### 5.0X6.0mm SURFACE MOUNT LED LAMP

The Hyper Red source color devices are made with DH

InGaAIP on GaAs substrate Light Emitting Diode.

AA5060SURC/G HYPER RED

Description

#### Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 500PCS / REEL.

•RoHS COMPLIANT.

#### **Package Dimensions**

### 5.7 [0.224] 0.067 0.039 5 [0.197 ø3.2[0.126] 236] 2 o. 4 3 Q 0.2[0.008] POLARITY MARK 0.039 2 4 [0.055] .051] 1.4 [0.055] 0 2.4 [0.094] 4 M

Notes:

1. All dimensions are in millimeters (inches).

2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.

3. Specifications are subject to change without notice.

SPEC NO: DSAD0898 APPROVED: J. Lu

**REV NO: V.3 CHECKED:** Allen Liu

DATE: MAR/09/2005 DRAWN: S.H.CHEN

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Selection Guide								
Part No.	Dice	Lens Type	lv (mcd) @ 50mA		Viewing Angle			
			Min.	Тур.	201/2			
AA5060SURC/G	HYPER RED (InGaAIP)	WATER CLEAR	480	750	100°			

Note: 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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

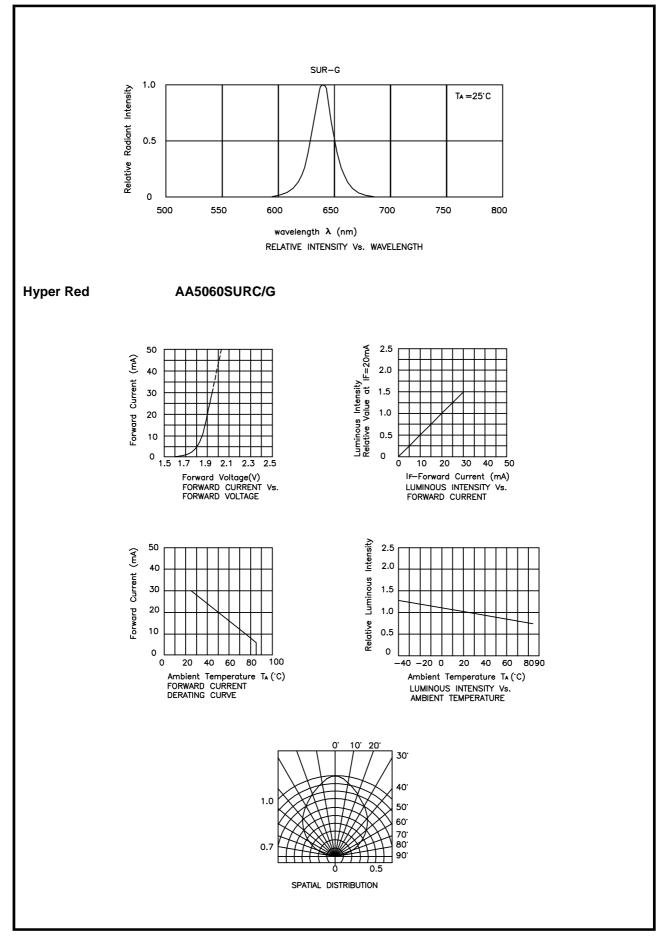
Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	640		nm	IF=20mA
λD	Dominant Wavelength	Hyper Red	630		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	22		nm	IF=20mA
С	Capacitance	Hyper Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Hyper Red	1.9	2.5	V	IF=20mA
IR	Reverse Current	Hyper Red		10	uA	VR = 5V

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

Parameter	Hyper Red	Units	
Power dissipation	100	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		

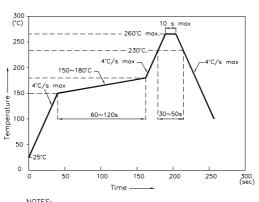
Note:

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



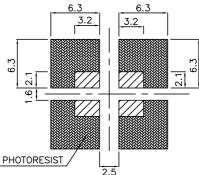
#### AA5060SURC/G

Reflow Soldering Profile For Lead-free SMT Process.

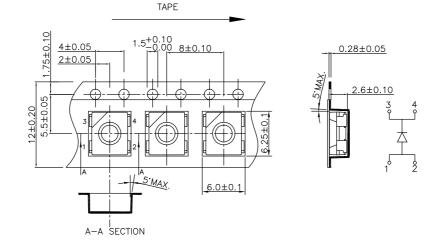


NOTES:
1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
3.Number of reflow process shall be 2 times or less.

### 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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