

### 3.2x1.0mm RIGHT ANGLE SMD CHIP **LED LAMP**

Part Number: KPA-3210SURCK HYPER RED

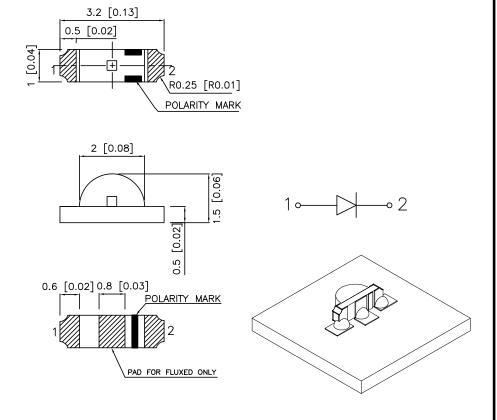
#### **Features**

- •3.2mmx1.0mm RIGHT ANGLE SMT LED, 1.5mm
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •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**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1 (0.004\mbox{"})$  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.	Тур.	2 θ 1/2
KPA-3210SURCK	HYPER RED (InGaAIP)	WATER CLEAR	110	250	120°

1. 01/2 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		

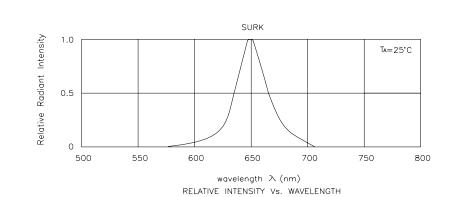
### Note:

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

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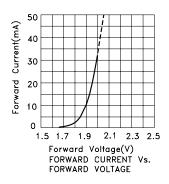
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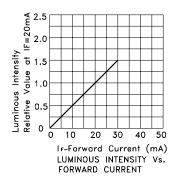
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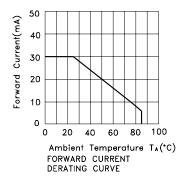


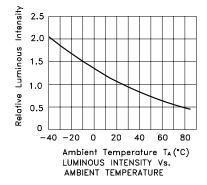
**Hyper Red** 

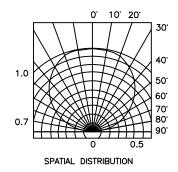
**KPA-3210SURCK** 











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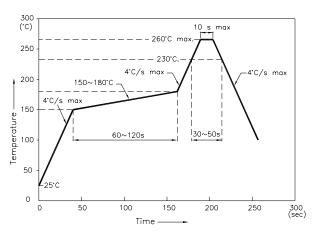
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## **KPA-3210SURCK**

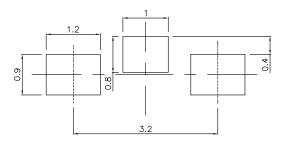
Reflow Soldering Profile For Lead-free SMT Process.



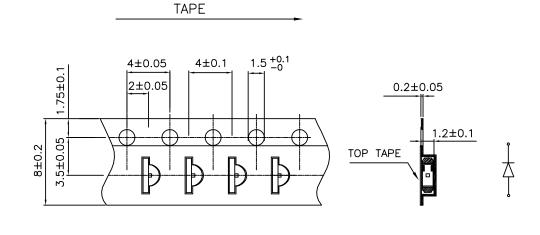
- NOTES:

  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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