

### 3.2x2.4mm SMD CHIP LED LAMP

Part Number: APBD3224SURKCGKC-F01

Hyper Red Green

### **Features**

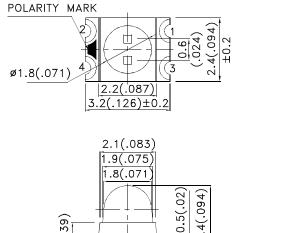
- •3.2x2.4mm SMT LED, 2.4mm thickness.
- •Low power consumption.
- •Ideal for backlight and indicator.
- •Various colors and lens types available.
- ●Package: 1500pcs / reel.
- •Moisture sensitivity level : level 3.
- ●RoHS compliant.

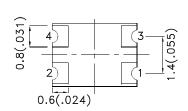
### Description

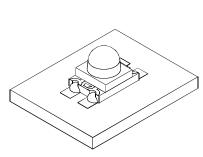
The Hyper Red source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

### **Package Dimensions**







RED 2 ──── 1

**GREEN** 

4 ⊶ 3

- 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	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APBD3224SURKCGKC-F01	Hyper Red (AlGaInP)	WATER CLEAR	380	800	20°
	Green (AlGalnP)	WATER CLEAR	110	300	

- 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline 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	Hyper Red Green	650 574		nm	I==20mA
λD [1]	Dominant Wavelength	Hyper Red Green	630 570		nm	I==20mA
Δλ1/2	Spectral Line Half-width	Hyper Red Green	28 20		nm	I==20mA
С	Capacitance	Hyper Red Green	35 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red Green	1.95 2.1	2.5 2.5	V	I==20mA
lR	Reverse Current	Hyper Red Green		10 10	uA	VR = 5V

### Notes:

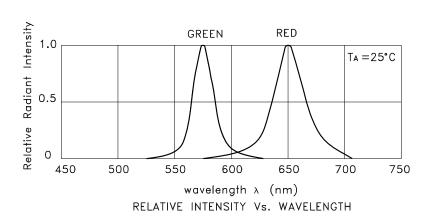
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

### Absolute Maximum Ratings at TA=25°C

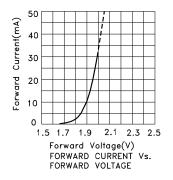
Parameter	Hyper Red	Green	Units		
Power dissipation	75	75	mW		
DC Forward Current	30	30	mA		
Peak Forward Current [1]	185	150	mA		
Reverse Voltage		V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

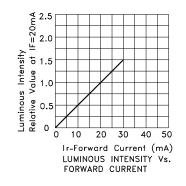
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

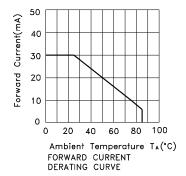
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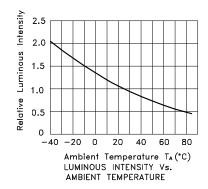


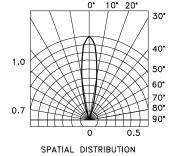
### APBD3224SURKCGKC-F01 Hyper Red







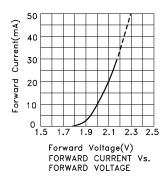


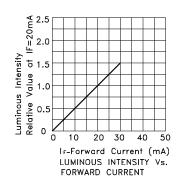


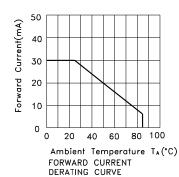
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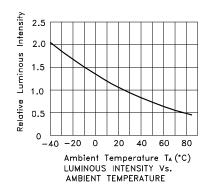
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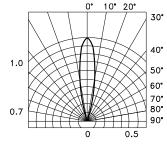
### Green











SPATIAL DISTRIBUTION

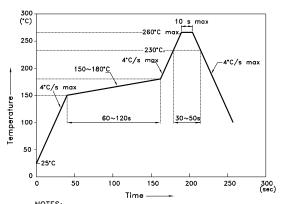
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### APBD3224SURKCGKC-F01

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.



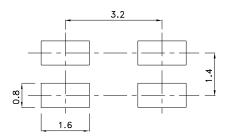
- NOTES:

  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

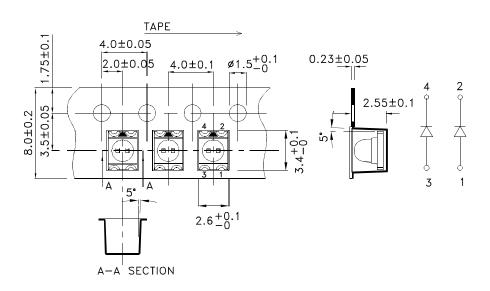
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

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



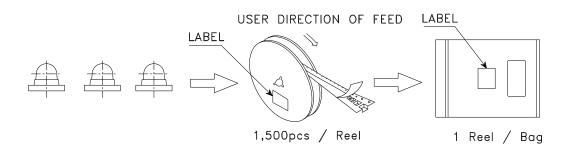
**Tape Dimensions** (Units : mm)

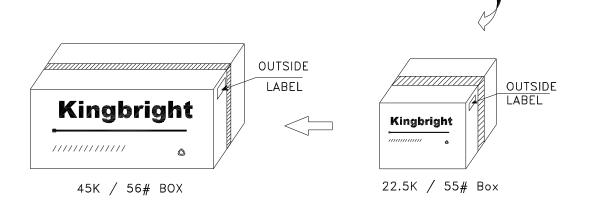


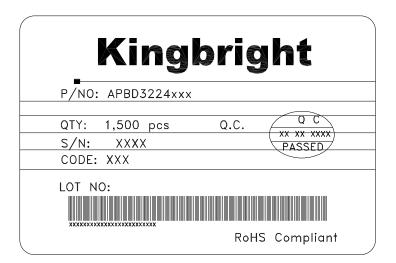
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### **PACKING & LABEL SPECIFICATIONS**

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