

#### 3.2X1.6mm SMD CHIP LED LAMP

Part Number: APC3216SURCK HYPER RED

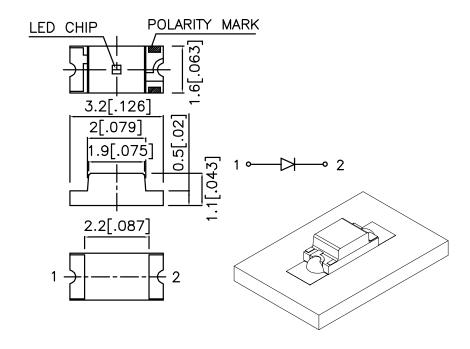
#### **Features**

- •3.2X1.6mm SMT LED, 1.1mm THICKNESS.
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •VARIOUS COLORS AND LENS TYPES AVAILABLE.
- •PACKAGE: 2000PCS / REEL .
- •MOISTURE SENSITIVITY LEVEL: LEVEL 3.
- •Rohs Compliant.

### **Description**

The Hyper Red source color devices are made with DH InGaAIP on GaAs substrate 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.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] @ 20 mA		Viewing Angle [1]
			Min.	Тур.	201/2
APC3216SURCK	HYPER RED (InGaAIP)	WATER CLEAR	50	150	120°

#### Notes

- 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	650		nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red	635		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	28		nm	IF=20mA
С	Capacitance	Hyper Red	35		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	1.95	2.5	V	IF=20mA
lr	Reverse Current	Hyper Red		10	uA	VR = 5V

#### Notes

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

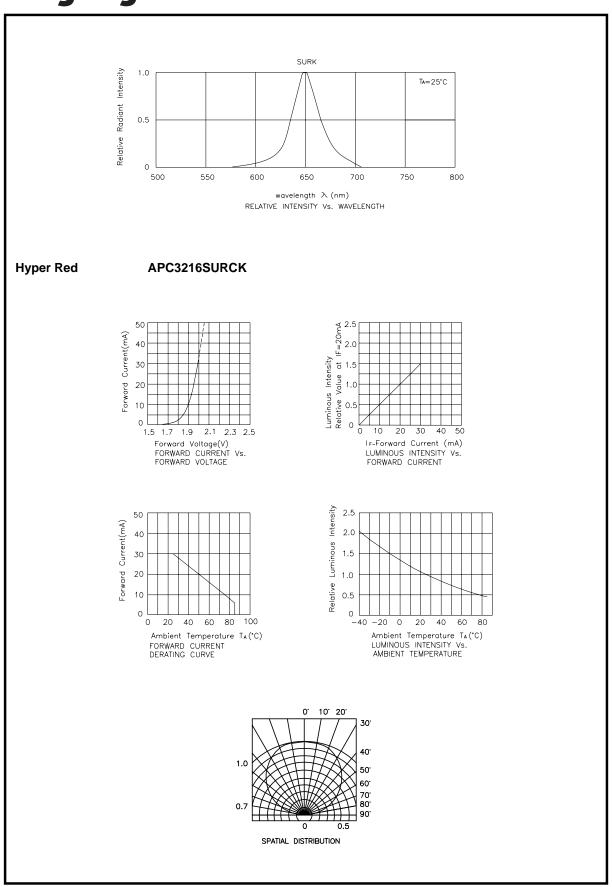
### Absolute Maximum Ratings at Ta=25°C

Parameter	Hyper Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

#### Note

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

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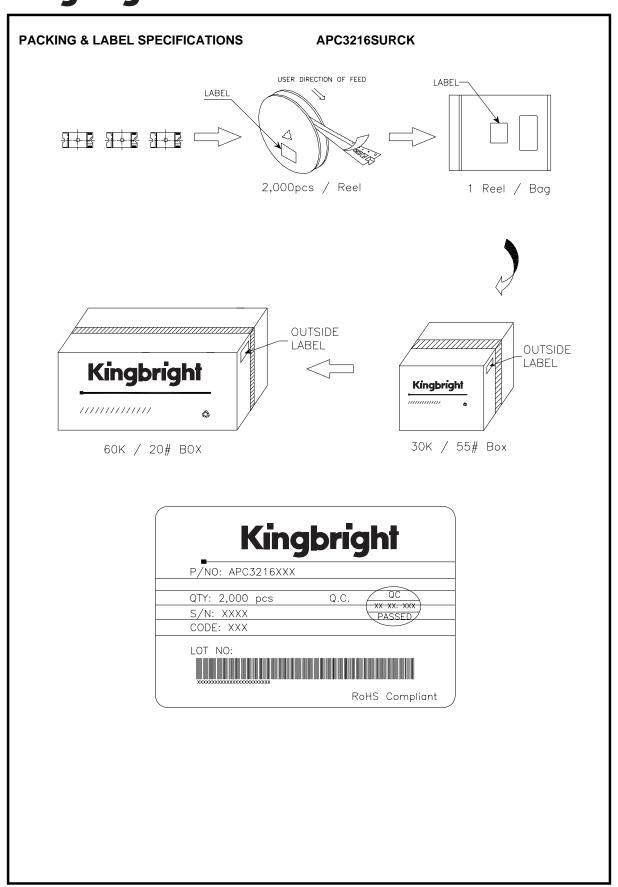


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## APC3216SURCK Reflow Soldering Profile For Lead-free SMT Process. (.C) 250 200 150 Temperature -30~50s 50 0 50 150 200 250 Time NOTES: 1.We recommend the reflow temperature 245°C( $\pm$ / $\pm$ 5°C).The maximum soldering temperature should be limited 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) 2.0 1.75 **Tape Specifications** (Units: mm) **TAPE** 4.0±0.1 $\phi 1.5 + 0.1$ $0.23 \pm 0.05$ 4.0±0.1 2.0±0.05 1.3±0.1 8.0+0.3 $3.5\pm0.05$ 3.5±0.1 5°MAX. 1.9±0.1

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A-A SECTION



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