

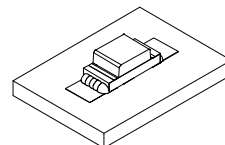
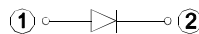
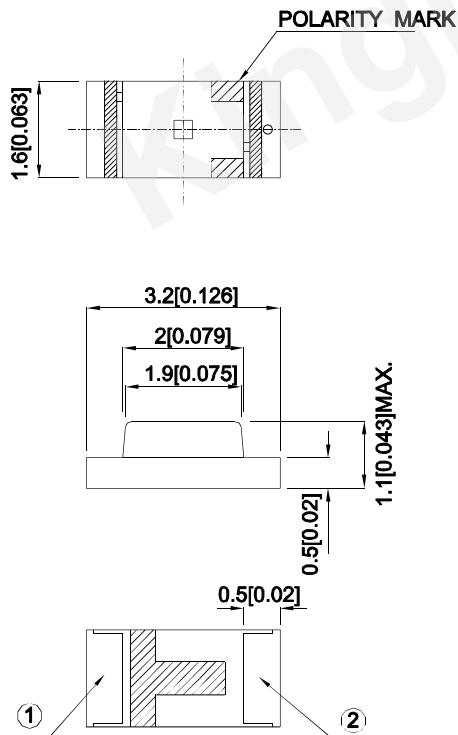
### Features

- 3.2mmx1.6mm SMD LED, 1.1mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### Description

The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$  (0.0079") 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.    | Emitting Color (Material)     | Lens Type   | Iv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|-------------|-------------------------------|-------------|------------------------|------|----------------------|
|             |                               |             | Min.                   | Typ. | 2θ1/2                |
| KP-3216SYCK | Super Bright Yellow (AlGaInP) | Water Clear | 80                     | 150  | 140°                 |

### Notes:

1. θ1/2 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 CIE127-2007 standards.

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

| Symbol | Parameter                | Emitting Color      | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|---------------------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | Super Bright Yellow | 590  |      | nm    | IF=20mA         |
| λD [1] | Dominant Wavelength      | Super Bright Yellow | 590  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Super Bright Yellow | 20   |      | nm    | IF=20mA         |
| C      | Capacitance              | Super Bright Yellow | 20   |      | pF    | VF=0V;f=1MHz    |
| VF [2] | Forward Voltage          | Super Bright Yellow | 2    | 2.5  | V     | IF=20mA         |
| IR     | Reverse Current          | Super Bright Yellow |      | 10   | uA    | VR=5V           |

### Notes:

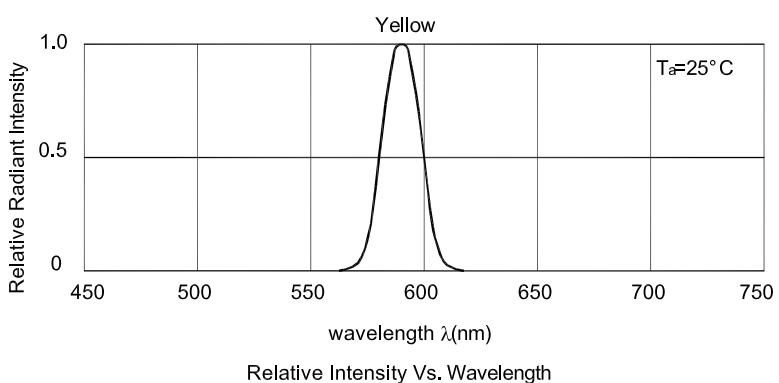
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

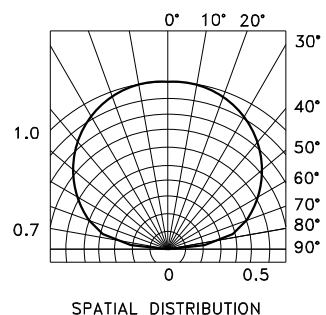
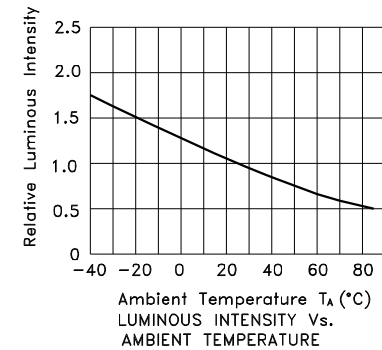
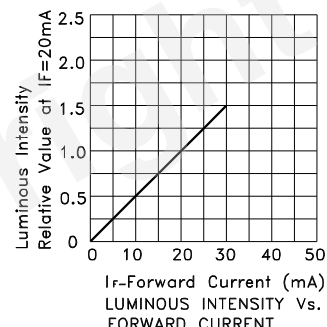
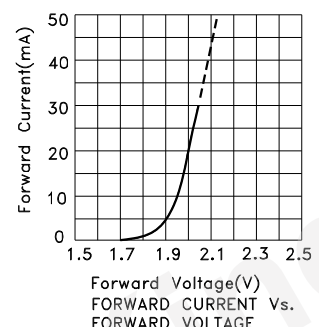
| Parameter                | Values         | Units |
|--------------------------|----------------|-------|
| Power dissipation        | 75             | mW    |
| DC Forward Current       | 30             | mA    |
| Peak Forward Current [1] | 175            | mA    |
| Reverse Voltage          | 5              | V     |
| Operating Temperature    | -40°C To +85°C |       |
| Storage Temperature      | -40°C To +85°C |       |

### Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



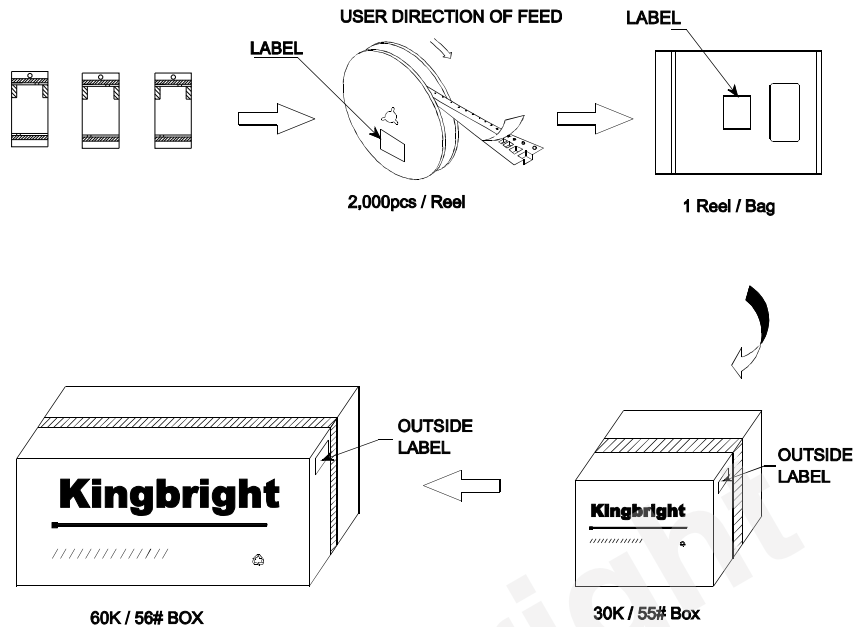
Super Bright Yellow KP-3216SYCK






## PACKING & LABEL SPECIFICATIONS

KP-3216SYCK



|   |      |         |
|---|------|---------|
| <b>Kingbright</b>   |      |         |
| P/NO: KP-3216XXX  |      |         |
| QTY: 2,000 pcs  | Q.C. | QC      |
| S/N: XXXX   |      | XXXXXXX |
| CODE: XXX   |      | PASSED  |
| LOT NO:   |      |         |
|  |      |         |
| RoHS Compliant  |      |         |

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