

Part Number: APBD3224SYKCGKC-F01

Super Bright Yellow  
Green

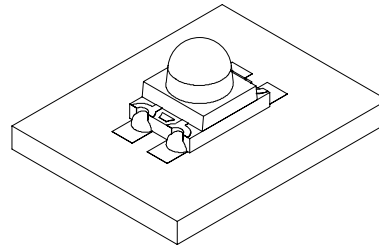
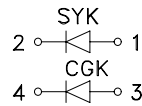
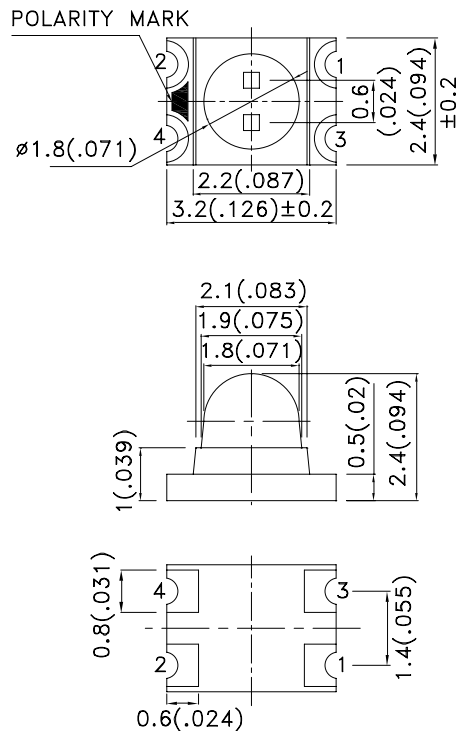
### Features

- 3.2x2.4mm SMT LED, 2.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

### Description

The Super Bright Yellow device is made with DH InGaAlP (on GaAs substrate) light emitting diode chip.  
The Green source color devices are made with InGaAlP on GaAs substrate Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.1(0.004") unless otherwise noted.
3. Specifications are subject to change without 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                |
| APBD3224SYKCGKC-F01 | Super Bright Yellow (InGaAlP) | WATER CLEAR | 110                    | 500  | 20°                  |
|                     | Green (InGaAlP)               |             | 110                    | 300  |                      |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

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

| Symbol | Parameter                | Device                       | Typ.       | Max.       | Units | Test Conditions |
|--------|--------------------------|------------------------------|------------|------------|-------|-----------------|
| λpeak  | Peak Wavelength          | Super Bright Yellow<br>Green | 590<br>574 |            | nm    | IF=20mA         |
| λD [1] | Dominant Wavelength      | Super Bright Yellow<br>Green | 590<br>570 |            | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Super Bright Yellow<br>Green | 20<br>20   |            | nm    | IF=20mA         |
| C      | Capacitance              | Super Bright Yellow<br>Green | 20<br>15   |            | pF    | VF=0V;f=1MHz    |
| VF [2] | Forward Voltage          | Super Bright Yellow<br>Green | 2<br>2.1   | 2.5<br>2.5 | V     | IF=20mA         |
| IR     | Reverse Current          | Super Bright Yellow<br>Green |            | 10<br>10   | uA    | VR = 5V         |

Notes:

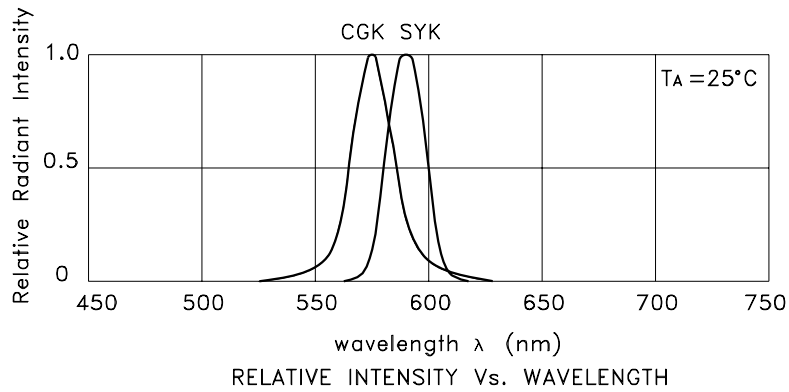
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

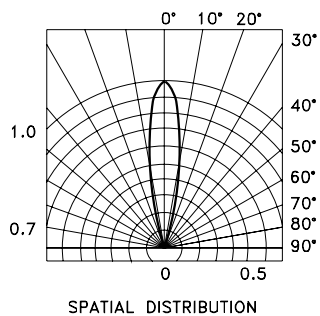
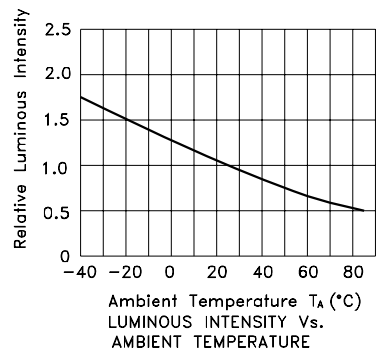
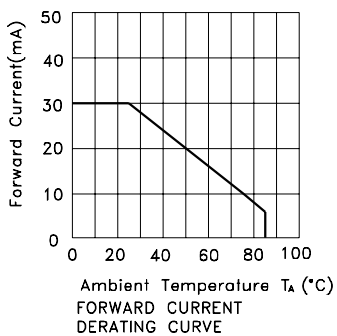
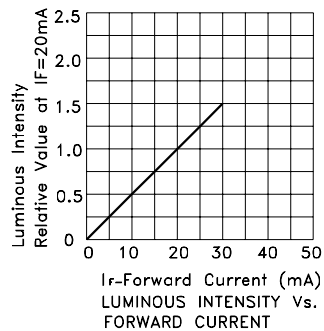
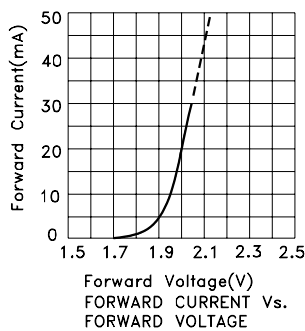
| Parameter                | Super Bright Yellow | Green | Units |
|--------------------------|---------------------|-------|-------|
| Power dissipation        | 75                  | 75    | mW    |
| DC Forward Current       | 30                  | 30    | mA    |
| Peak Forward Current [1] | 175                 | 150   | 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.

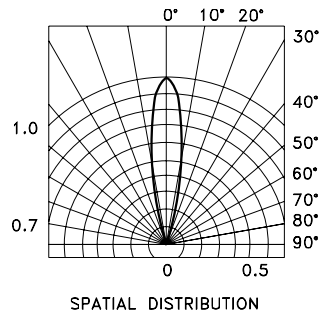
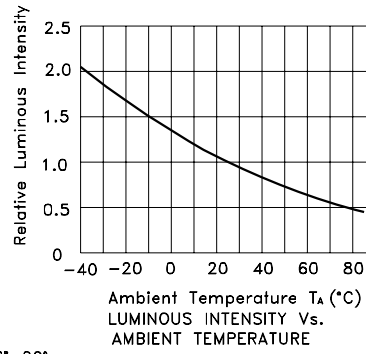
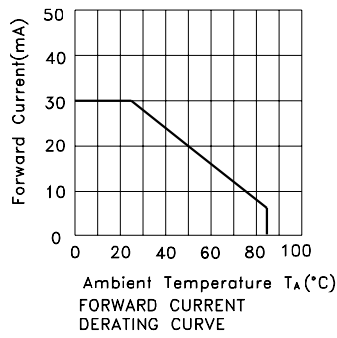
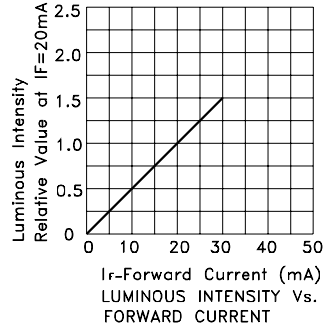
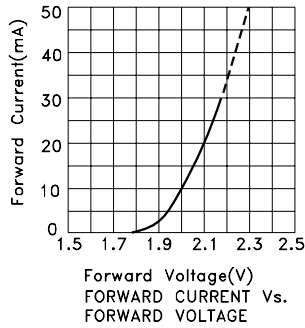


**APBD3224SYKCGKC-F01**  
**Super Bright Yellow**



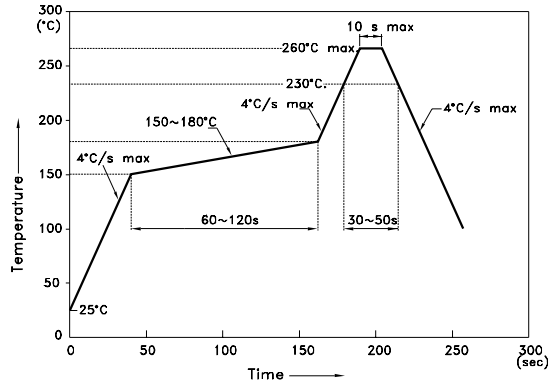
# Kingbright

## Green



## APBD3224SYKCGKC-F01

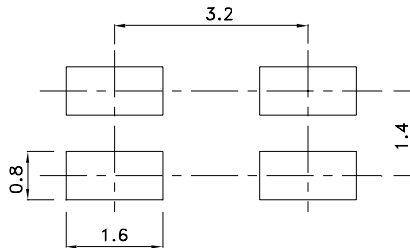
Reflow Soldering Profile For Lead-free SMT Process.



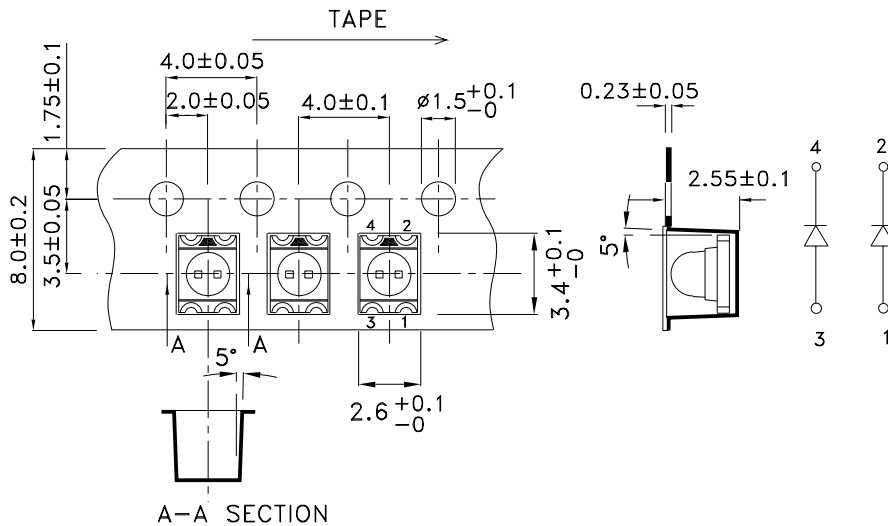
**NOTES:**

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; Tolerance: ± 0.1)



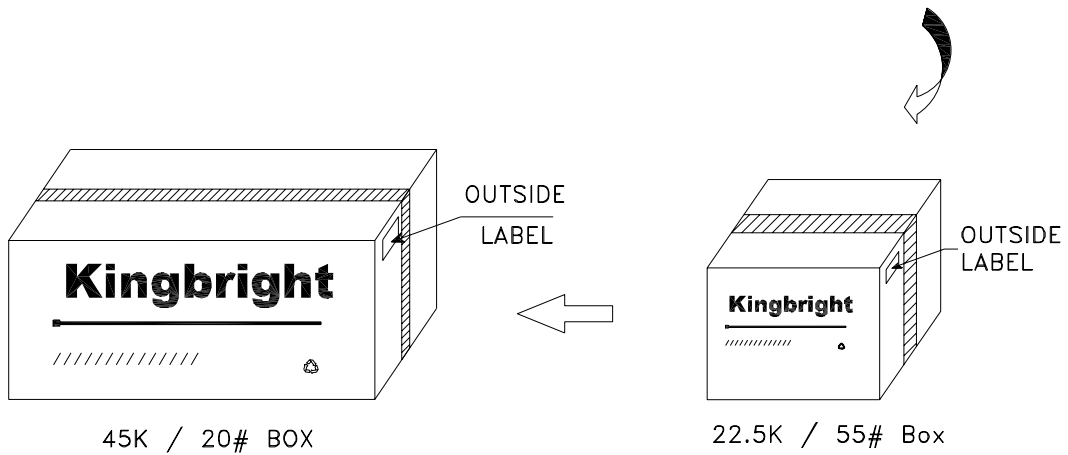
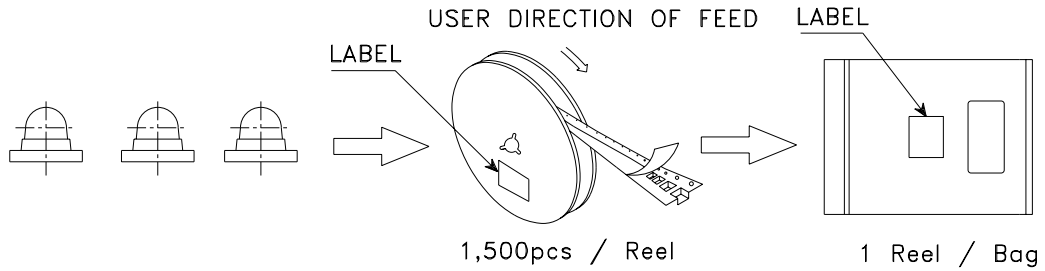
### Tape Specifications (Units : mm)




# Kingbright

## PACKING & LABEL SPECIFICATIONS

APBD3224SYKCGKC-F01



|  |  |
|--|--|
| <h1>Kingbright</h1>  |  |
| P/NO: APBD3224xxx  |  |
| QTY: 1,500 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>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx |  |
| MADE IN CHINA  | RoHS Compliant   |