

Part Number: APTD1608SYCK

Super Bright Yellow

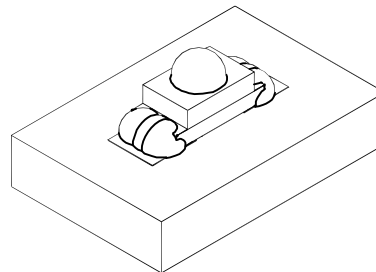
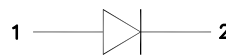
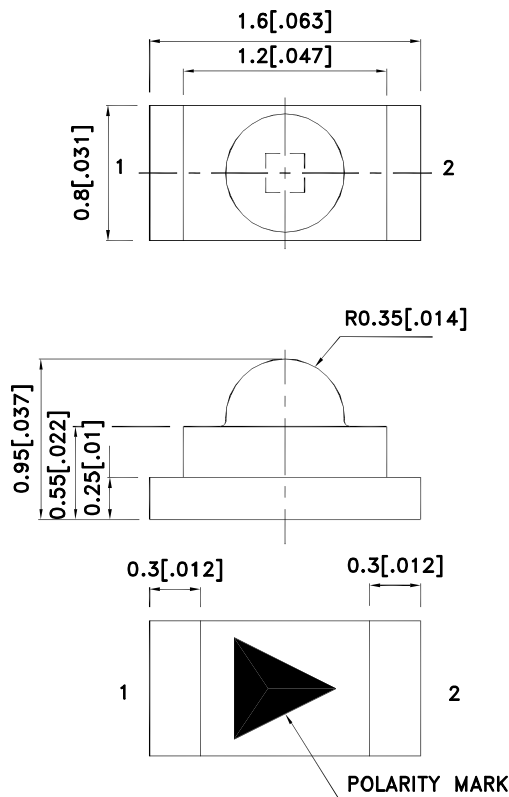
### Features

- 1.6mmX0.8mm SMT LED, 0.95mm 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 made with AlGaInP (on GaAs substrate) light emitting diode chip.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.15(0.006")$  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                |
| APTD1608SYCK | Super Bright Yellow (AlGaInP) | Water Clear | 200                    | 450  | 60°                  |

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 the CIE127-2007 compliant national standards.

## Electrical / Optical Characteristics at TA=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> [1] | Dominant Wavelength      | Super Bright Yellow | 590  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub>  | Spectral Line Half-width | Super Bright Yellow | 20   |      | nm    | I <sub>F</sub> =20mA      |
| C                  | Capacitance              | Super Bright Yellow | 20   |      | 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

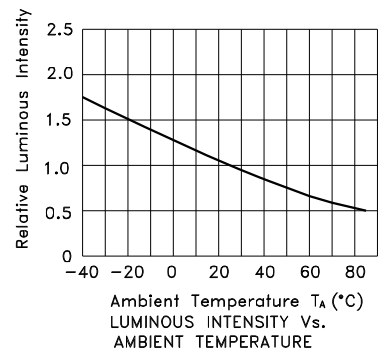
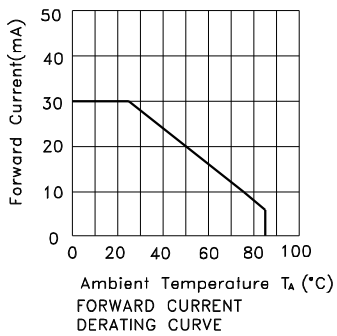
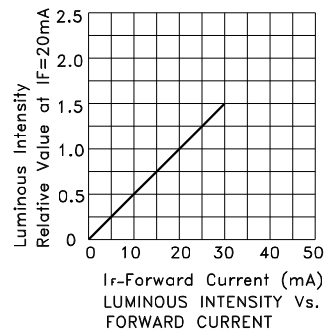
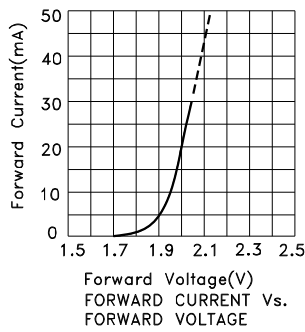
| Parameter                | Super Bright Yellow | Units |
|--------------------------|---------------------|-------|
| Power dissipation        | 75                  | mW    |
| DC Forward Current       | 30                  | mA    |
| Peak Forward Current [1] | 175                 | mA    |
| Reverse 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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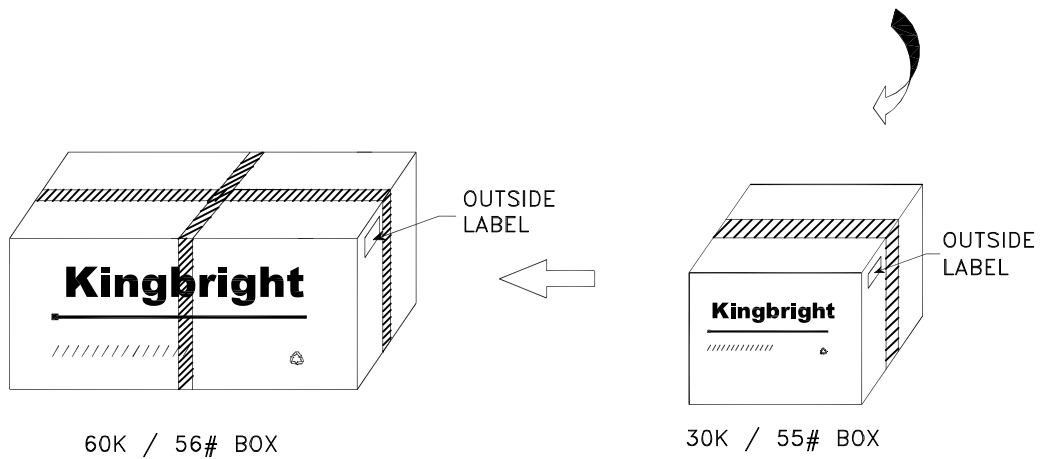
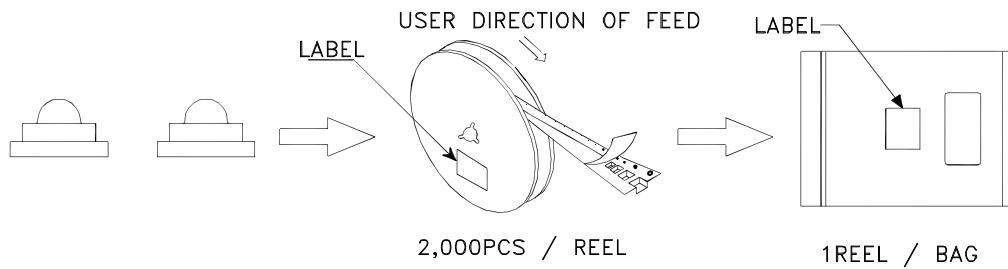





# Kingbright

## PACKING & LABEL SPECIFICATIONS

## APTD1608SYCK



|  |  |
|--|--|
| <b>Kingbright</b>  |  |
| P/NO: APTD1608xxx  |  |
| QTY: 2,000 pcs   | Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C<br/>XX XX XXXX<br/>PASSED</span> |
| S/N: XXXX  |  |
| CODE: XXX  |  |
| LOT NO:  |  |
| <br>xxxxxxxxxxxxxxxxxxxxxxxxxxxx |  |
| RoHS Compliant   |  |

All design applications should refer to Kingbright application notes available at <http://www.KingbrightUSA.com/ApplicationNotes>