



## Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
KCPSA04-107	Super Bright Yellow (AlGaInP)	White Diffused	21000	46000	Common Anode, Rt. Hand Decimal.
			*5600	*12000	

### Notes:

1. Luminous intensity/ luminous Flux: +/-15%.

\* 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	20		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Super Bright Yellow	2.0	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.

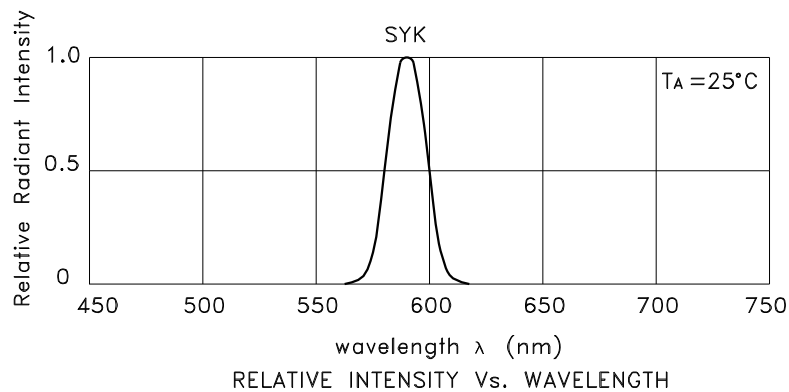
3.Wavelength value is traceable to the CIE127-2007 compliant national standards.

## 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 / Storage Temperature	-40°C To +85°C	

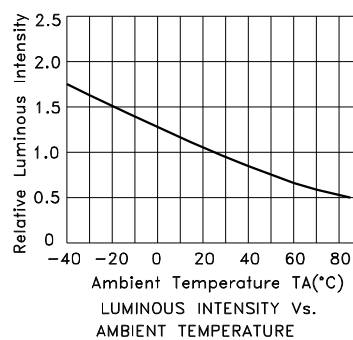
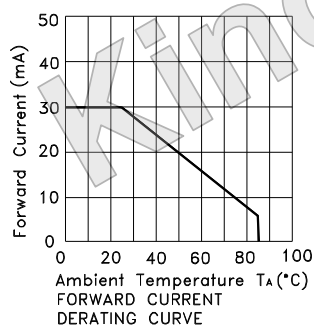
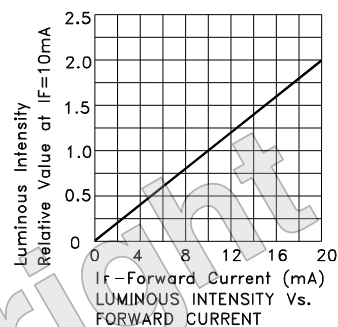
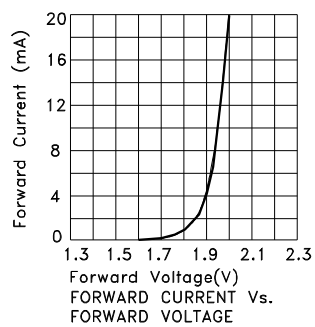
### Note:

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



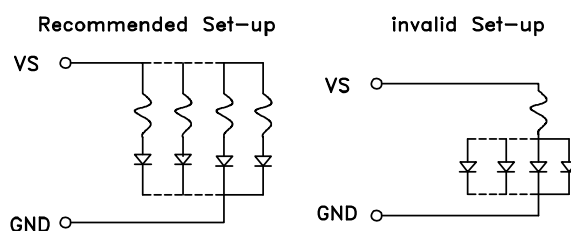
## Super Bright Yellow

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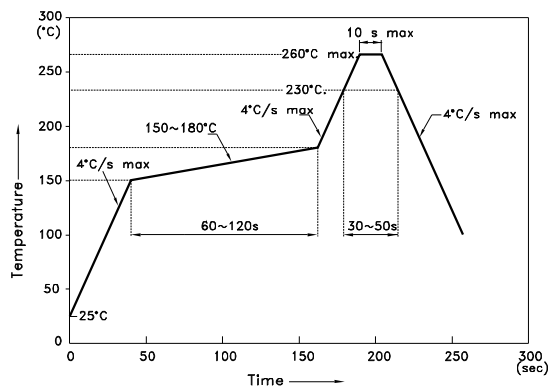
## CIRCUIT DESIGN NOTES

1. Protective current-limiting resistors may be necessary to operate the Displays.
2. LEDs mounted in parallel should each be placed in series with its own current-limiting resistor.



## KCPSA04-107

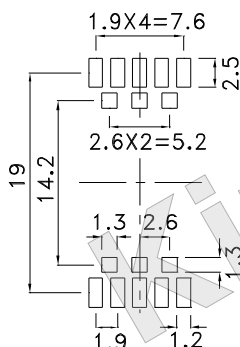
### Reflow Soldering Profile For Lead-free SMT Process.



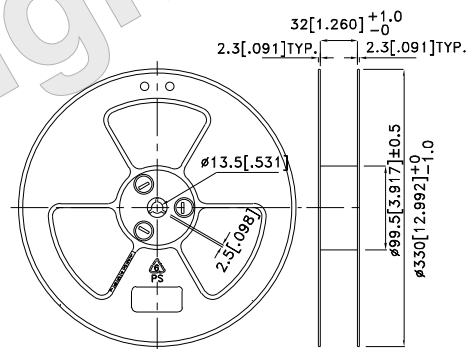
#### NOTES:

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.

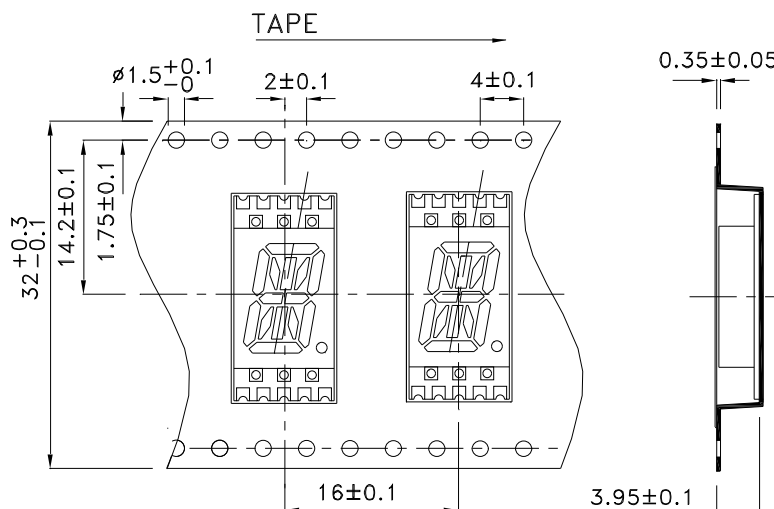
### Recommended Soldering Pattern (Units : mm; Tolerance: $\pm 0.15$ )



### Reel Dimension

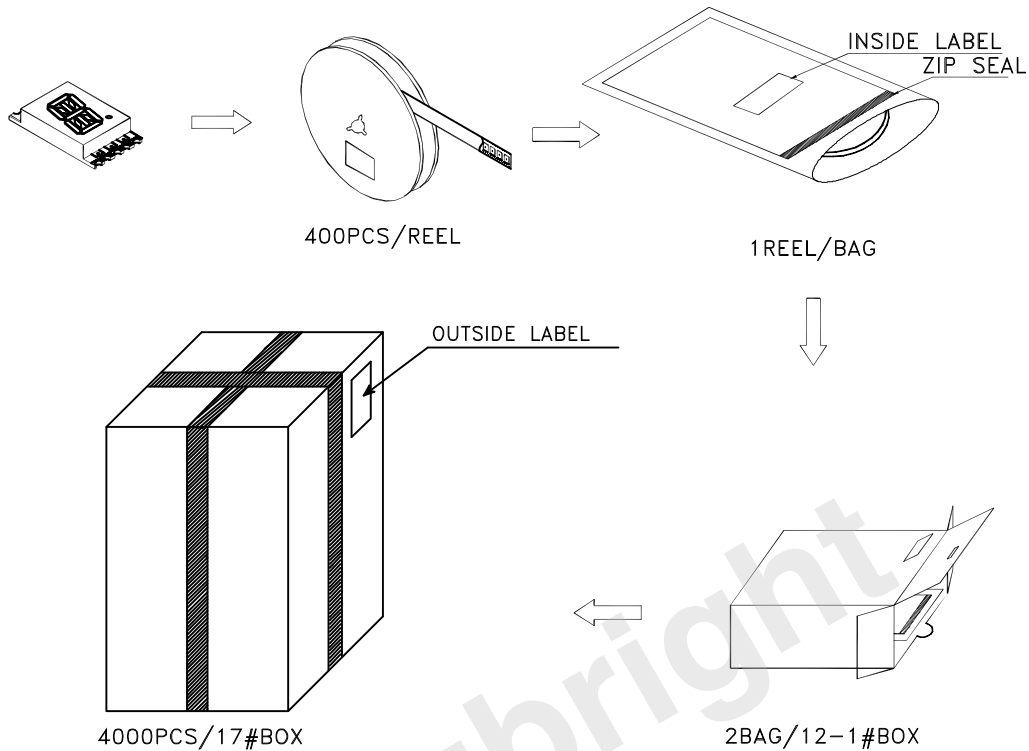


### Tape Specifications (Units : mm)

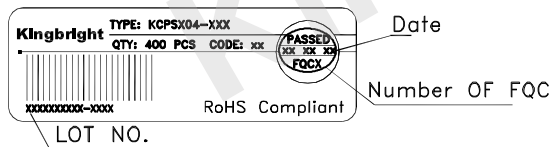


## PACKING & LABEL SPECIFICATIONS

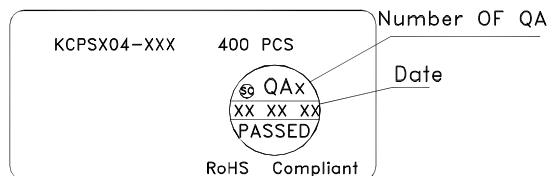
## KCPSA04-107



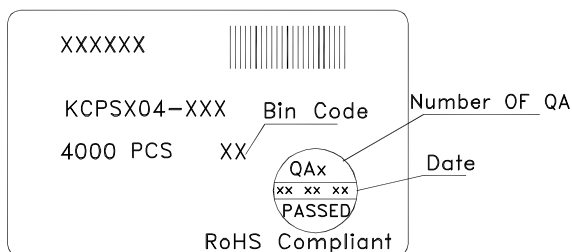
Inside Label On Tape



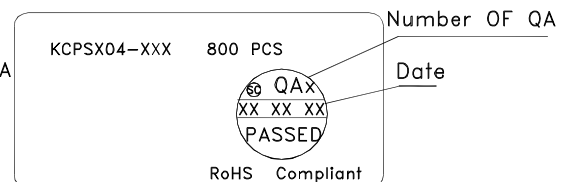
Outside Label On Bag



Outside Label On 17#Box



Outside Label On 12-1#Box



Detailed application notes are listed on our website.

[http://www.kingbright.com/application\\_notes](http://www.kingbright.com/application_notes)