

#### SUBMINIATURE SOLID STATE LAMP

PRELIMINARY SPEC

Part Number: AM2520SURCK03

Hyper Red

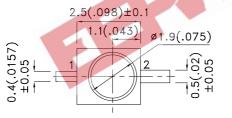
#### **Features**

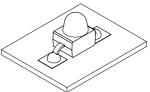
- SUBMINIA TURE PACKAGE.
- WIDE VIEWING ANGLE.
- GULL WING LEAD.
- LONG LIFE SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- MOISTURE SENSITIVITY LEVEL: LEVEL 3.
- PACKAGE: 1000PCS / REEL.
- RoHS COMPLIANT.

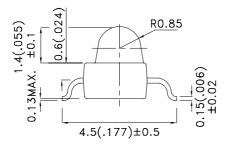
### **Description**

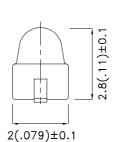
The Hyper Red source color devices are made with DH InGaAIP on GaAs substrate Light Emitting Diode.

## **Package Dimensions**









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#### Notes:

- All dimensions are in millimeters (inches).
   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.
- 5. The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAD1256 APPROVED: WYNEC

**REV NO: V.4 CHECKED: Allen Liu**  **DATE: MAY/08/2007** DRAWN: Y.L.LI

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### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		, , , , , , , , , , , , , , , , , , ,	Min.	Тур.	201/2
AM2520SURCK03	Hyper Red (InGaAIP)	WATER CLEAR	480	1400	20°

- θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
   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	650	. 4	nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red	635	30	nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	28	-0.1	nm	IF=20mA
С	Capacitance	Hyper Red	35	10.	pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	1.95	2.5	V	IF=20mA
lr	Reverse Current	Hyper Red		10	uA	VR=5V

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

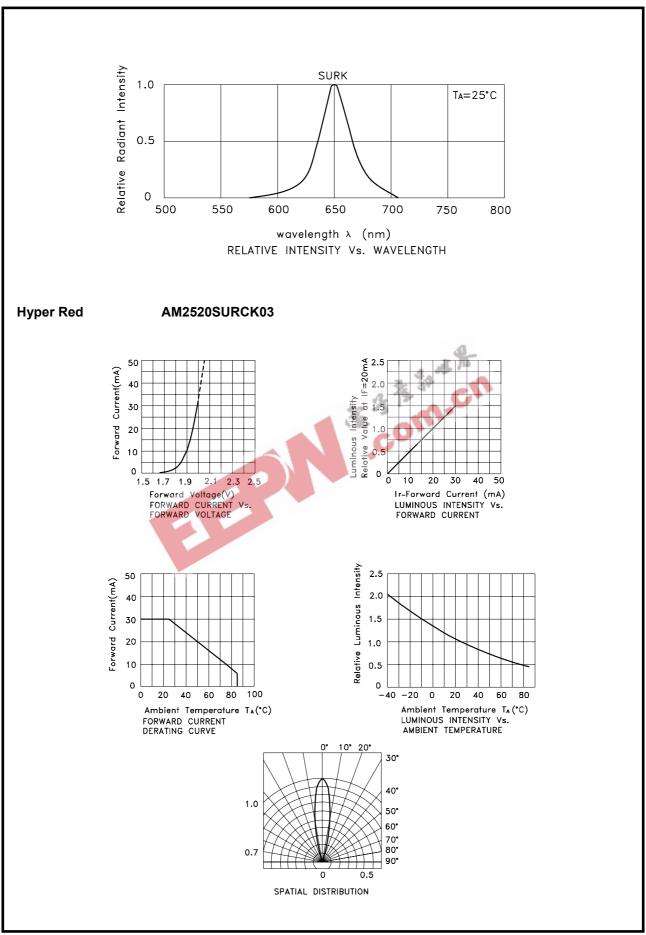
### Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red				
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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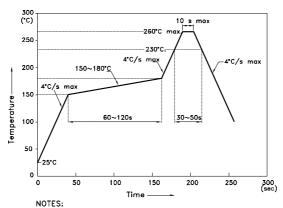


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### **AM2520SURCK03**

Reflow Soldering Profile For Lead-free SMT Process.

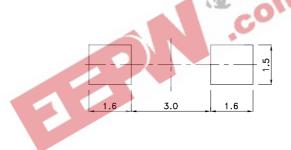


- NOTES:

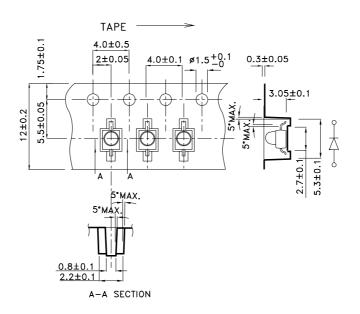
  1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

  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)

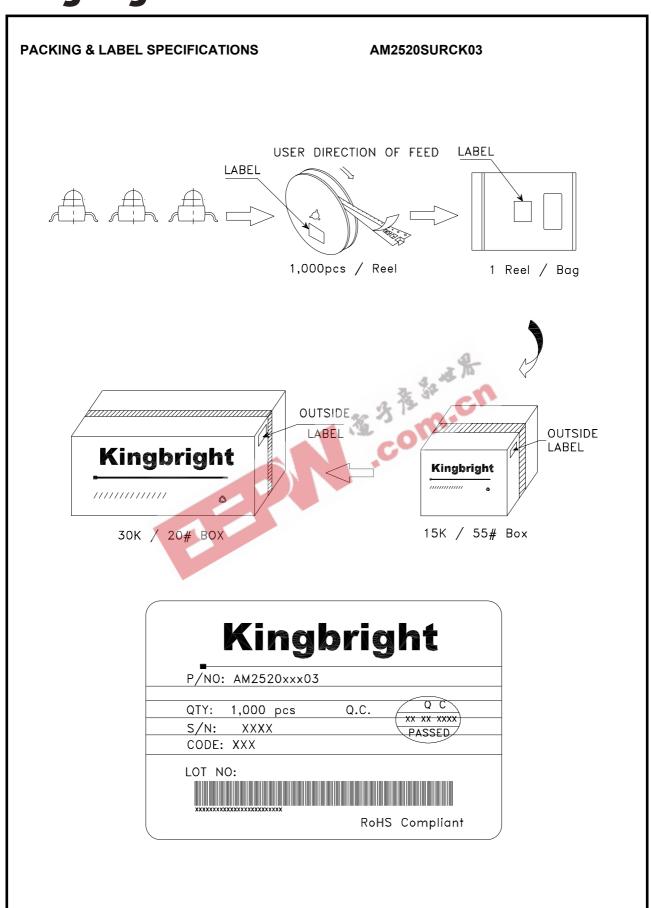


Tape Specifications (Units: mm)



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