

3.2x1.6mm SMD CHIP LED LAMP

KPTR-3216SURCK

HYPER RED

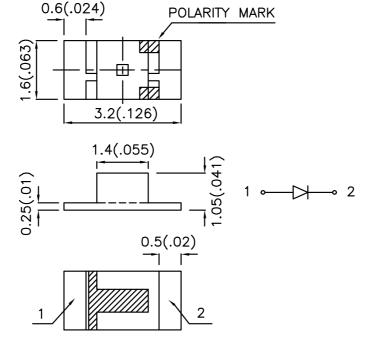
Features

- •3.2mmx1.6mm SMT LED,1.05mm THICKNESS.
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •VAVRIOUS COLORS AND LENS TYPES AVAILABLE.
- •PACKAGE: 2000PCS/REEL.
- •RoHS COMPLIANT.

Description

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

Package Dimensions



Notes:

- 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.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
		2.	Min.	Тур.	2 θ 1/2
KPTR-3216SURCK	HYPER RED (InGaAIP)	WATER CLEAR	50	150	120°

Note

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	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	Forward Voltage	Hyper Red	1.95	2.5	V	IF=20mA
IR	Reverse Current	Hyper Red		10	uA	VR = 5V

Absolute Maximum Ratings at Ta=25°C

Parameter	Hyper Red	Units
Power dissipation	170	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating/Storage Temperature	Storage Temperature -40°C To +85°C	

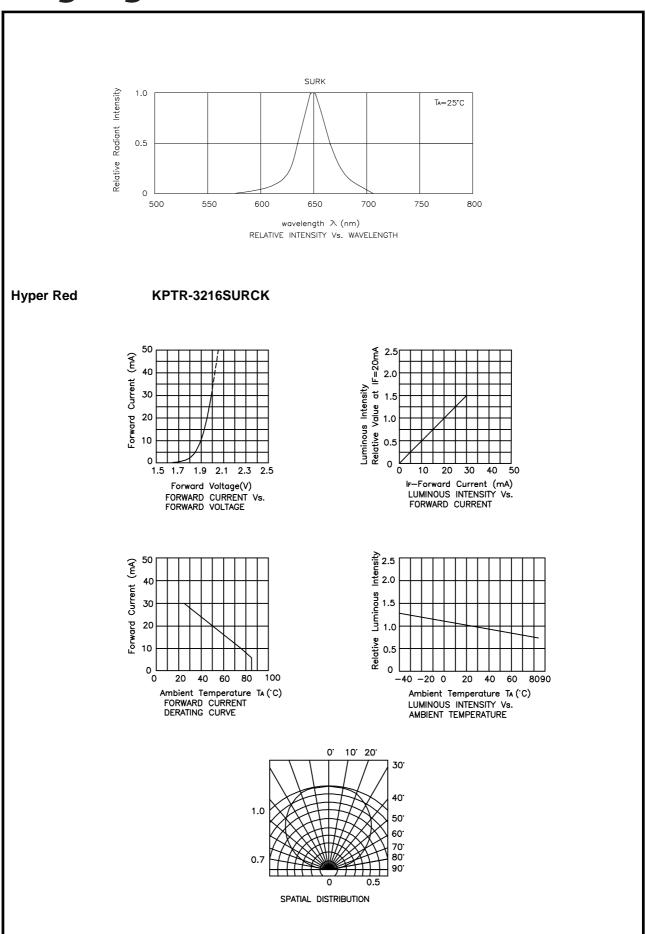
Note:

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 $^{1.\,\}theta1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

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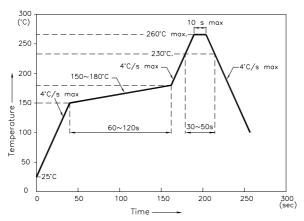


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Reflow Soldering Profile For Lead-free SMT Process.

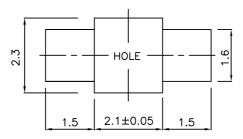


- NOTES:

 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)



Tape Specifications (Units: mm)

TAPE 4.0TYP 2.0TYP. 4.0TYP 0.23TYP. **Emitting**

Remarks:

If special sorting is required (e.g. binning based on forward voltage,luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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