

#### 1.6X0.8mm SMD CHIP LED LAMP

Part Number: KP-1608SURC

Hyper Red

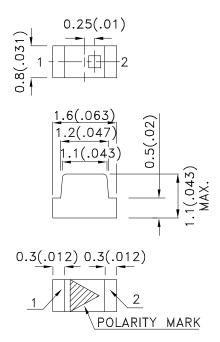
#### **Features**

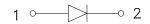
- 1.6mmX0.8mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

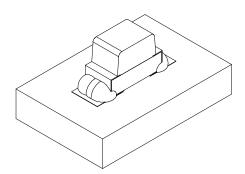
#### Description

The Hyper Red source color devices are made with InGaAIP 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.





SPEC NO: DSAA4838 **REV NO: V.10** CHECKED: Allen Liu APPROVED: WYNEC

**DATE: JUN/28/2007** DRAWN: Y.L.LI

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#### **Selection Guide**

Part No.	Dice Lens Type Iv (mcd) [2] @ 20mA		,	Viewing Angle [1]	
		7,1	Min.	Тур.	201/2
KP-1608SURC	Hyper Red (InGaAIP)	WATER CLEAR	70	200	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	640		nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red	628		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	27		nm	IF=20mA
С	Capacitance	Hyper Red	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	1.9	2.5	V	IF=20mA
lR	Reverse Current	Hyper Red		10	uA	V <sub>R</sub> =5V

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

## Absolute Maximum Ratings at TA=25°C

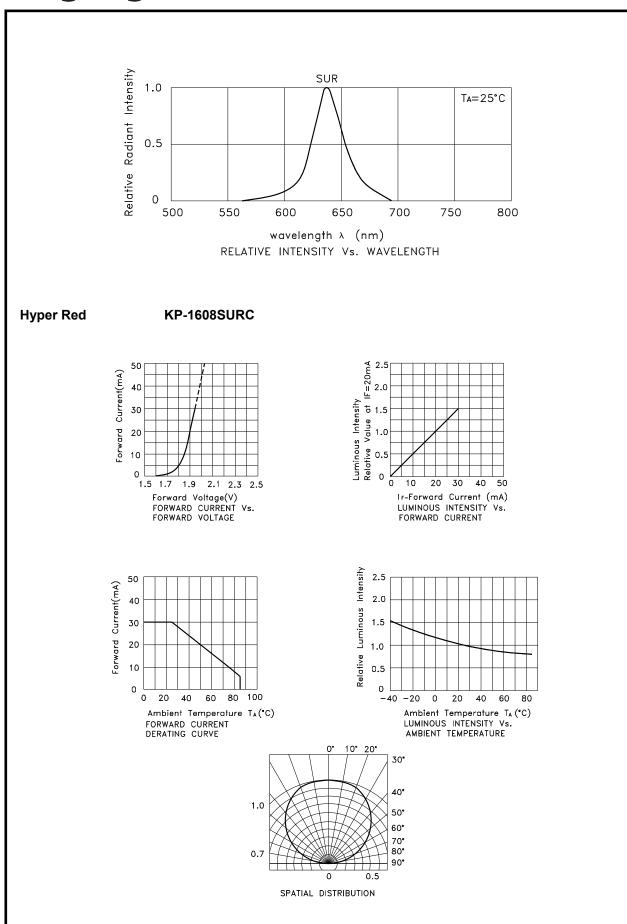
Parameter	Hyper Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	185	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

#### Note:

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

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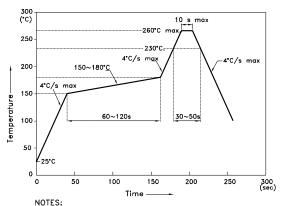
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## KP-1608SURC

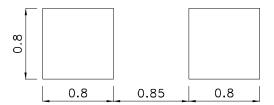
Reflow Soldering Profile For Lead-free SMT Process.



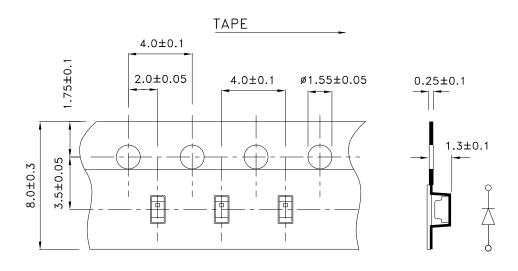
- NOTES:

  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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