

AA3528SYC

SUPER BRIGHT YELLOW

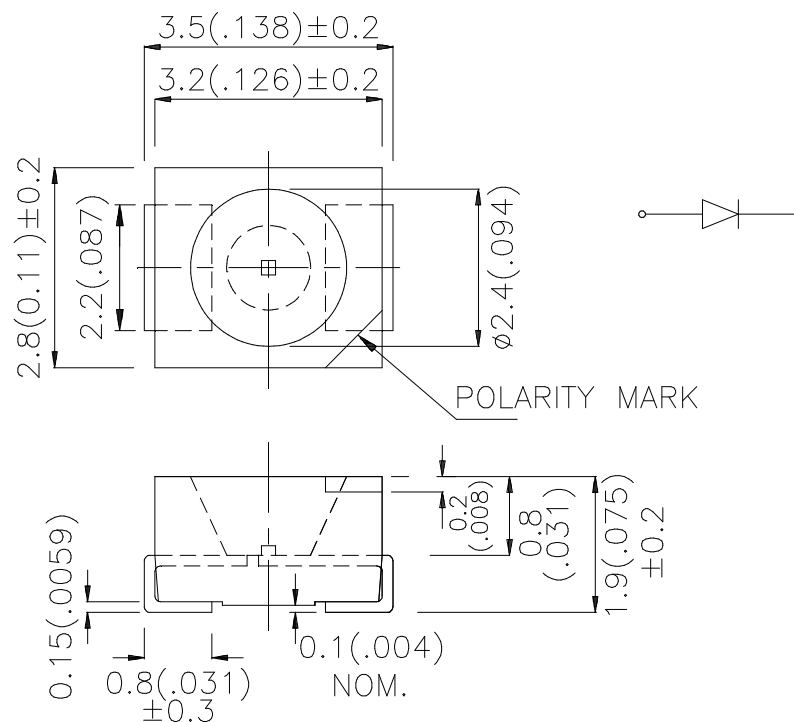
### Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / REEL.
- 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.

## Selection Guide

| Part No.  | Dice                          | Lens Type   | Iv (mcd)<br>@ 20mA |      | Viewing<br>Angle |
|-----------|-------------------------------|-------------|--------------------|------|------------------|
|           |                               |             | Min.               | Typ. | 2 $\theta$ 1/2   |
| AA3528SYC | SUPER BRIGHT YELLOW (InGaAlP) | WATER CLEAR | 36                 | 120  | 120°             |

Note:  
1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

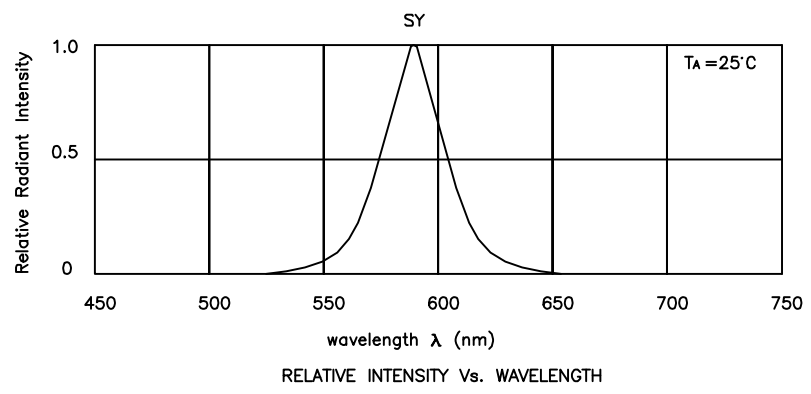
## Electrical / Optical Characteristics at TA=25°C

| Symbol                | Parameter                | Device              | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---------------------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength          | Super Bright Yellow | 590  |      | nm    | IF=20mA         |
| $\lambda_D$           | Dominant Wavelength      | Super Bright Yellow | 588  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Yellow | 28   |      | nm    | IF=20mA         |
| C                     | Capacitance              | Super Bright Yellow | 25   |      | pF    | VF=0V;f=1MHz    |
| VF                    | Forward Voltage          | Super Bright Yellow | 2.0  | 2.5  | V     | IF=20mA         |
| IR                    | Reverse Current          | Super Bright Yellow |      | 10   | uA    | VR = 5V         |

## Absolute Maximum Ratings at TA=25°C

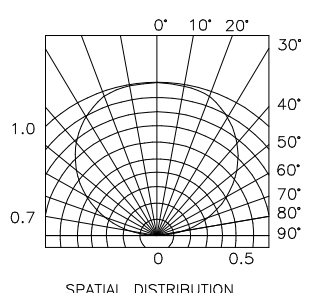
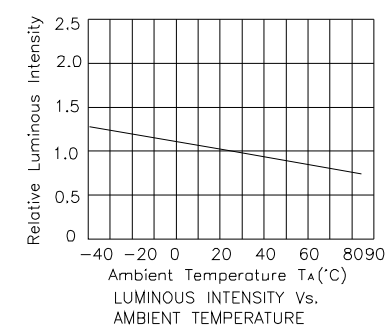
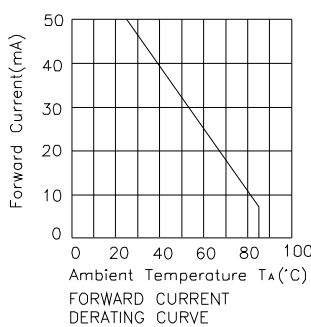
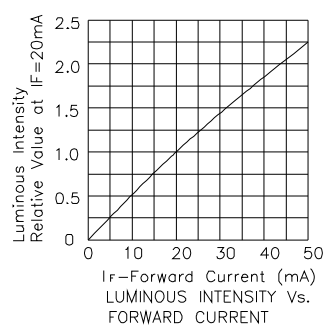
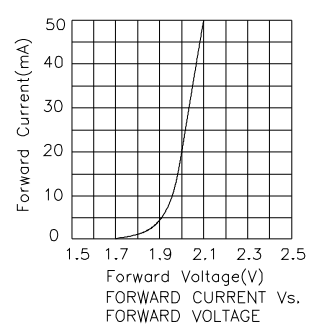
| Parameter                     | Super Bright Yellow | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 125                 | mW    |
| DC Forward Current            | 50                  | mA    |
| Peak Forward Current [1]      | 150                 | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |

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



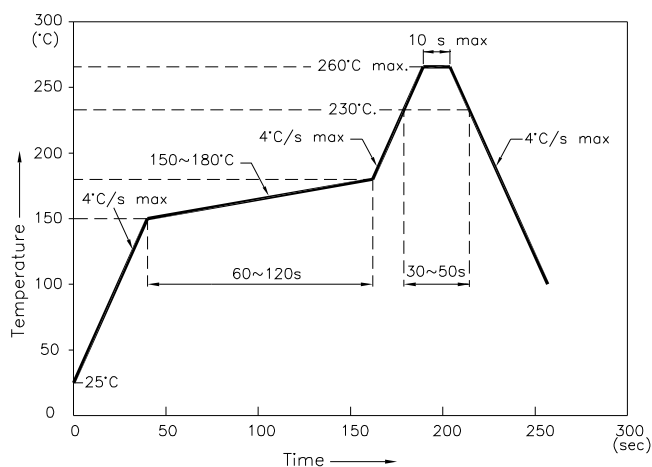
**Super Bright Yellow**

**AA3528SYC**



## AA3528SYC

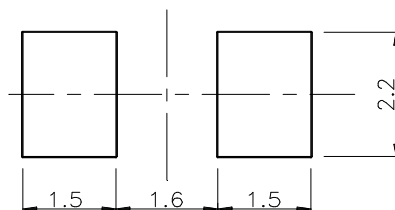
### Reflow Soldering Profile For Lead-free SMT Process.



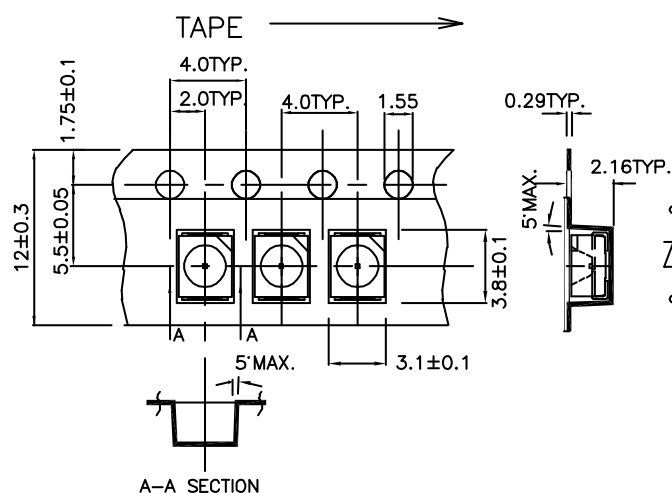
NOTES:

1. We recommend the reflow temperature  $245^{\circ}\text{C}(+/-5^{\circ}\text{C})$ . The maximum soldering temperature should be limited to  $260^{\circ}\text{C}$ .
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)



### Tape Specifications (Units : mm)



## Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1.Wavelength:  $\pm 1\text{nm}$  (Test condition is based on the sorting standard).
- 2.Luminous intensity:  $\pm 15\%$  (Test condition is based on the sorting standard).
- 3.Forward voltage:  $\pm 0.1\text{V}$  (Test condition is based on the sorting standard).

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