

KA-3022SYC-4.5SF SUPER BRIGHT YELLOW

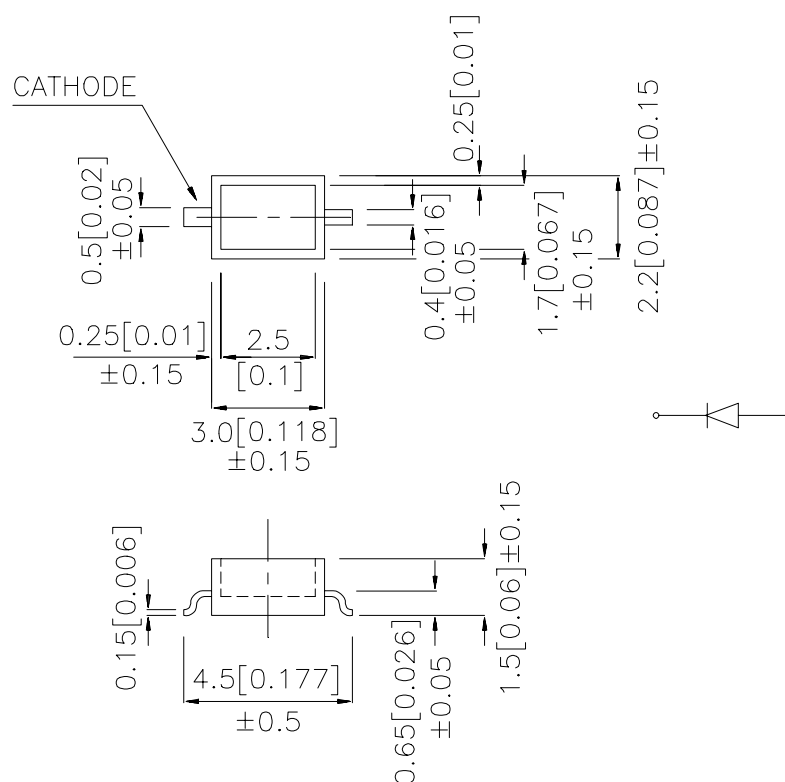
### Features

- 3.0mm x 2.2mm SMT LED, 1.5mm THICKNESS.
- WHITE REFLECTOR TO MAXIMIZE REFLECTION OF LIGHT.
- ULTRA-COMPACT TYPE ASSURES SPACE SAVING.
- HIGH EFFICIENCY & LOW POWER CONSUMPTION.
- PACKAGE : 1500PCS / REEL.

### Description

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

### Package Dimensions



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

| Part No.         | Dice                            | Lens Type   | Iv (mcd)<br>@ 20 mA |      | Viewing<br>Angle |
|------------------|---------------------------------|-------------|---------------------|------|------------------|
|                  |                                 |             | Min.                | Typ. | 2θ1/2            |
| KA-3022SYC-4.5SF | SUPER BRIGHT YELLOW ( InGaAlP ) | WATER CLEAR | 50                  | 120  | 90°              |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

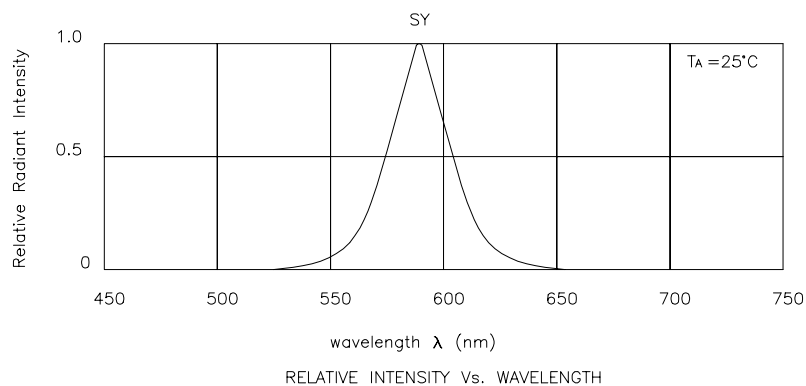
| Symbol            | Parameter                | Device              | Typ. | Max. | Units | Test Conditions           |
|-------------------|--------------------------|---------------------|------|------|-------|---------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | Super Bright Yellow | 590  |      | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub>    | Dominate Wavelength      | Super Bright Yellow | 588  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub> | Spectral Line Half-width | Super Bright Yellow | 28   |      | nm    | I <sub>F</sub> =20mA      |
| C                 | Capacitance              | Super Bright Yellow | 25   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub>    | Forward Voltage          | Super Bright Yellow | 2.0  | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>    | Reverse Current          | Super Bright Yellow |      | 10   | uA    | V <sub>R</sub> = 5V       |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

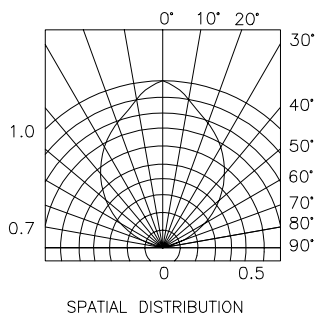
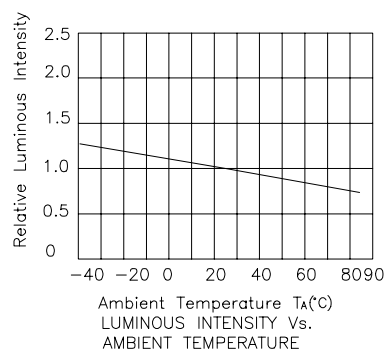
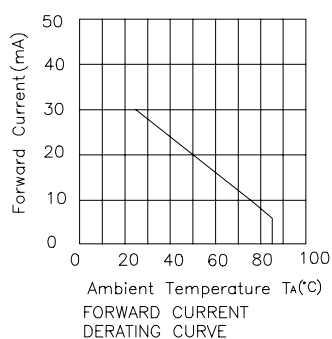
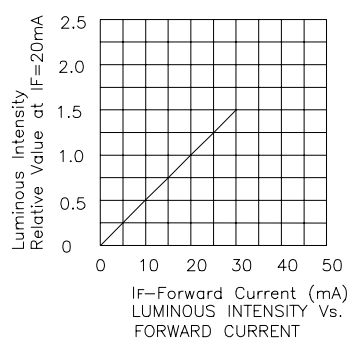
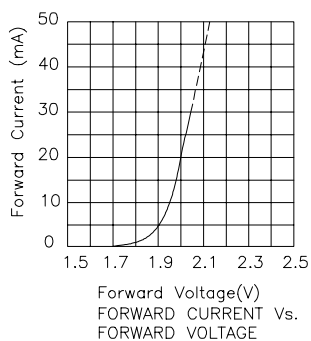
| Parameter                     | Super Bright Yellow | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 125                 | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 150                 | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |

Note:

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



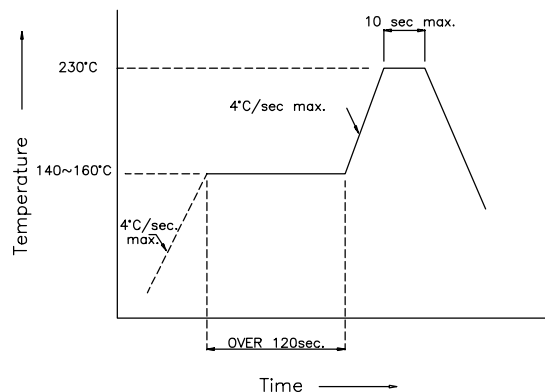
## Super Bright Yellow KA-3022SYC-4.5SF



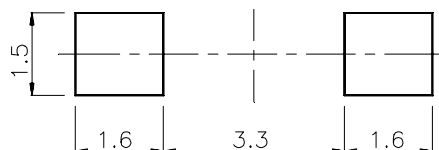
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### SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)

