

### 3.5x2.8mm SURFACE MOUNT LED LAMP

Part Number: KA-3528LYT Yellow

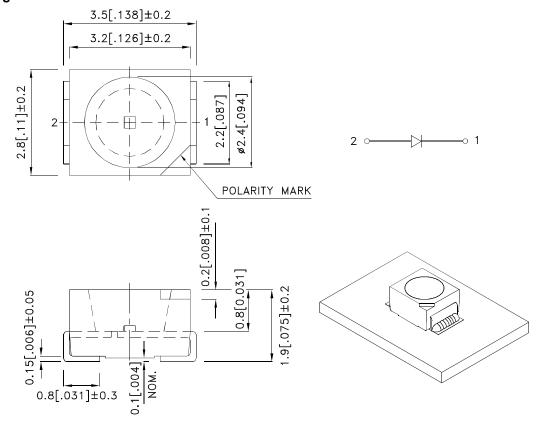
### **Features**

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 4.
- Low current IF=2mA operating.
- RoHS compliant.

## Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

## **Package Dimensions**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.

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## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Тур.	201/2
KA-3528LYT	Yellow (GaAsP/GaP)	Yellow Transparent	0.5	1	120°

### Notes:

- 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- 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	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Yellow	590		nm	IF=2mA
λD [1]	Dominant Wavelength	Yellow	588		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Yellow	35		nm	IF=2mA
С	Capacitance	Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Yellow	1.85	2.5	V	IF=2mA
lr	Reverse Current	Yellow		10	uA	VR=5V

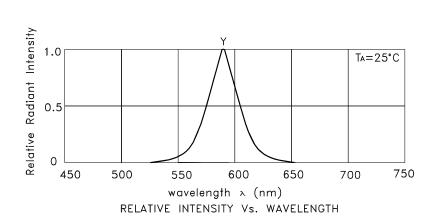
- Notes: 1.Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

## Absolute Maximum Ratings at TA=25°C

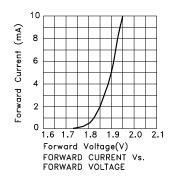
Parameter	Yellow	Units	
Power dissipation	Power dissipation 75		
DC Forward Current	30	mA	
Peak Forward Current [1]	140	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

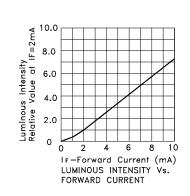
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

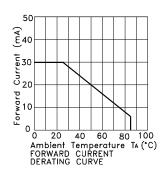
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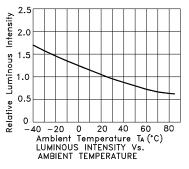


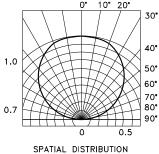
Yellow KA-3528LYT











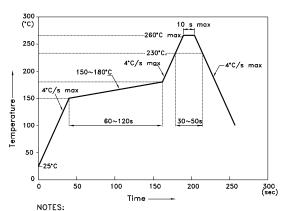
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### **KA-3528LYT**

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.



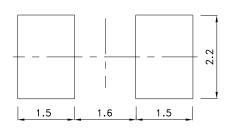
- NOTES:

  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.

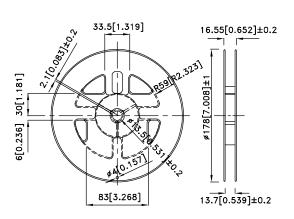
  3.Number of reflow process shall be 2 times or less.

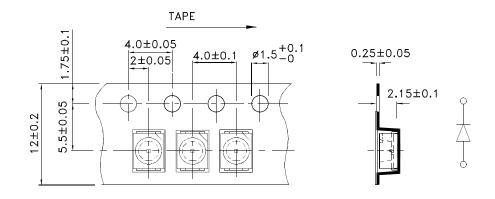
## **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



# **Tape Dimensions** (Units: mm)

## **Reel Dimension**

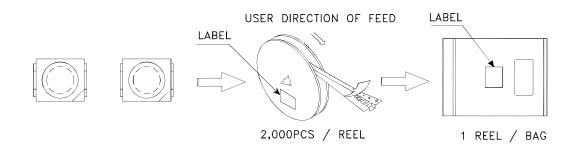


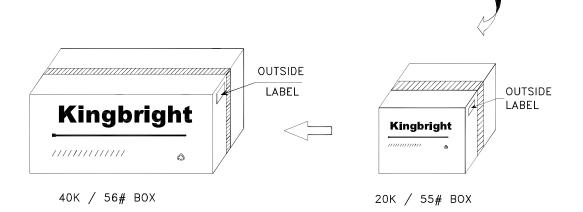


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## **PACKING & LABEL SPECIFICATIONS**









Detailed application notes are listed on our website. http://www.kingbright.com/application notes

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