

3.2x1.6mm SMD CHIP LED LAMP

APTR3216SURC

HYPER RED

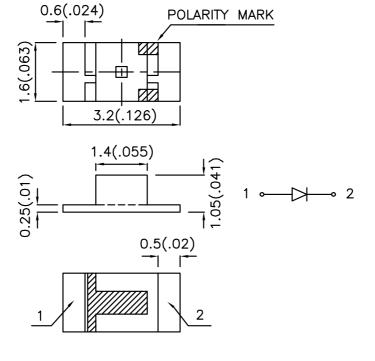
Features

- •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.

 SPEC NO: DSAC0363
 REV NO: V.5
 DATE: MAR/20/2005
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 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: W,J,ZHU
 ERP: 1203002423

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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 20mA Min. Typ.		Viewing Angle
		,,			201/2
APTR3216SURC	HYPER RED (InGaAIP)	WATER CLEAR	70	200	120°

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	Dominant Wavelength	Hyper Red	628		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	27		nm	IF=20mA
С	Capacitance	Hyper Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Hyper Red	1.9	2.5	V	IF=20mA
IR	Reverse Current	Hyper Red		10	uA	VR = 5V

Absolute Maximum Ratings at Ta=25°C

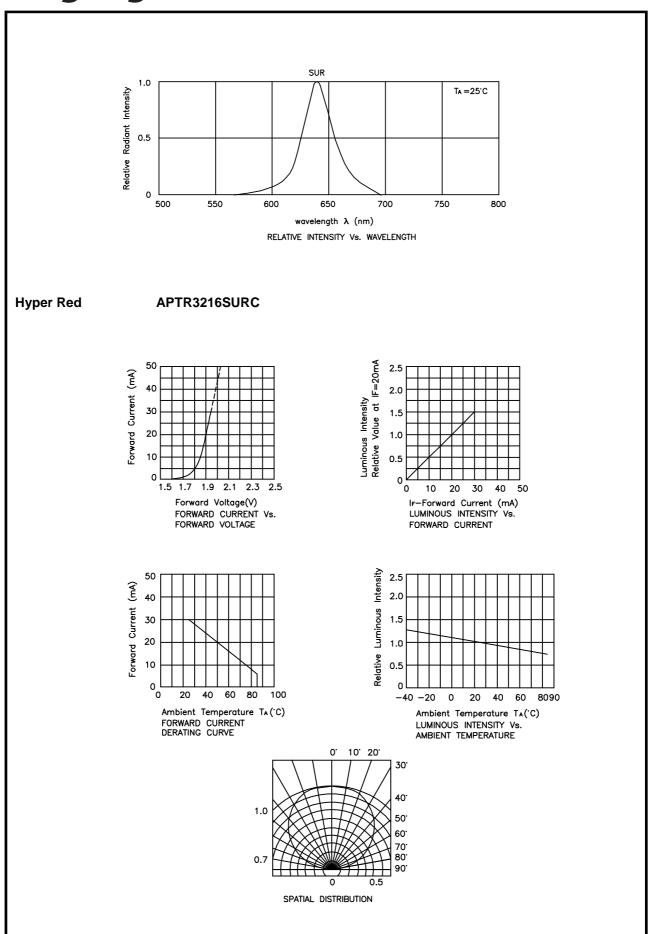
Parameter	Hyper Red	Units
Power dissipation	170	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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Note: 1. θ 1/2 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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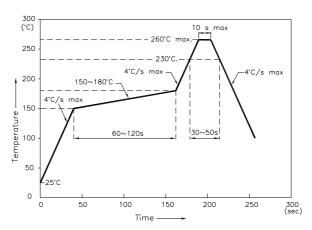
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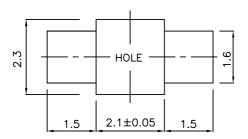
APTR3216SURC

Reflow Soldering Profile For Lead-free SMT Process.

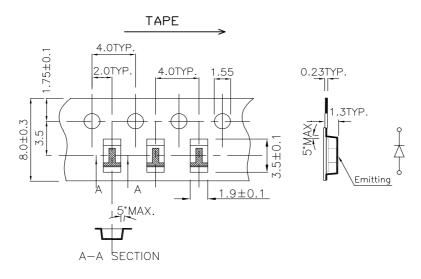


- NOTES: 1.We recommend the reflow temperature 245°C(\pm / \pm 5°C).The maximum soldering temperature should be limited to 260°C.
 - 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 - 3. Number of reflow process shall be 2 times or less.

Recommended **Soldering Pattern**



Tape Specifications (Units: mm)



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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