

#### SUBMINIATURE SOLID STATE LAMP

KM2520SURC03 HYPER RED

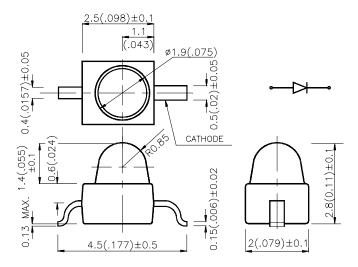
#### **Features**

- •SUBMINIA TURE PACKAGE.
- •WIDE VIEWING ANGLE.
- •GULL WING LEAD.
- •LONG LIFE SOLID STATE RELIABILITY.
- •LOW PACKAGE PROFILE.
- •PACKAGE: 1000PCS/REEL.

#### **Description**

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

#### **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- $3. \ \mbox{Lead}$  spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAA7299 REV NO: V.2
APPROVED: J. Lu CHECKED: Allen Liu

DATE:FEB/08/2003 DRAWN: F.Y.YUAN PAGE: 1 OF 4



#### **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (mcd)</b> @ 20 mA		<b>Viewing</b> Angle
		,	Min.	Тур.	201/2
KM2520SURC03	HYPER RED (InGaAIP)	WATER CLEAR	280	660	20°

#### Note:

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	640		nm	IF=20mA
λD	Dominate 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	V <sub>F</sub> =0V;f=1MHz
VF	Forward Voltage	Hyper Red	1.9	2.5	V	IF=20mA
IR	Reverse Current	Hyper Red		10	uA	V <sub>R</sub> = 5V

### Absolute Maximum Ratings at T<sub>A</sub>=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	

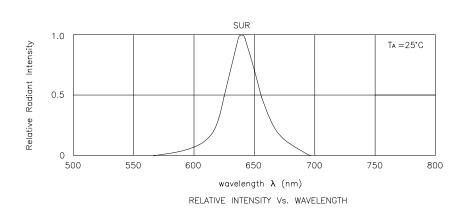
#### Note

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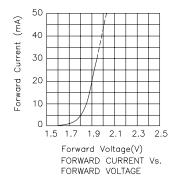
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

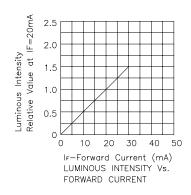
<sup>1. 1/10</sup> Duty Cycle, 0.1ms Pulse Width.

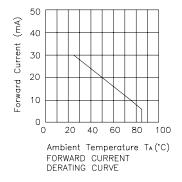


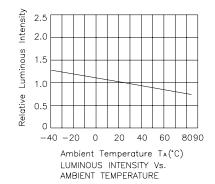


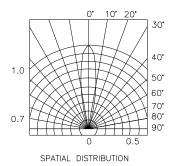
### Hyper Red KM2520SURC03











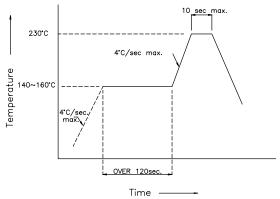
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# Kingbright

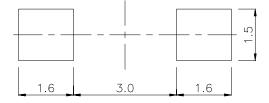
#### KM2520SURC03

#### **SMT Reflow Soldering Instructions**

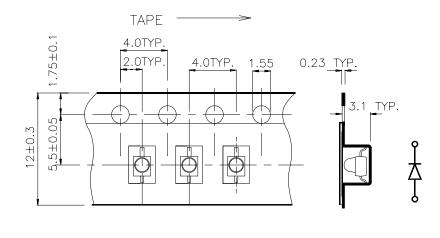
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



## Recommended Soldering Pattern (Units:mm)



## Tape Specifications (Units:mm)



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