

#### SUBMINIATURE SOLID STATE LAMP

PRELIMINARY SPEC

Part Number: AM2520SURC03

Hyper Red

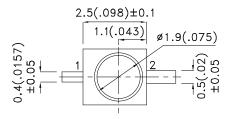
#### **Features**

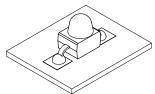
- SUBMINIA TURE PACKAGE.
- WIDE VIEWING ANGLE.
- GULL WING LEAD.
- LONG LIFE SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- MOISTURE SENSITIVITY LEVEL: LEVEL 3.
- PACKAGE: 1000PCS/REEL.
- RoHS COMPLIANT.

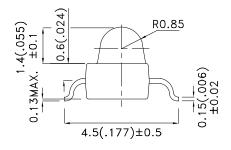
#### Description

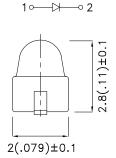
The Hyper Red source color devices are made with In-GaAIP on GaAs substrate Light Emitting Diode.

### **Package Dimensions**









#### Notes:

- 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.
- 5. The device has a single mounting surface. The device must be mounted according to the specifications.





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#### **Selection Guide**

Part No.	Dice	lv (mcd) [2] Dice Lens Type @ 20mA		,	Viewing Angle [1]
			Min.	Тур.	201/2
AM2520SURC03	Hyper Red (InGaAIP)	WATER CLEAR	650	1600	20°

#### Notes:

- 1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous intensity/ luminous Flux: +/-15%.

### Electrical / Optical Characteristics at TA=25°C

Parameter	Device	Тур.	Max.	Units	Test Conditions			
Peak Wavelength	Hyper Red	640		nm	IF=20mA			
Dominant Wavelength	Hyper Red	628		nm	IF=20mA			
Spectral Line Half-width	Hyper Red	27		nm	IF=20mA			
Capacitance	Hyper Red	45		pF	VF=0V;f=1MHz			
Forward Voltage	Hyper Red	1.9	2.5	V	IF=20mA			
Reverse Current	Hyper Red		10	uA	VR=5V			
	Peak Wavelength  Dominant Wavelength  Spectral Line Half-width  Capacitance  Forward Voltage	Peak Wavelength Hyper Red  Dominant Wavelength Hyper Red  Spectral Line Half-width Hyper Red  Capacitance Hyper Red  Forward Voltage Hyper Red	Peak Wavelength Hyper Red 640  Dominant Wavelength Hyper Red 628  Spectral Line Half-width Hyper Red 27  Capacitance Hyper Red 45  Forward Voltage Hyper Red 1.9	Peak Wavelength Hyper Red 640  Dominant Wavelength Hyper Red 628  Spectral Line Half-width Hyper Red 27  Capacitance Hyper Red 45  Forward Voltage Hyper Red 1.9 2.5	Peak Wavelength Hyper Red 640 nm  Dominant Wavelength Hyper Red 628 nm  Spectral Line Half-width Hyper Red 27 nm  Capacitance Hyper Red 45 pF  Forward Voltage Hyper Red 1.9 2.5 V			

### Notes:

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

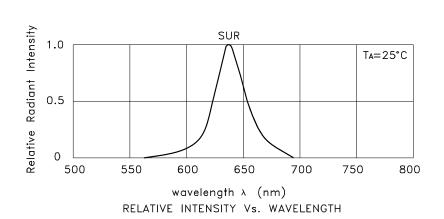
### Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units	
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		

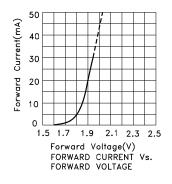
#### Note:

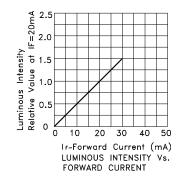
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

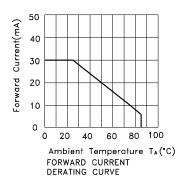
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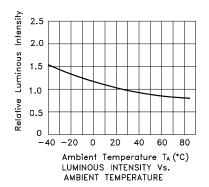


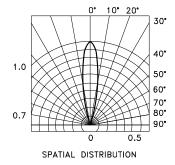
Hyper Red AM2520SURC03









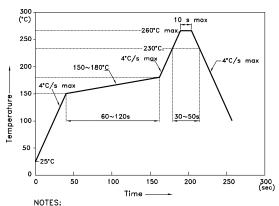


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### **AM2520SURC03**

Reflow Soldering Profile For Lead-free SMT Process.



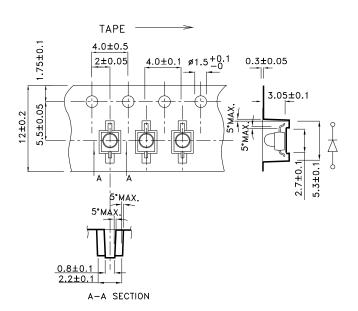
- NOTES:

  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)



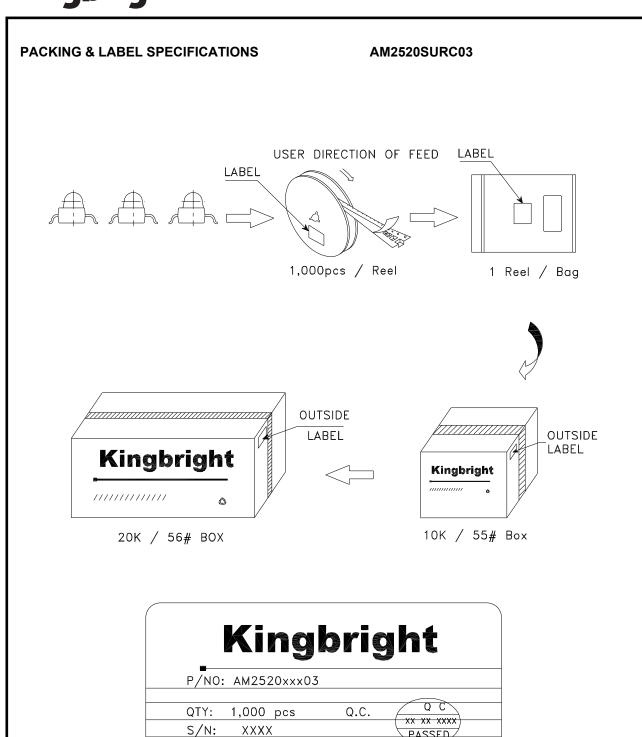
**Tape Specifications** (Units: mm)



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RoHS Compliant

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CODE: XXX

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