

Part Number: KP-1608SYCK-J3

Super Bright Yellow

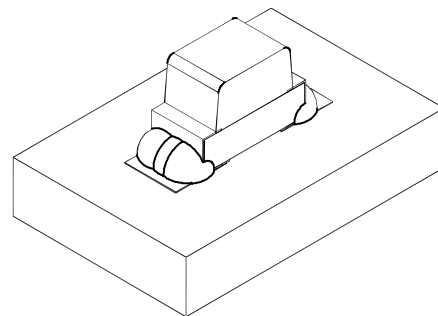
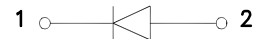
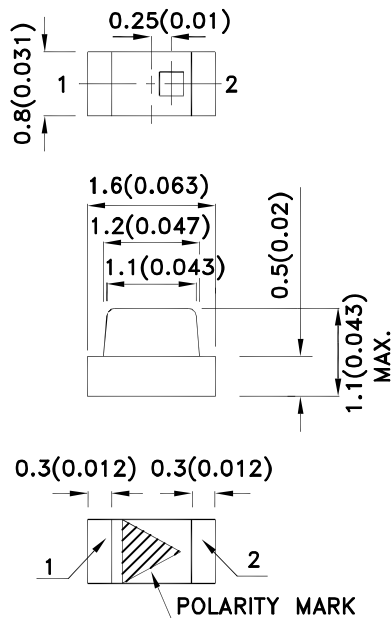
### Features

- 1.6mmX0.8mm SMT LED, 1.1mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### Description

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

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$  unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior 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]<br>@ 20mA |      | Viewing<br>Angle [1] |
|----------------|-------------------------------|-------------|------------------------|------|----------------------|
|                |                               |             | Min.                   | Typ. | 2θ1/2                |
| KP-1608SYCK-J3 | Super Bright Yellow (AlGaInP) | Water Clear | 200                    | 320  | 120°                 |

Notes:

1.  $\theta_{1/2}$  is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.
3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

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

| Symbol                | Parameter                | Device              | Typ. | Max. | Units | Test Conditions            |
|-----------------------|--------------------------|---------------------|------|------|-------|----------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Super Bright Yellow | 590  |      | nm    | I <sub>F</sub> =20mA       |
| $\lambda_D$ [1]       | Dominant Wavelength      | Super Bright Yellow | 590  |      | nm    | I <sub>F</sub> =20mA       |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Yellow | 20   |      | nm    | I <sub>F</sub> =20mA       |
| C                     | Capacitance              | Super Bright Yellow | 45   |      | pF    | V <sub>F</sub> =0V; f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Super Bright Yellow | 2    | 2.5  | V     | I <sub>F</sub> =20mA       |
| I <sub>R</sub>        | Reverse Current          | Super Bright Yellow |      | 10   | uA    | V <sub>R</sub> =5V         |

Notes:

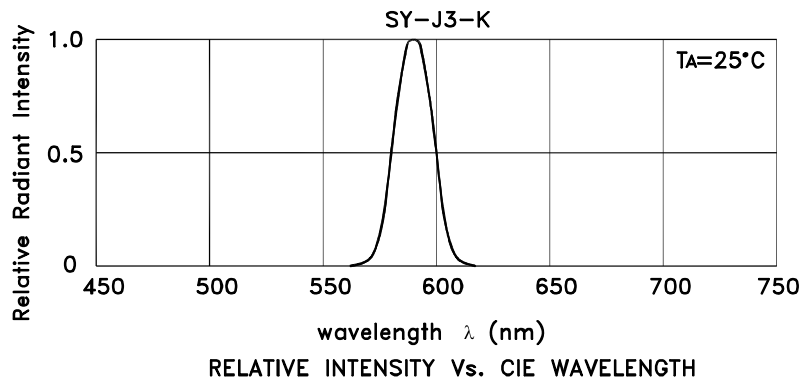
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

## Absolute Maximum Ratings at TA=25°C

| Parameter                | Super Bright 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      |       |

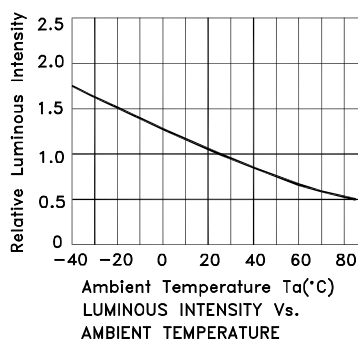
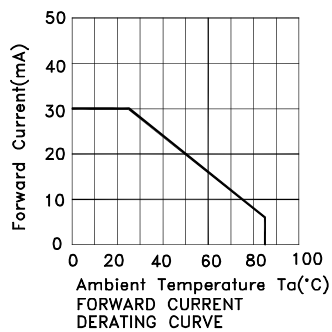
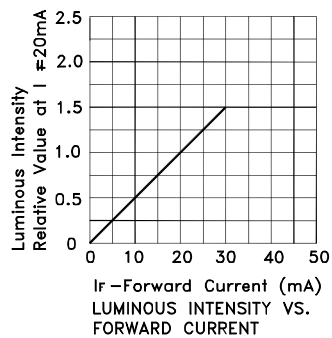
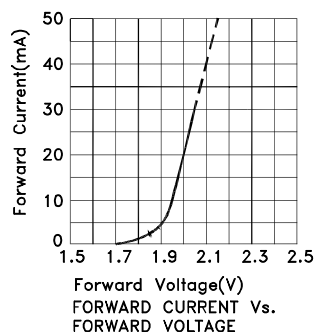
Note:

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



## Super Bright Yellow

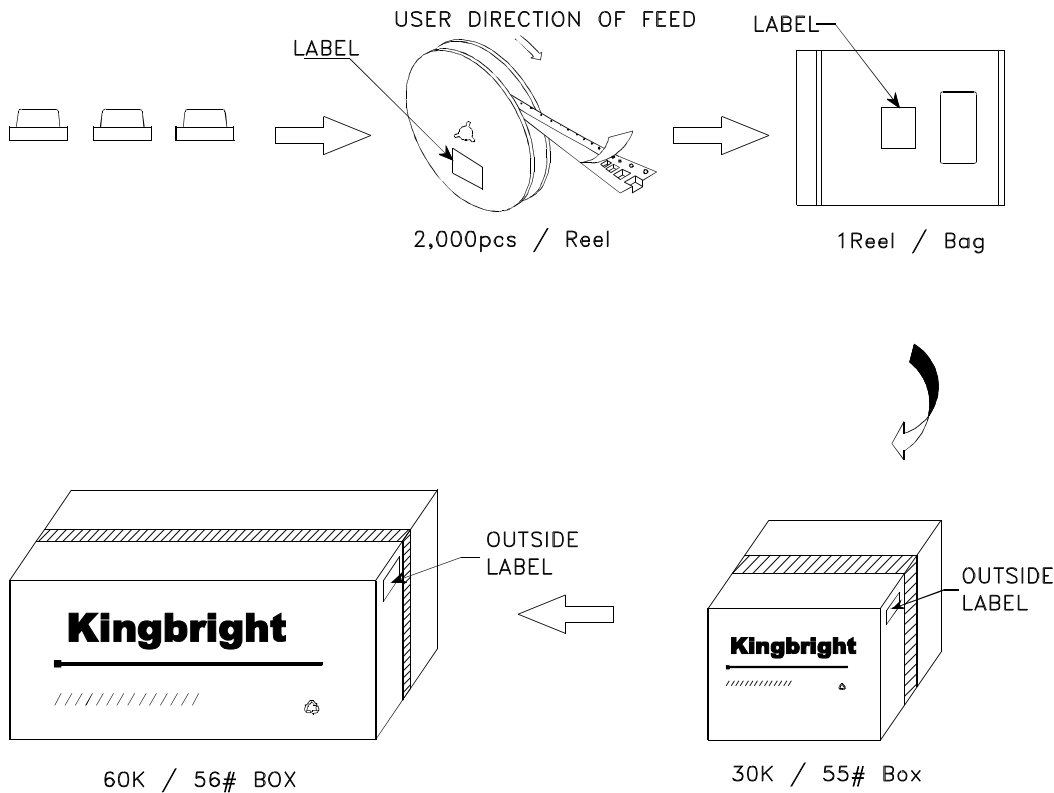
## KP-1608SYCK-J3





PACKING & LABEL SPECIFICATIONS

KP-1608SYCK-J3



|                                                                                                              |      |                                          |
|--------------------------------------------------------------------------------------------------------------|------|------------------------------------------|
| <b>Kingbright</b>                                                                                            |      |                                          |
| P/NO: KP-1608XXX                                                                                             |      |                                          |
| QTY: 2,000 pcs                                                                                               | Q.C. | <div>Q C<br/>xx xx xxxx<br/>PASSED</div> |
| S/N: XXXX                                                                                                    |      |                                          |
| CODE: XXX                                                                                                    |      |                                          |
| LOT NO:                                                                                                      |      |                                          |
| <br>XXXXXXXXXXXXXXXXXXXX |      |                                          |
| RoHS Compliant                                                                                               |      |                                          |

Detailed application notes are listed on our website.  
[http://www.kingbright.com/application\\_notes](http://www.kingbright.com/application_notes)