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3.2x2.4mm SMD CHIP LED LAMP

Part Number: APBD3224LSURKSYKC

Hyper Red Super Bright Yellow

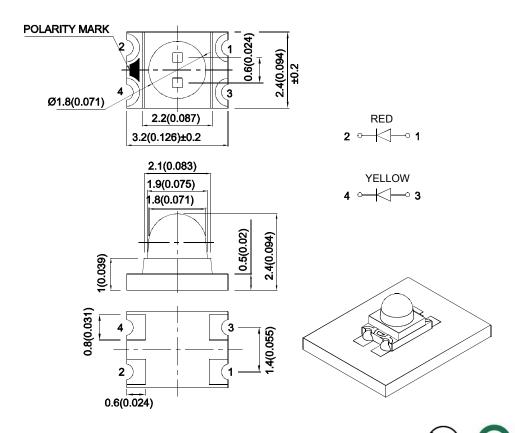
Features

- 3.2x2.4mm SMD LED, 2.4mm thickness.
- Low power consumption.
- Ideal for backlight and indicator.
- Package: 1500pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

Descriptions

- The Hyper Red source color devices are made with Al GaInP on GaAs substrate Light Emitting Diode.
- The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1(0.004")$ 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.	Emitting Color (Material)	Lens Type	lv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Тур.	201/2
APBD3224LSURKSYKC	Hyper Red (AlGaInP)	- Water Clear	20	50	20°
			10*	30*	
	Super Bright Yellow (AlGaInP)		20	50	
			20*	50*	

- 1. θ 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	Emitting Color	Min.	Тур.	Max.	Units	Test Conditions	
λpeak	Peak Wavelength	Hyper Red Super Bright Yellow		645 590		nm	IF=2mA	
λD [1]	Dominant Wavelength	Hyper Red Super Bright Yellow		630 590		nm	IF=2mA	
Δλ1/2	Spectral Line Half-width	Hyper Red Super Bright Yellow		28 20		nm	IF=2mA	
С	Capacitance	Hyper Red Super Bright Yellow		35 20		pF	VF=0V;f=1MHz	
VF [2]	Forward Voltage	Hyper Red Super Bright Yellow	1.5 1.5	1.75 1.85	2.1 2.1	V	IF=2mA	
lR	Reverse Current	Hyper Red Super Bright Yellow			10 10	uA	VR = 5V	

Notes:

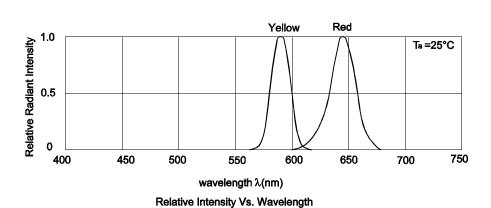
- 1. Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

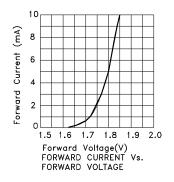
Parameter	Hyper Red	Super Bright Yellow	Units		
Power dissipation	63	63	mW		
DC Forward Current	30	30	mA		
Peak Forward Current [1]	185	175	mA		
Reverse Voltage	5				
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

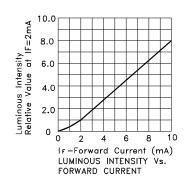
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

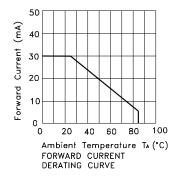
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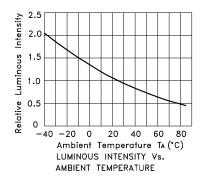


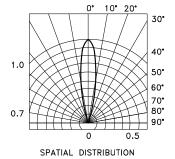
APBD3224LSURKSYKC Hyper Red







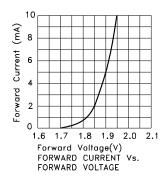


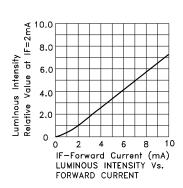


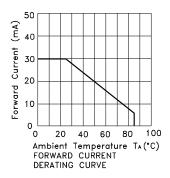
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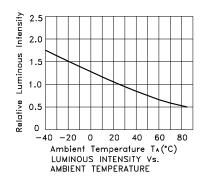
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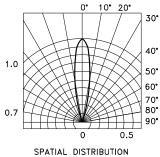
Super Bright Yellow











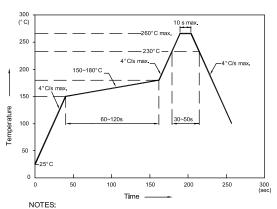
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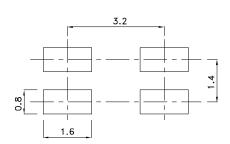
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



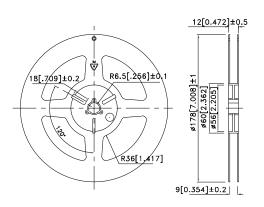
- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed to high temperature
- to high temperature.
 3.Number of reflow process shall be 2 times or less.

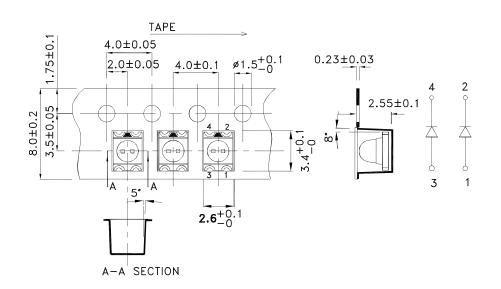
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units : mm)

Reel Dimension



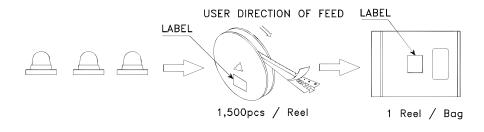


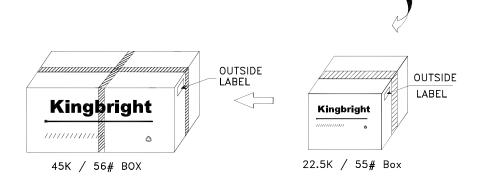
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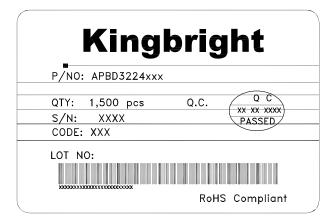


PACKING & LABEL SPECIFICATIONS

APBD3224LSURKSYKC







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