

Part Number: KPBD-3224SYKCGKC

Super Bright Yellow  
Green

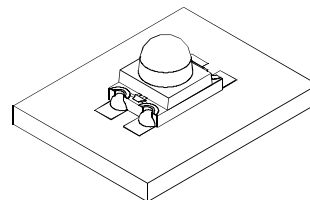
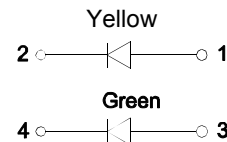
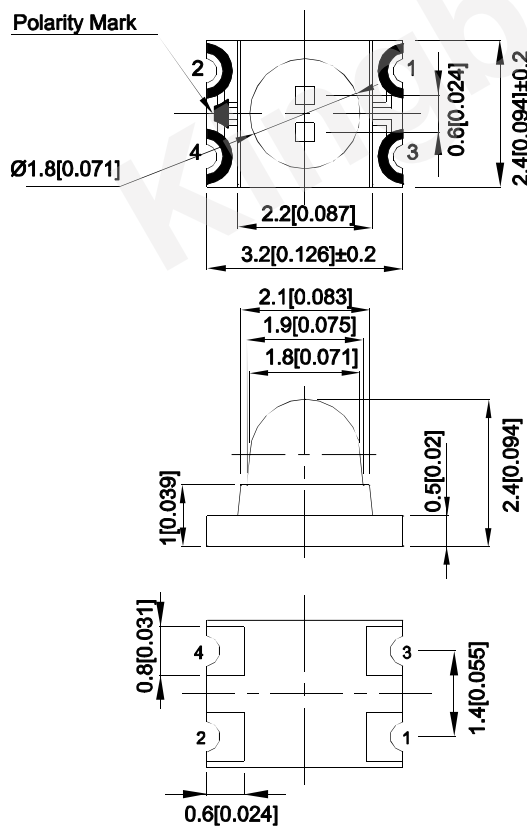
### Features

- 3.2x2.4mm SMD LED, 2.4mm thickness.
- Low power consumption.
- Ideal for backlight and indicator.
- Package : 1500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### Descriptions

- The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.
- The Green source color devices are made with AlGaInP 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. 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] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KPBD-3224SYKCGKC	Super Bright Yellow (AlGaInP)	Water Clear	400	800	20°
	Green (AlGaInP)		80	280	

### 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 Green	590 574		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow Green	590 570		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow Green	20 20		nm	IF=20mA
C	Capacitance	Super Bright Yellow Green	20 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow Green	2 2.1	2.5 2.5	V	IF=20mA
IR	Reverse Current	Super Bright Yellow Green		10 10	uA	VR = 5V

### Notes:

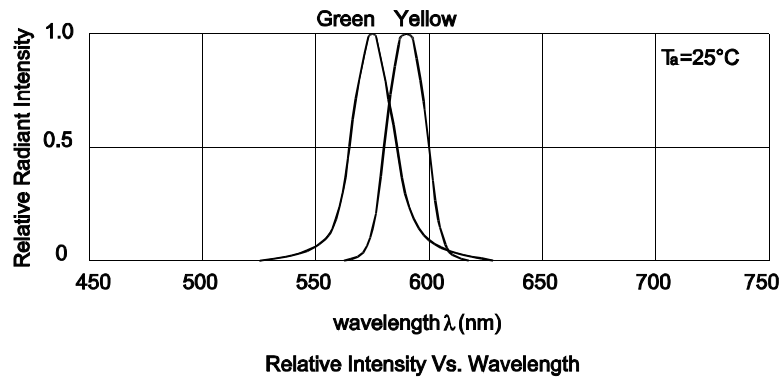
- 1.Wavelength: +/-1nm.
- 2.Forward Voltage: +/-0.1V.
- 3.Wavelength value is traceable to CIE127-2007 standards.
- 4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

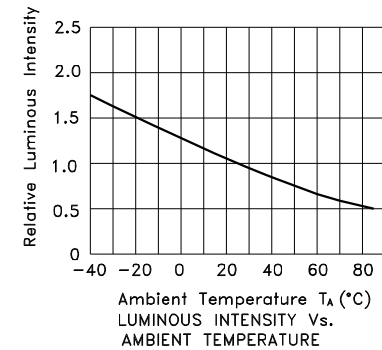
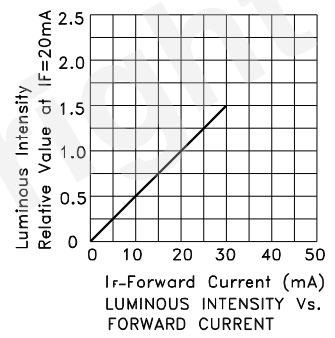
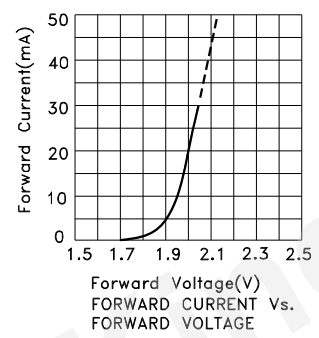
Parameter	Super Bright Yellow	Green	Units
Power dissipation	75	75	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	175	150	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

### Notes:

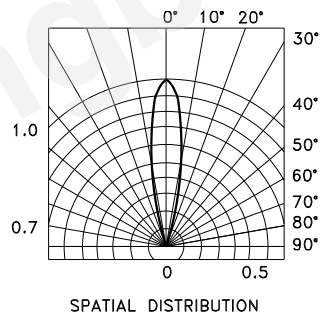
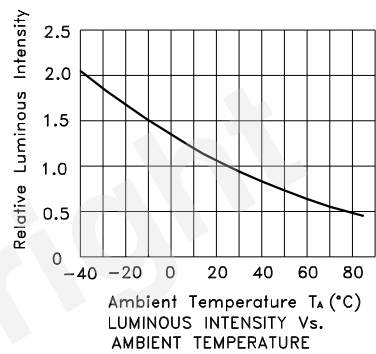
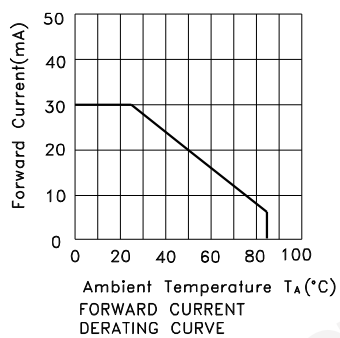
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



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Super Bright Yellow



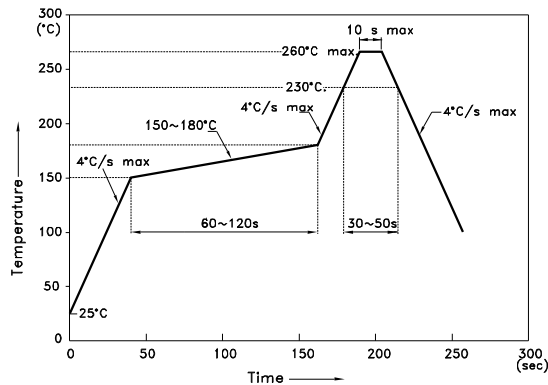
## Green



**KPBD-3224SYKCGKC**

**Reflow soldering is recommended and the soldering profile is shown below.  
Other soldering methods are not recommended as they might cause damage to the product.**

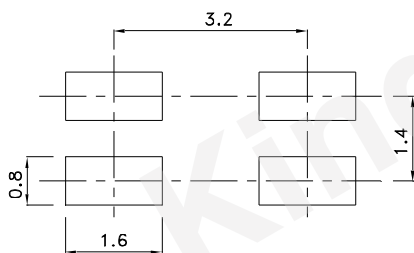
### Reflow Soldering Profile For Lead-free SMT Process.



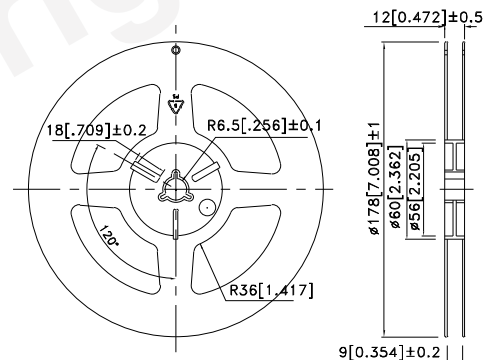
NOTES:

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.

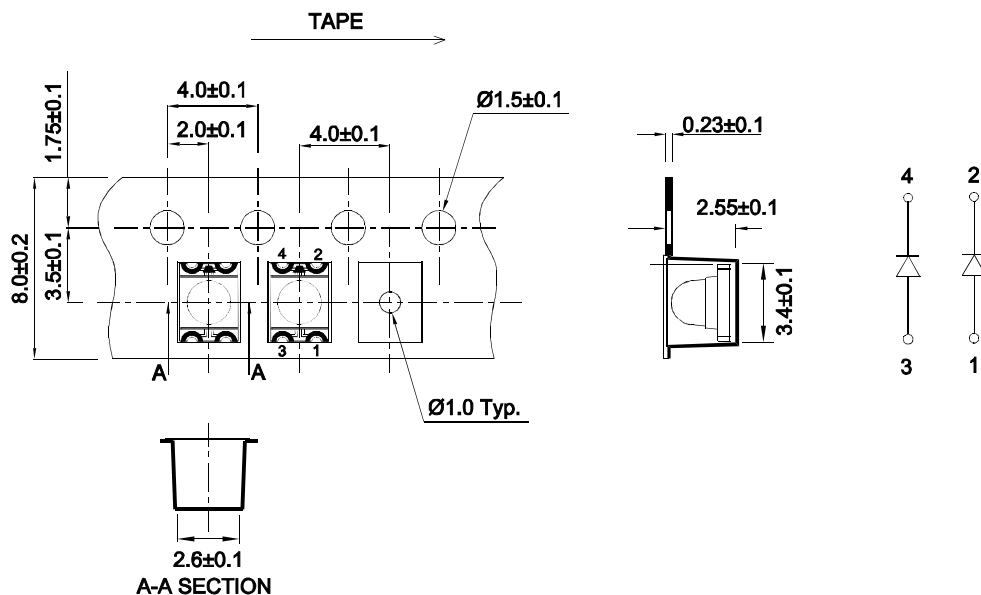
**Recommended Soldering Pattern**  
(Units : mm; Tolerance:  $\pm 0.1$ )



## Reel Dimension

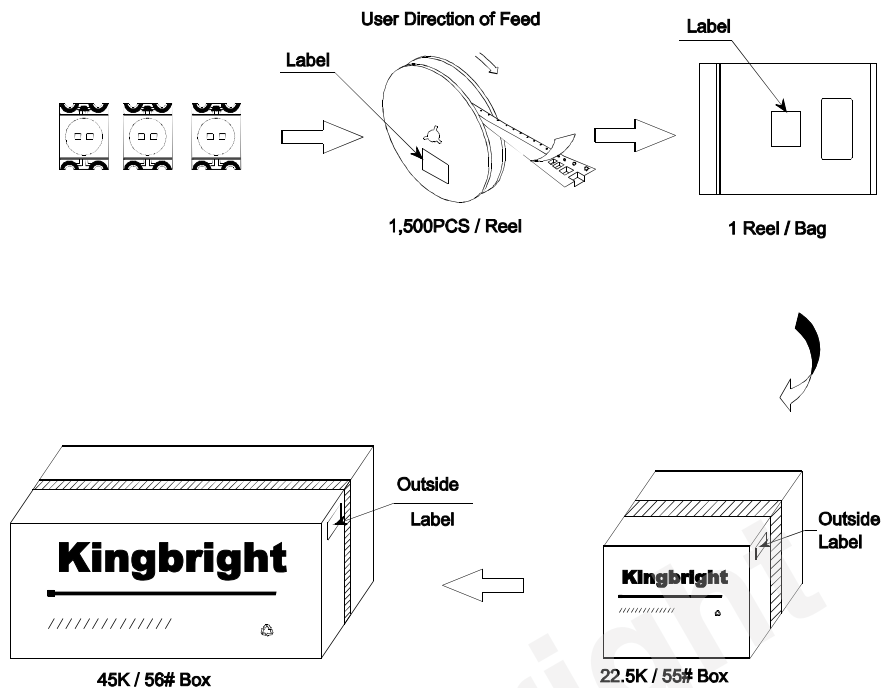


### Tape Dimensions (Units : mm)



## PACKING & LABEL SPECIFICATIONS

KPBD-3224SYKCGKC



<b>Kingbright</b>		
P/NO: KPBD-3224xxx		
QTY: 1,500 PCS	Q.C.	QC
S/N: XXXX		xxxxxxx PASSED
CODE: XXX		
LOT NO:		
RoHS Compliant		

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