

#### 3.0x2.5mm SURFACE MOUNT LED LAMP

Part Number: APBL3025EYC-F01

High Efficiency Red

#### **Features**

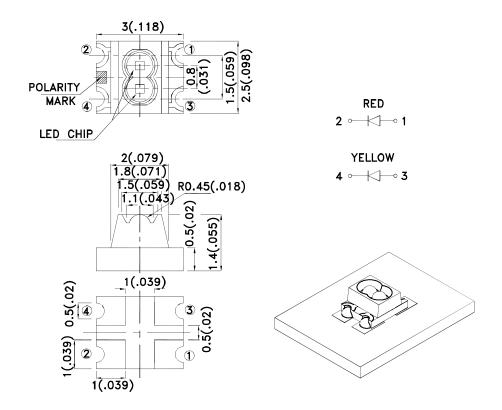
- 3.0mmx2.5mm SMT LED, 1.4mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for back light and indicator.
- Various colors and lens types available.
- Inner lens type.
- Moisture sensitivity level : level 3.
- Package: 2000pcs / reel.
- RoHS compliant.

### Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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 ±0.2(0.008") 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.

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### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,,	Min.	Тур.	201/2
APBL3025EYC-F01	High Efficiency Red (GaAsP/GaP)	Water Clear	12	20	100°
	Yellow (GaAsP/GaP)	Water Clear	6	15	

- Notes:
  1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
  2. Luminous intensity/ luminous Flux: +/-15%.

# Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Yellow	627 590		nm	IF=20mA
λD [1]	Dominant Wavelength	High Efficiency Red Yellow	625 588		nm	I==20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Yellow	45 35		nm	I==20mA
С	Capacitance	High Efficiency Red Yellow	15 20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red Yellow	2 2.1	2.5 2.5	V	I==20mA
lR	Reverse Current	High Efficiency Red Yellow		10 10	uA	V <sub>R</sub> = 5V

#### Notes:

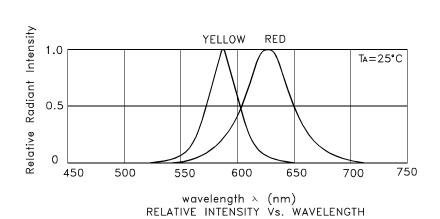
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

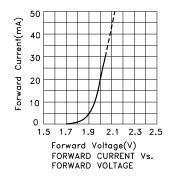
Parameter	High Efficiency Red	Yellow	Units		
Power dissipation	75	75	mW		
DC Forward Current	30	30	mA		
Peak Forward Current [1]	160	140	mA		
Reverse Voltage		V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

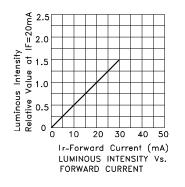
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

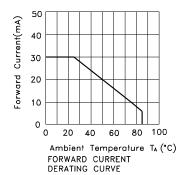
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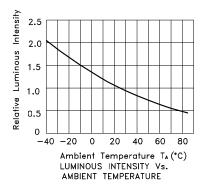


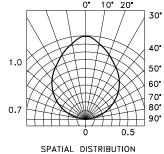
## APBL3025EYC-F01 High Efficiency Red









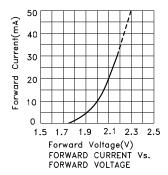


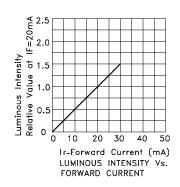
STATIAL DISTRIBUTION

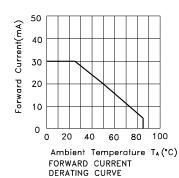
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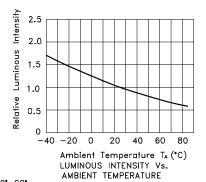
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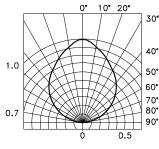
### Yellow











SPATIAL DISTRIBUTION

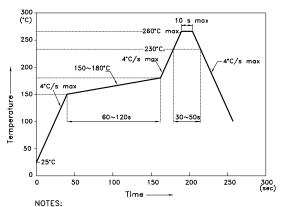
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#### APBL3025EYC-F01

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.



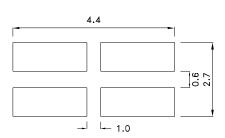
- NOTES:

  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.

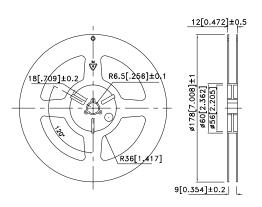
  3.Number of reflow process shall be 2 times or less.

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



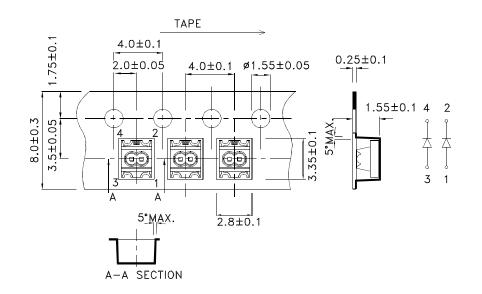
## **Tape Dimensions** (Units: mm)

### **Reel Dimension**



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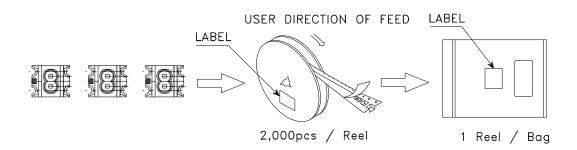
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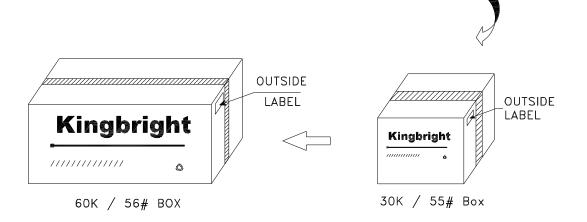


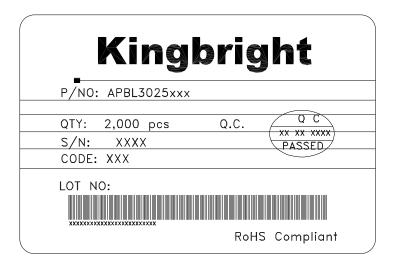
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# **PACKING & LABEL SPECIFICATIONS**

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