

SUBMINIATURE SOLID STATE LAMP

AM2520SYCK08

SUPER BRIGHT YELLOW

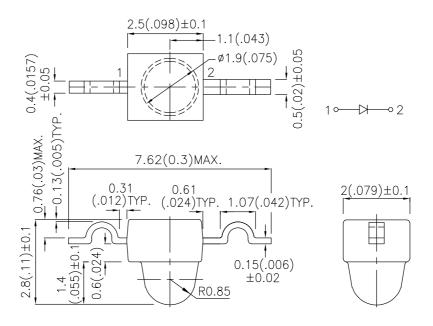
Features

- •SUBMINIATURE PACKAGE.
- •WIDE VIEWING ANGLE.
- ●YOKE LEAD.
- •LONG LIFE SOLID STATE RELIABILITY.
- •LOW PACKAGE PROFILE.
- ●PACKAGE: 1000PCS / REEL.
- •RoHS COMPLIANT.

Description

The Super Bright Yellow source color devices are made with DH InGaAIP on GaAs substrate Light Emitting Diode.

Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25(0.01") unless otherwise noted.

 3. Lead spacing is measured where the leads emerge from the package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAD1273 APPROVED: J. Lu

REV NO: V.2 CHECKED: Allen Liu DATE: MAR/05/2005 DRAWN: W.J.ZHU

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Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) @ 20mA | | Viewing Angle |
|--------------|-------------------------------|-------------|--------------------|------|------------------|
| | | ,, | Min. | Тур. | 201/2 |
| AM2520SYCK08 | SUPER BRIGHT YELLOW (InGaAIP) | WATER CLEAR | 70 | 300 | 20° |

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 | 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 | Forward Voltage | Super Bright Yellow | 2.0 | 2.5 | V | IF=20mA |
| lr | Reverse Current | Super Bright Yellow | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at Ta=25°C

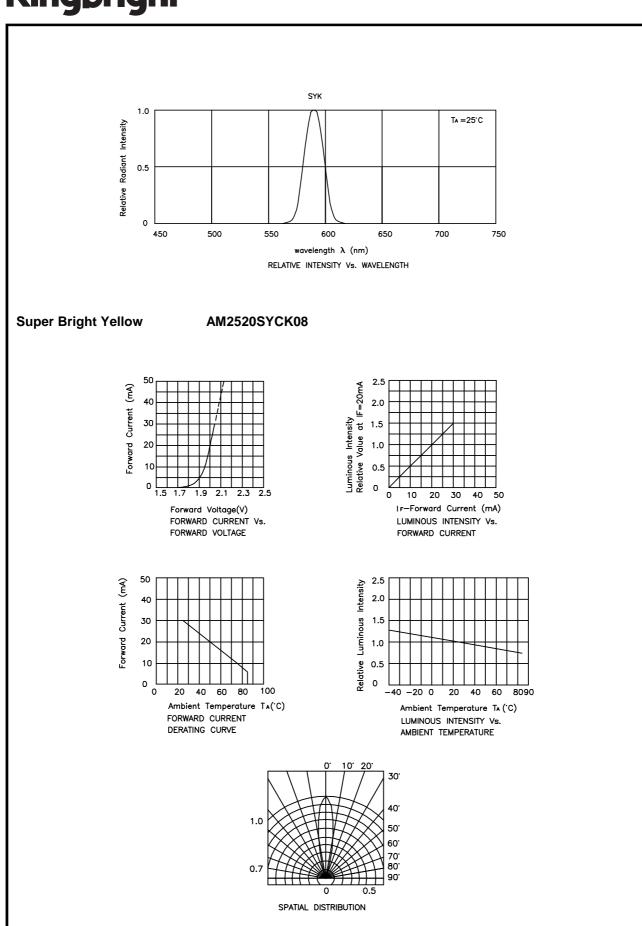
| Parameter | Super Bright Yellow | Units |
|-------------------------------|---------------------|-------|
| Power dissipation | 125 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 175 | mA |
| Reverse Voltage | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | |

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

^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

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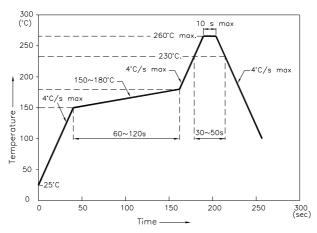
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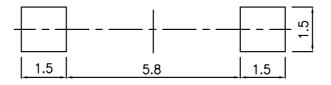
Reflow Soldering Profile For Lead-free SMT Process.



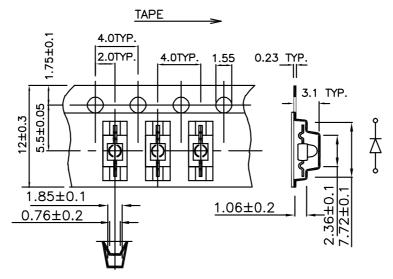
- NOTES:

 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)



Tape Specifications (Units: mm)



Remarks:

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

- 1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
- 2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).
- 3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).

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