

Part Number: APBL3025EYC-F01

High Efficiency Red
Yellow

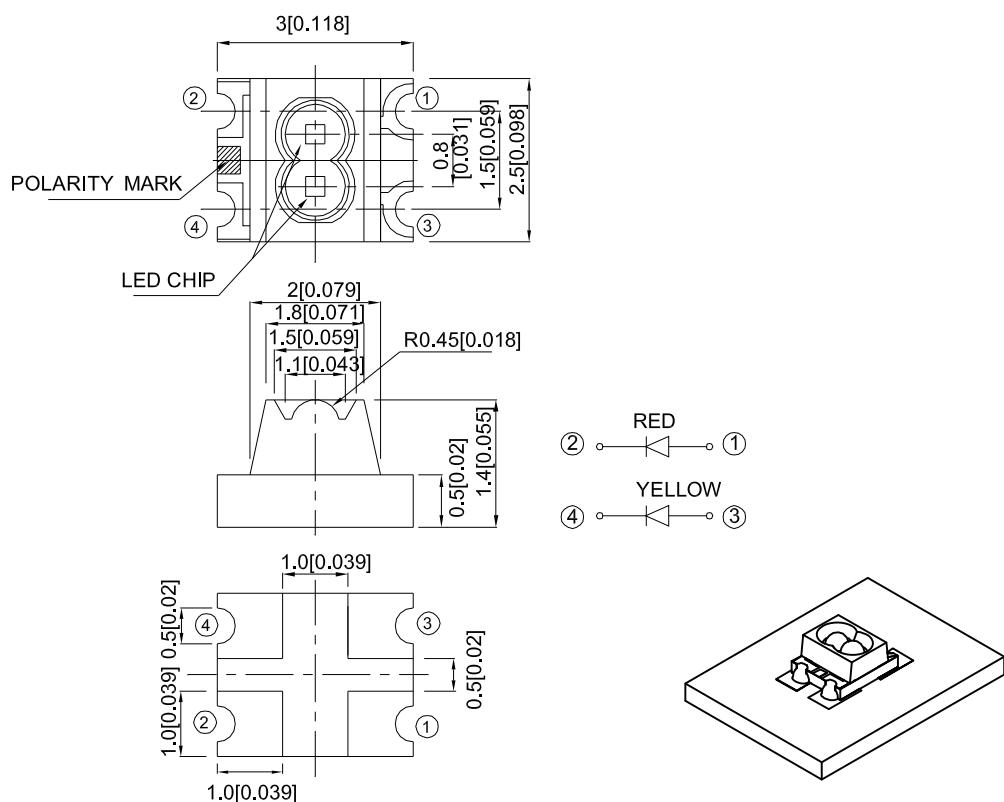
Features

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

Descriptions

- 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



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008")$ 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.



Selection Guide

Part No.	Dice	Lens Type	I _v (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	
APBL3025EYC-F01	High Efficiency Red (GaAsP/GaP)	Water Clear	12	20	100°
			*8	*15	
	Yellow (GaAsP/GaP)		5	15	
			*5	*15	

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%.

* 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
λpeak	Peak Wavelength	High Efficiency Red Yellow	627 590		nm	I _F =20mA
λD [1]	Dominant Wavelength	High Efficiency Red Yellow	617 588		nm	I _F =20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Yellow	45 35		nm	I _F =20mA
C	Capacitance	High Efficiency Red Yellow	15 20		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	High Efficiency Red Yellow	2 2.1	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	High Efficiency Red Yellow		10 10	uA	V _R = 5V

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

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

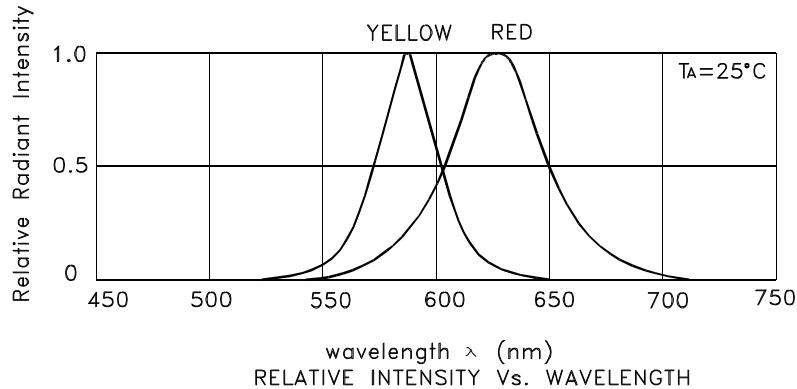
4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

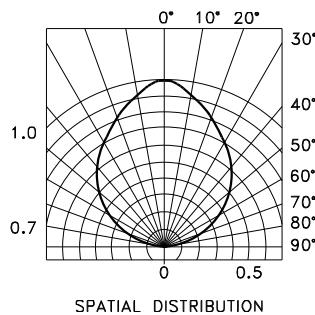
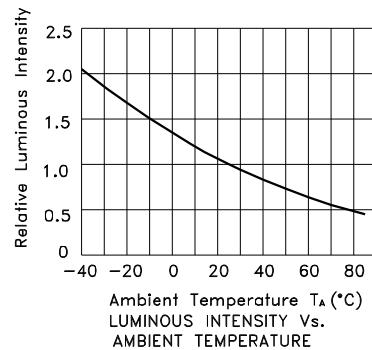
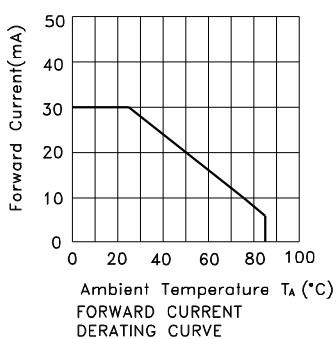
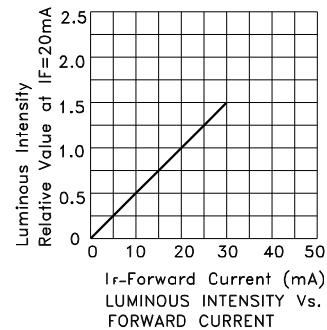
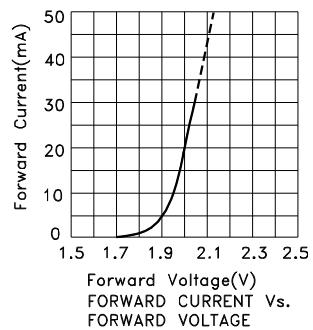
Parameter	High Efficiency Red	Yellow	Units
Power dissipation	75	75	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

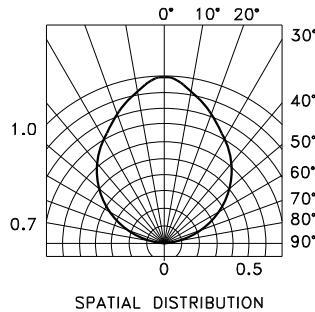
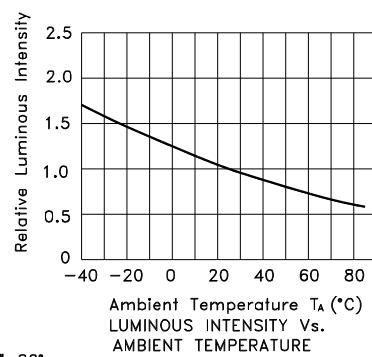
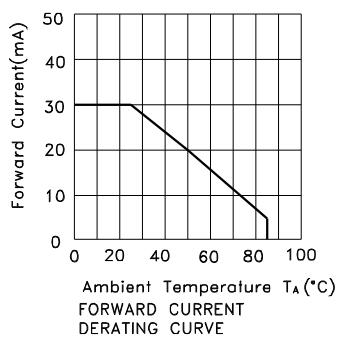
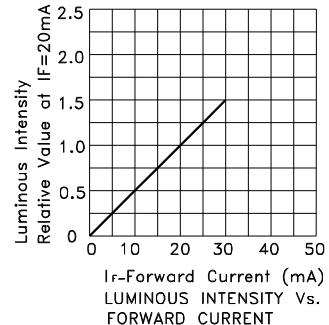
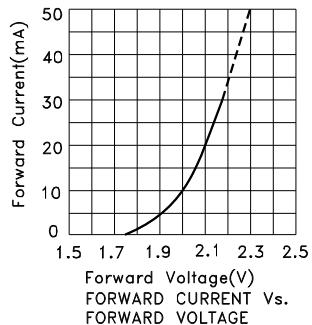
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



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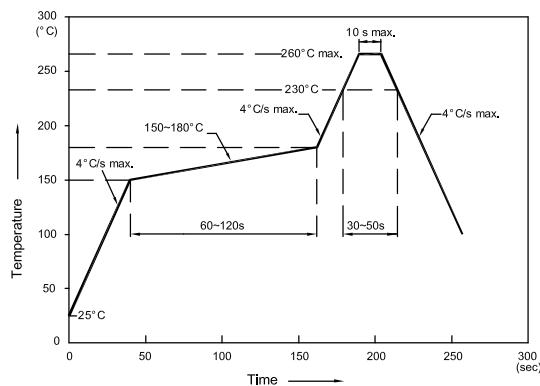
Yellow



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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.

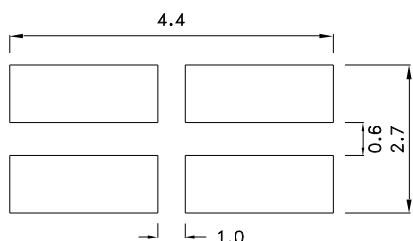
Reflow Soldering Profile For Lead-free SMT Process.



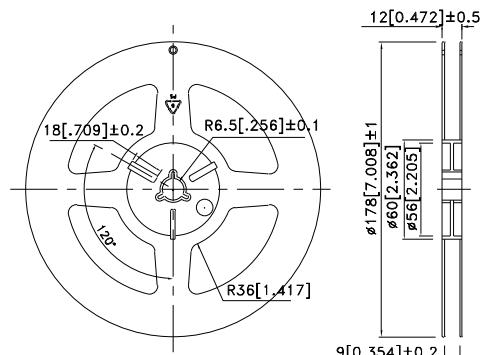
NOTES:

- 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.

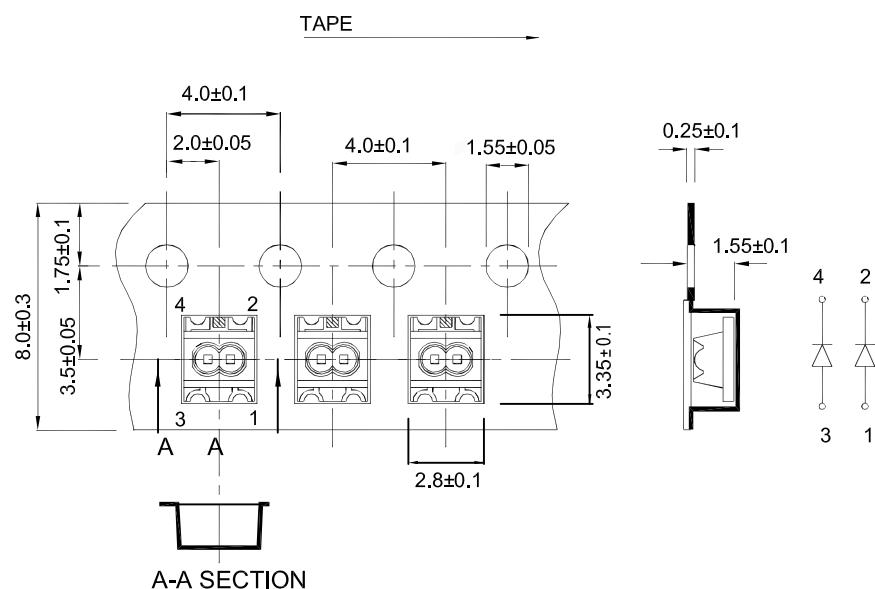
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension

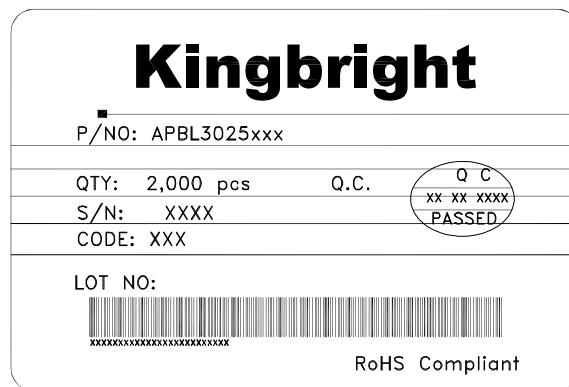
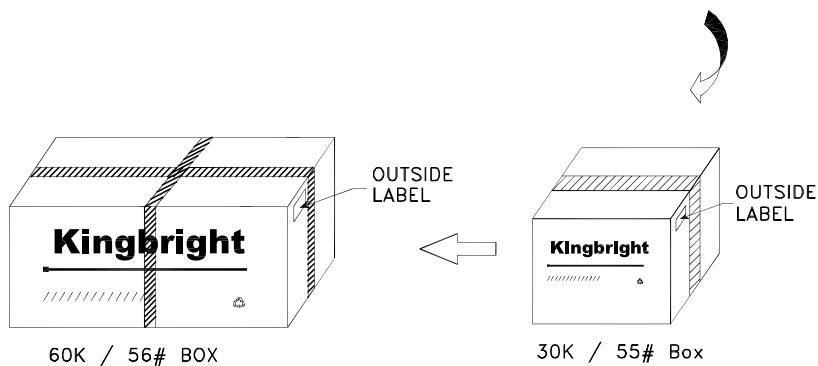
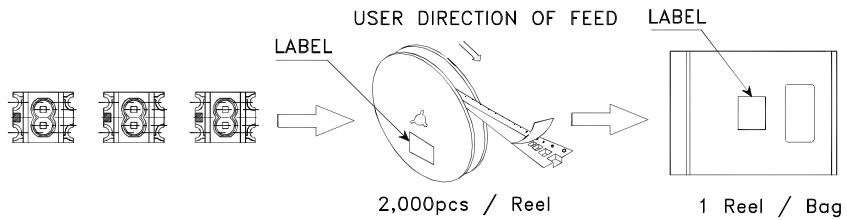


Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

APBL3025EYC-F01



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