

5.0X6.0mm SURFACE MOUNT LED LAMP

PRELIMINARY SPEC

Part Number: AA5060SYC/J3

Super Bright Yellow

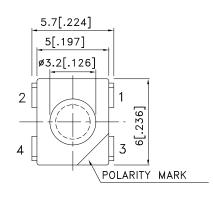
Features

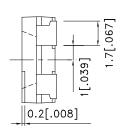
- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

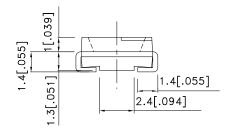
Description

The Super Bright Yellow device is based on light emitting diode chip made from AlInGaP.

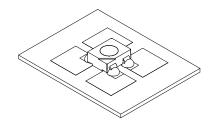
Package Dimensions











- 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.





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Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) [2] @ 50mA | | Viewing Angle [1] |
|--------------|-------------------------------|-------------|------------------------|------|----------------------|
| | | 21 | Min. | Тур. | 201/2 |
| AA5060SYC/J3 | Super Bright Yellow (AllnGaP) | WATER CLEAR | 650 | 1300 | 100° |

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 | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|---------------------|------|------|-------|---------------------------|
| λpeak | Peak Wavelength | Super Bright Yellow | 590 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Super Bright Yellow | 589 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Super Bright Yellow | 20 | | nm | IF=20mA |
| С | Capacitance | Super Bright Yellow | 45 | | pF | V _F =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 |

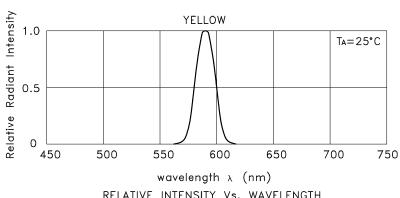
- Notes: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

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] | 140 | mA | |
| Reverse Voltage | 5 | V | |
| Operating Temperature | -40°C To +85°C | | |
| Storage Temperature | -40°C To +85°C | | |

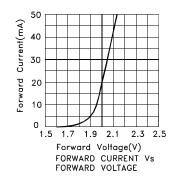
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

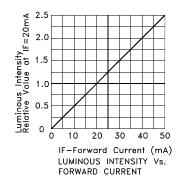
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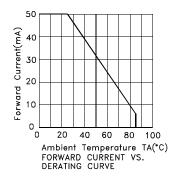


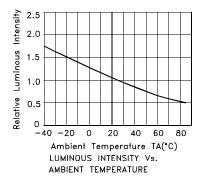
RELATIVE INTENSITY Vs. WAVELENGTH

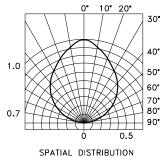
Super Bright Yellow AA5060SYC/J3









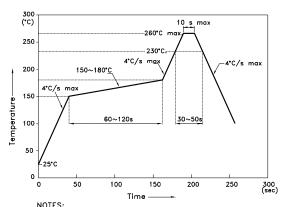


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AA5060SYC/J3

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.



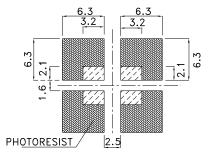
NOTES:

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

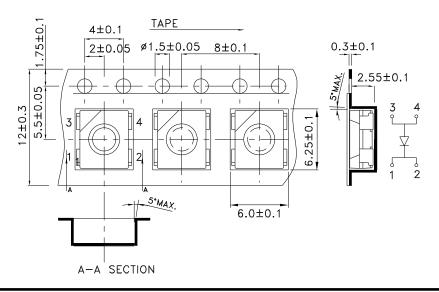
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

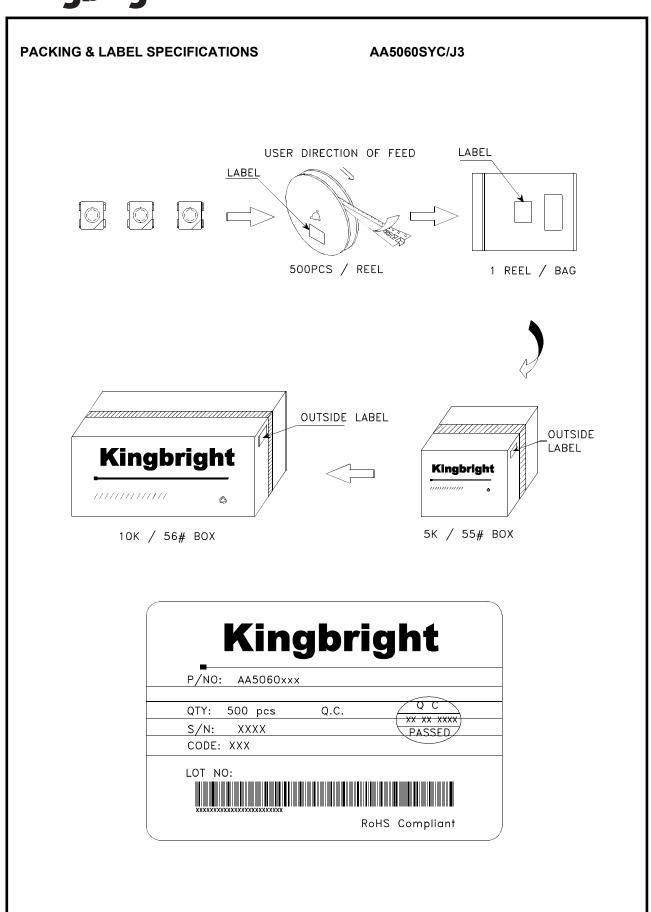
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)



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