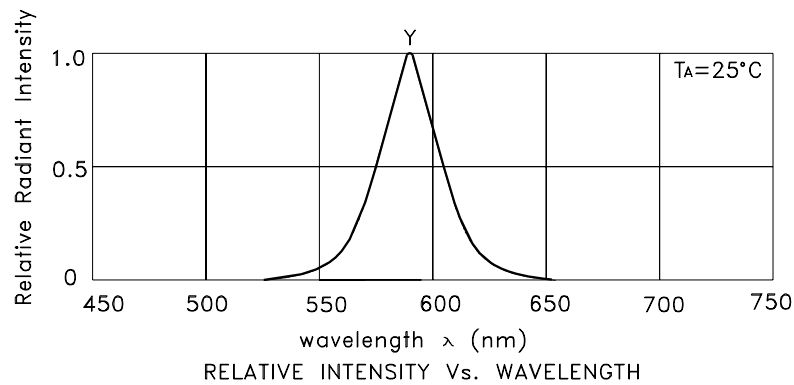
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Yellow	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	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.



Yellow

AA3528AYC

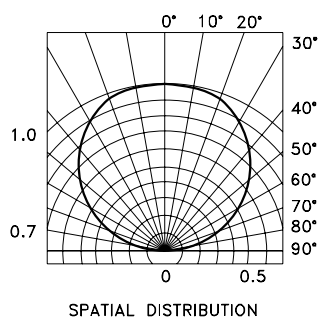
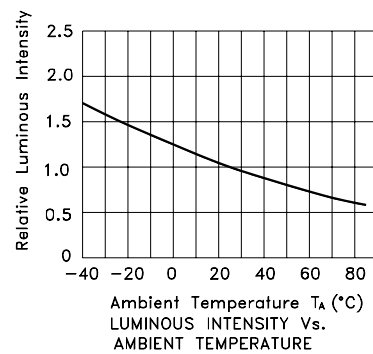
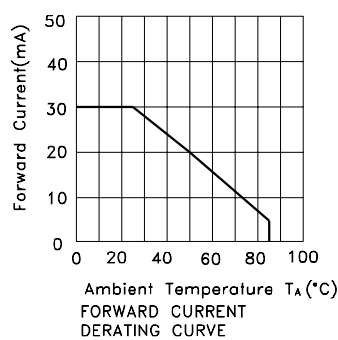
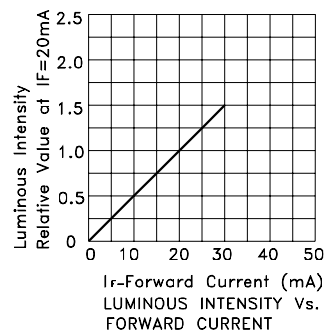
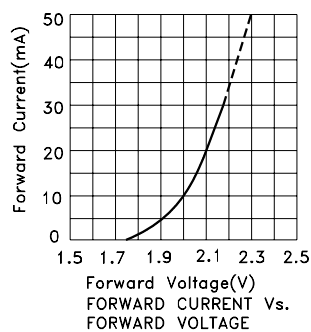


Figure 1 is a line graph showing the temperature profile of the sample during the pyrolysis of polypropylene. The y-axis represents Temperature in degrees Celsius (°C), ranging from 0 to 300. The x-axis represents Time in seconds (sec), ranging from 0 to 300. The profile starts at 25°C at 0 seconds. It rises at a rate of 4°C/s to 150°C at approximately 40 seconds. From 150°C to 180°C, the temperature is held constant for 60 to 120 seconds. It then rises again at 4°C/s to 230°C at approximately 160 seconds. From 230°C to 260°C, it rises at 4°C/s. At 260°C, it is held constant for 10 seconds (maximum). Finally, it cools down at 4°C/s to 100°C at approximately 250 seconds. The cooling phase is marked as 30 to 50 seconds.

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.

Technical drawing of a mechanical part with dimensions and a section view.

Dimensions:

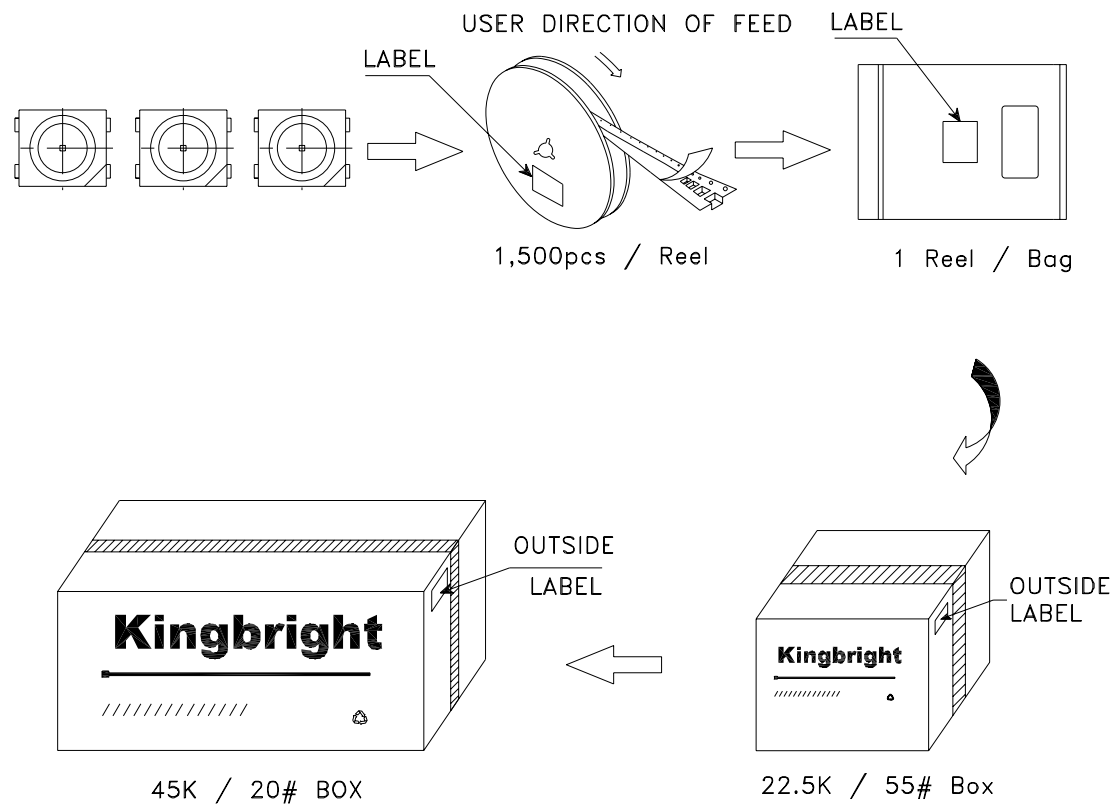
- Overall width: 12 ± 0.3
- Overall height: 5.5 ± 0.05
- Top flange thickness: 1.75 ± 0.1
- Top flange width: 4.0 ± 0.1
- Top flange hole diameter: 2 ± 0.05
- Top flange hole spacing: 4.0 ± 0.1
- Top flange hole diameter: $\phi 1.55 \pm 0.05$
- Top flange hole spacing: 0.25 ± 0.1
- Top flange hole diameter: 2.15 ± 0.1
- Top flange hole spacing: 5°MAX.
- Top flange hole diameter: 3.95 ± 0.15
- Top flange hole spacing: $3.1^{+0.15}_{-0}$
- Top flange hole diameter: 5°MAX.

Section View:

A-A SECTION

PACKING & LABEL SPECIFICATIONS

AA3528AYC



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