

Kingbright

3.2x1.0mm RIGHT ANGLE BI-COLOR SMD CHIP LED LAMP

PRELIMINARY SPEC

Part Number: APBA3210EYC-F01

High Efficiency Red
Yellow

Features

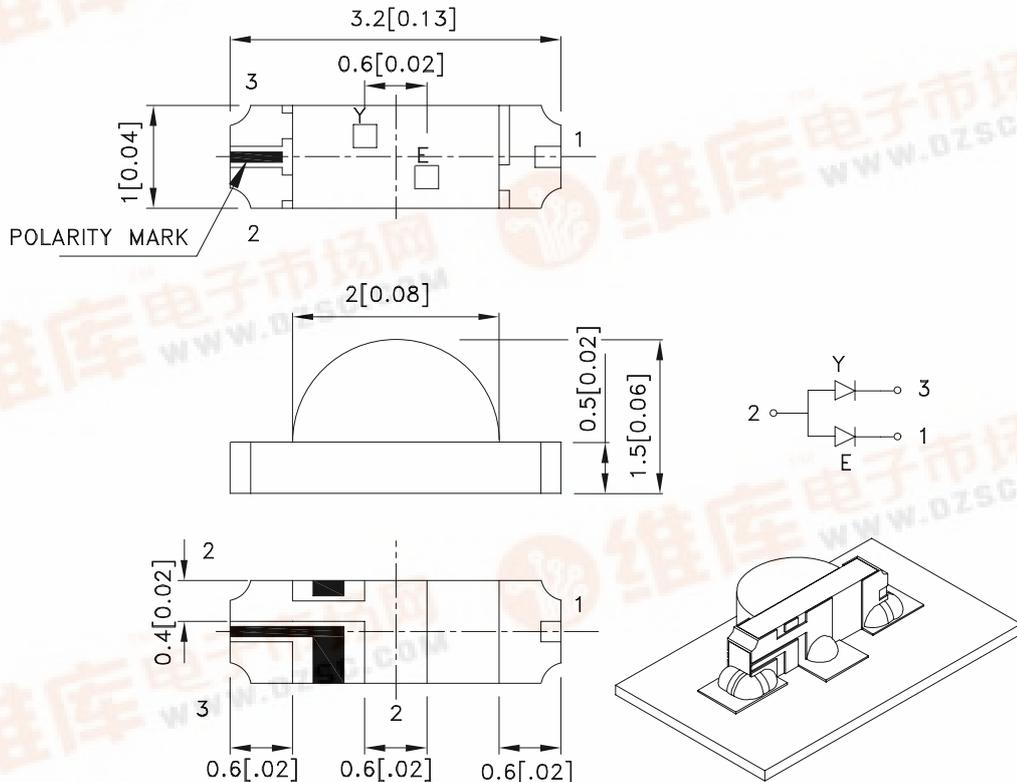
- LOW POWER CONSUMPTION.
- 3.2mmX1.0mm RIGHT ANGLE SMT LED,1.5mm THICKNESS.
- WIDE VIEWING ANGLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

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



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
3. Specifications are subject to change without 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	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	θ1/2
APBA3210EYC-F01	High Efficiency Red (GaAsP/GaP)	WATER CLEAR	4	12	120°
	Yellow (GaAsP/GaP)		2.6	8	

Notes:

- θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red Yellow	627 590		nm	I _F =20mA
λ _D [1]	Dominant Wavelength	High Efficiency Red Yellow	625 588		nm	I _F =20mA
Δλ _{1/2}	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:

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

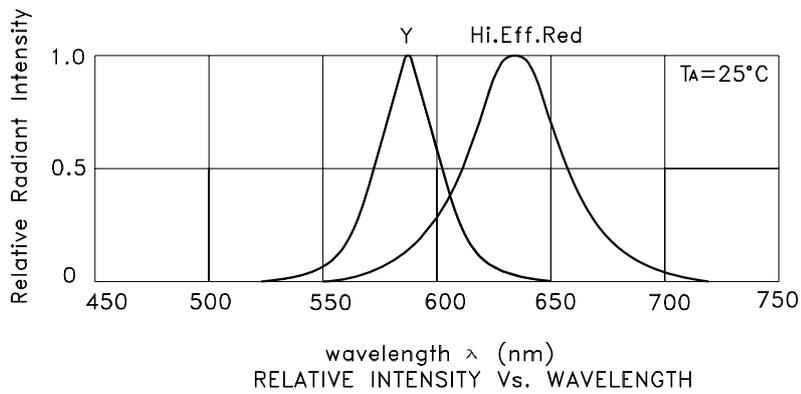
Absolute Maximum Ratings at TA=25°C

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	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

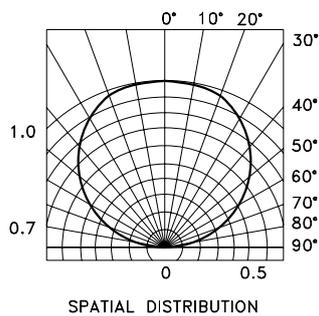
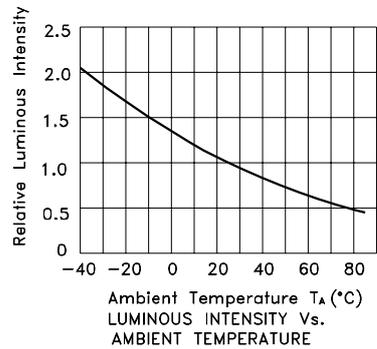
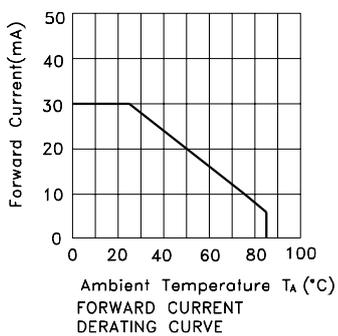
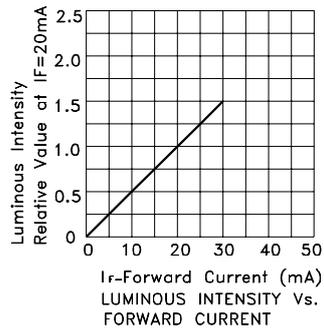
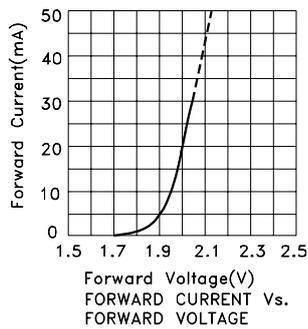
Note:

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

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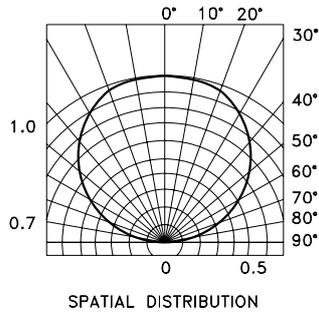
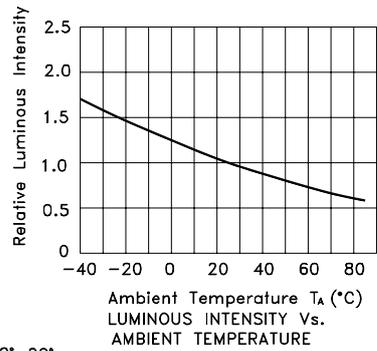
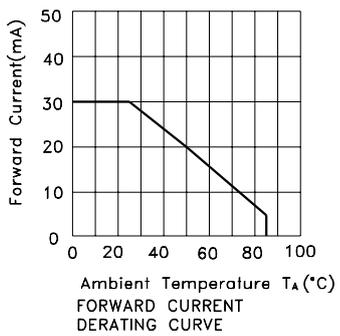
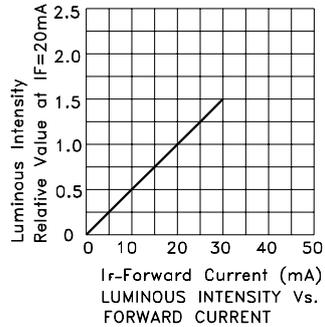
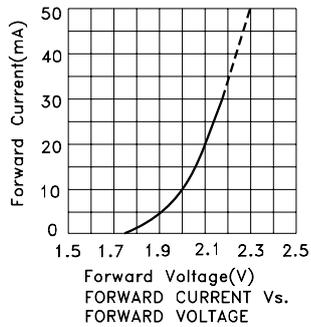


APBA3210EYC-F01 High Efficiency Red



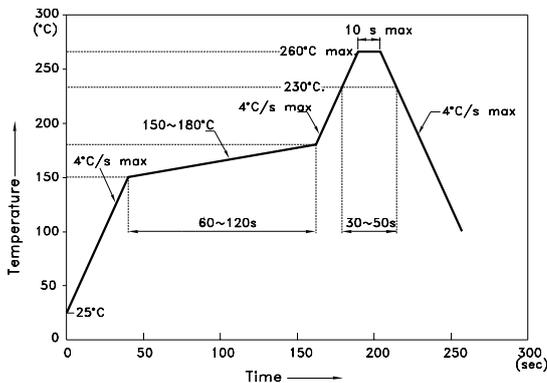
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Yellow



APBA3210EYC-F01

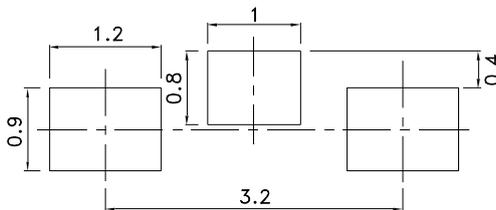
Reflow Soldering Profile For Lead-free SMT Process.



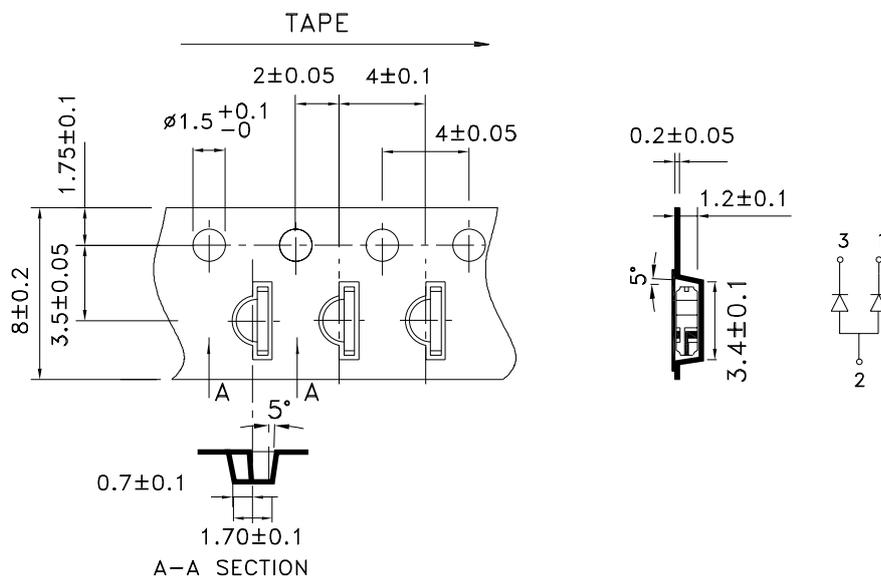
NOTES:

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)



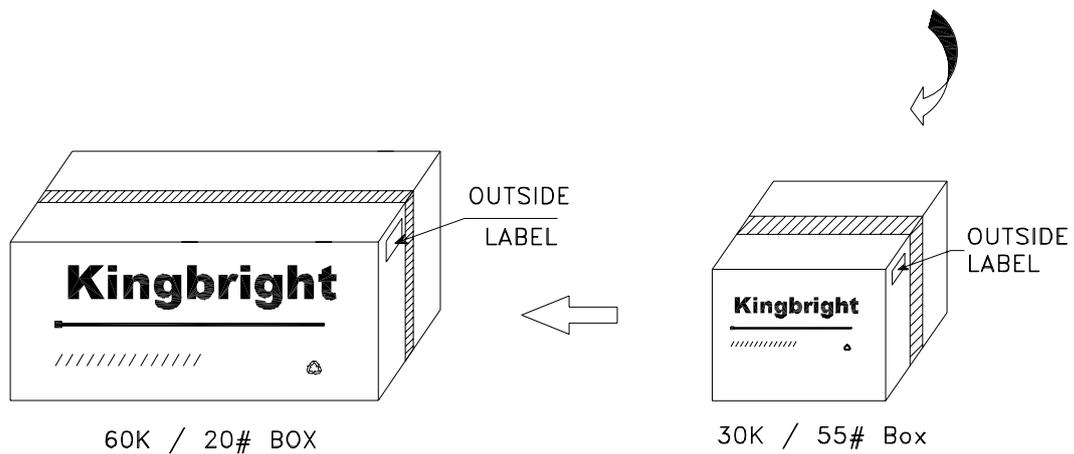
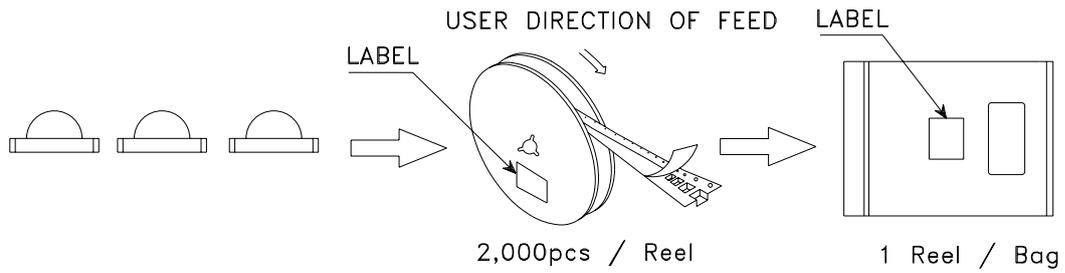
Tape Specifications (Units : mm)



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PACKING & LABEL SPECIFICATIONS

APBA3210EYC-F01



<h1>Kingbright</h1>	
P/NO: APBA3210xxx	
QTY: 2,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 <small>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</small>	
RoHS Compliant	