

### SUBMINIATURE SOLID STATE LAMP

AM2520SURC08

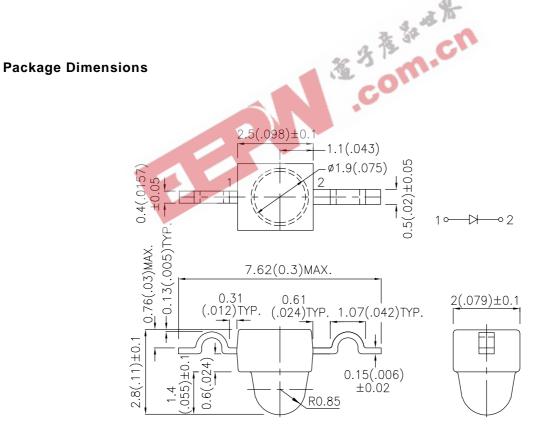
HYPER RED

#### **Features**

- •SUBMINIATURE PACKAGE.
- •WIDE VIEWING ANGLE.
- ●YOKE LEAD.
- •LONG LIFE SOLID STATE RELIABILITY.
- •LOW PACKAGE PROFILE.
- ●PACKAGE: 1000PCS / REEL.
- •RoHS COMPLIANT.

### Description

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



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25(0.01") unless otherwise noted.

  3. Lead spacing is measured where the leads emerge from the package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAD1266 **REV NO: V.2** DATE: MAR/05/2005 **PAGE: 1 OF 4** APPROVED: J. Lu CHECKED: Allen Liu DRAWN: W.J.ZHU ERP:1202000698

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### **Selection Guide**

Part No.	Dice	Iv (mcd) @ 20mA		,	Viewing Angle
		7,	Min.	Тур.	201/2
AM2520SURC08	HYPER RED (InGaAIP)	WATER CLEAR	280	1000	20°

Note

# 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	1 3º	nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	27	-0	nm	IF=20mA
С	Capacitance	Hyper Red	45	0,,,	pF	VF=0V;f=1MHz
VF	Forward Voltage	Hyper Red	1.9	2.5	V	IF=20mA
lr	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	

Note:

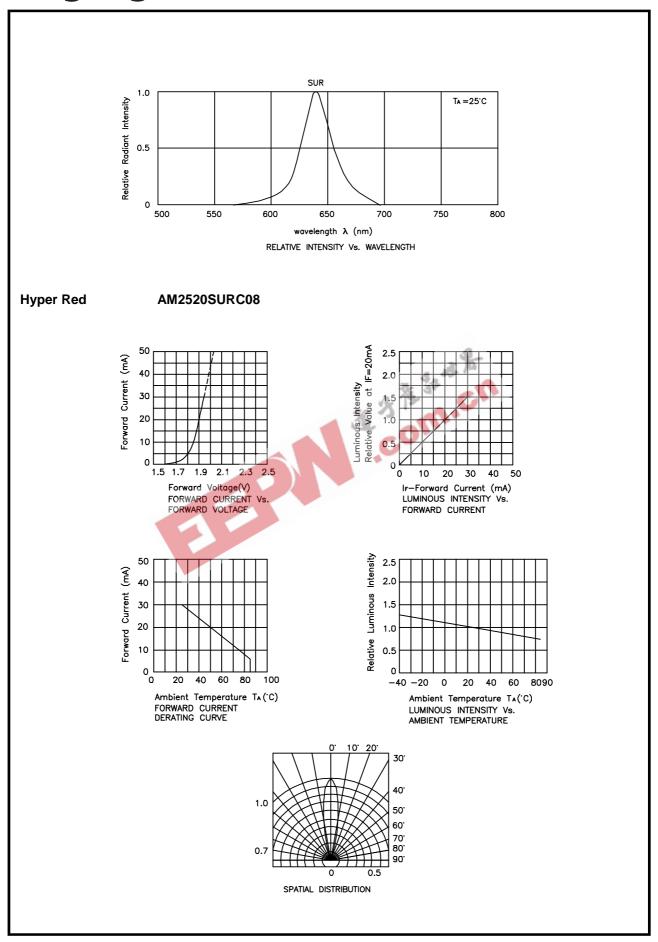
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<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.

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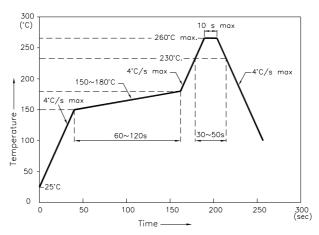
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### **AM2520SURC08**

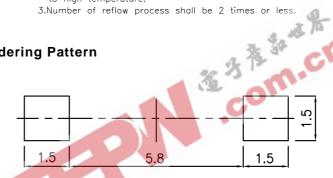
Reflow Soldering Profile For Lead-free SMT Process.



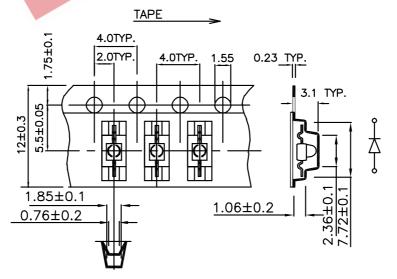
- NOTES:

  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)



#### Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
- 2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).
- 3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).

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