

1.0X0.5mm SMD CHIP LED LAMP

Hyper Red Part Number: APHHS1005SURCK

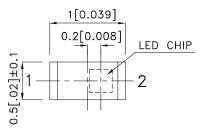
Features

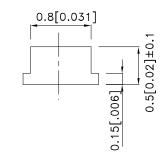
- ●1.0mmX0.5mm SMT LED, 0.5mm thickness.
- •Low power consumption.
- •Wide viewing angle.
- •Ideal for backlight and indicator.
- •Various colors and lens types available.
- ●Package: 2000pcs / reel .
- •Moisture sensitivity level : level 3.
- ●RoHS compliant.

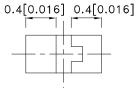
Description

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

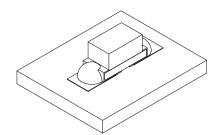
Package Dimensions











- 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
APHHS1005SURCK	Hyper Red (AlGaInP)	WATER CLEAR	70	220	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	630		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	V _R =5V

Notes:

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

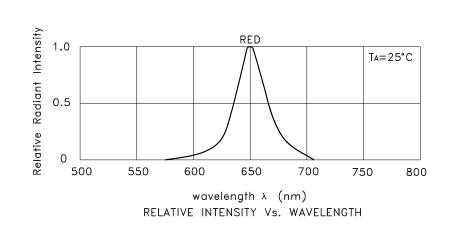
Absolute Maximum Ratings at TA=25°C

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

Note:

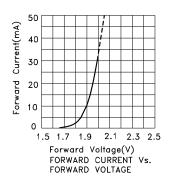
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

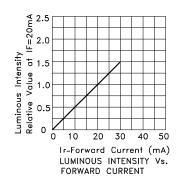
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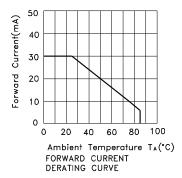


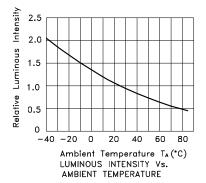
Hyper Red

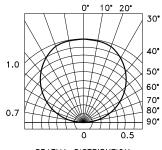
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SPATIAL DISTRIBUTION

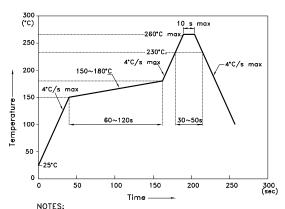
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



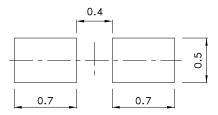
- NOTES:

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

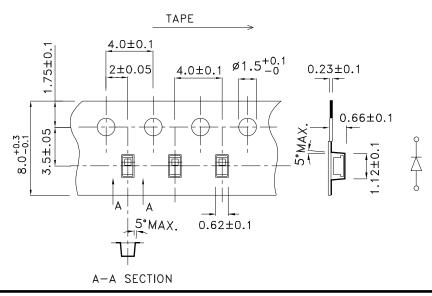
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

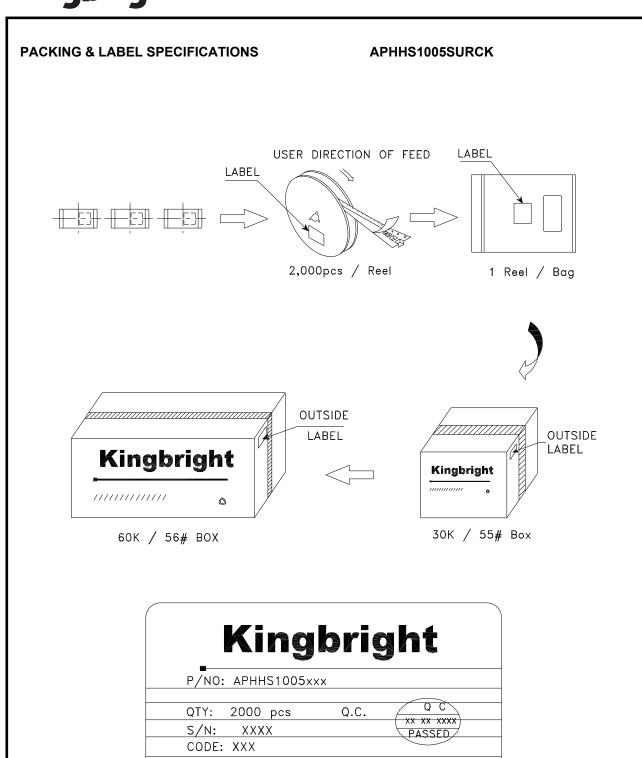
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units: mm)



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LOT NO:

DATE: MAR/27/2009 DRAWN: X.J.Guo

RoHS Compliant

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