#### SUBMINIATURE SOLID STATE LAMP

AM2520SURCK08

HYPER RED

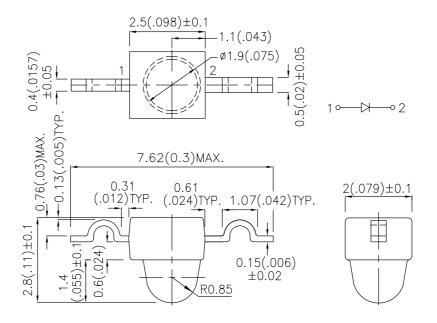
#### **Features**

- •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.

#### **Package Dimensions**



- 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: DSAD1267 **REV NO: V.2** APPROVED: J. Lu **CHECKED: Allen Liu**  DATE: MAR/05/2005 DRAWN: W.J.ZHU

PAGE: 1 OF 4 ERP:1202000702

#### **Selection Guide**

Part No.	Dice	Lens Type	lv (m @ 20	,	Viewing Angle
			Min.	Тур.	2 <del>0</del> 1/2
AM2520SURCK08	HYPER RED (InGaAIP)	WATER CLEAR	180	650	20°

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

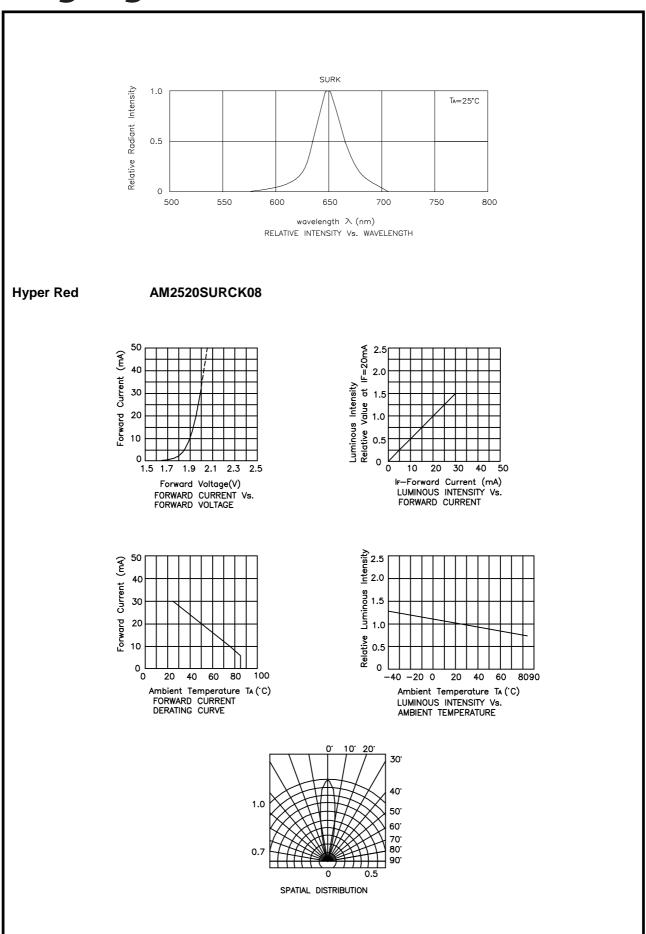
Parameter	Hyper Red	Units
Power dissipation	170	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

Note

SPEC NO: DSAD1267 REV NO: V.2 DATE: MAR/05/2005 PAGE: 2 OF 4
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: W.J.ZHU ERP:1202000702

 $<sup>1.\,\</sup>theta1/2$  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.

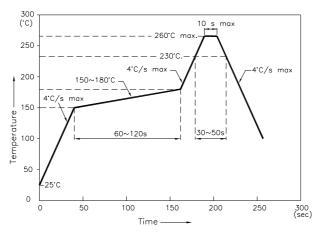


 SPEC NO: DSAD1267
 REV NO: V.2
 DATE: MAR/05/2005
 PAGE: 3 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: W.J.ZHU
 ERP:1202000702

#### AM2520SURCK08

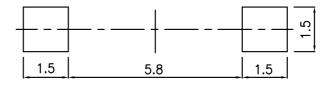
Reflow Soldering Profile For Lead-free SMT Process.



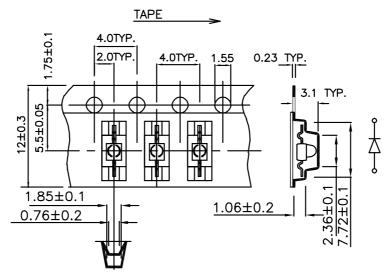
- NOTES:

  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).

SPEC NO: DSAD1267 **REV NO: V.2** DATE: MAR/05/2005 PAGE: 4 OF 4 APPROVED: J. Lu **CHECKED: Allen Liu** DRAWN: W.J.ZHU ERP:1202000702