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SUBMINIATURE SOLID STATE LAMP

AM2520SURCK08

HYPER RED

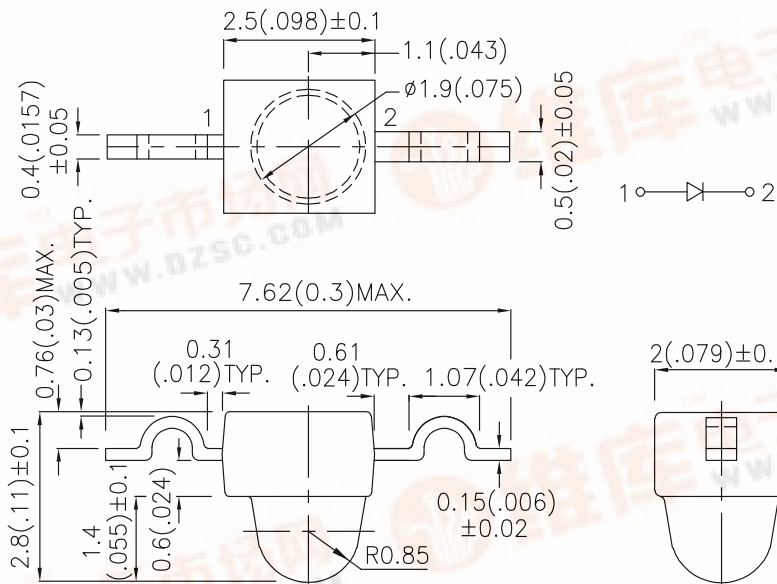
Features

- 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 InGaAlP 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. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
AM2520SURCK08	HYPER RED (InGaAlP)	WATER CLEAR	180	650	20°

Note:

1. θ1/2 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	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Hyper Red	650		nm	I _F =20mA
λ _D	Dominant Wavelength	Hyper Red	635		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Hyper Red	28		nm	I _F =20mA
C	Capacitance	Hyper Red	35		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Hyper Red	1.95	2.5	V	I _F =20mA
I _R	Reverse Current	Hyper Red		10	μA	V _R = 5V

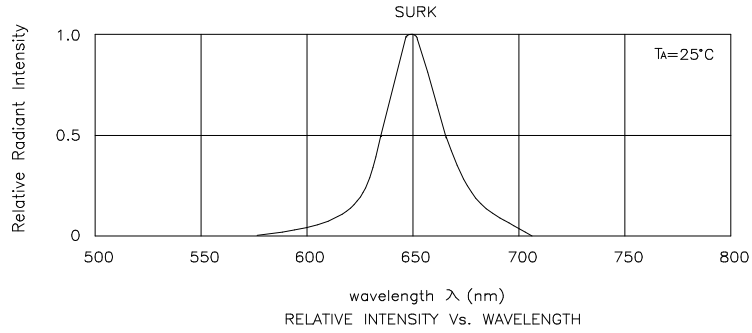
Absolute Maximum Ratings at TA=25°C

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:

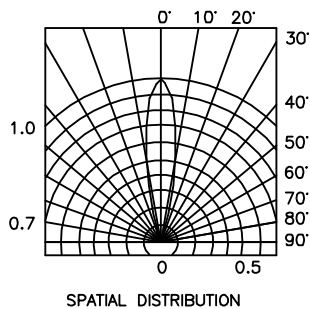
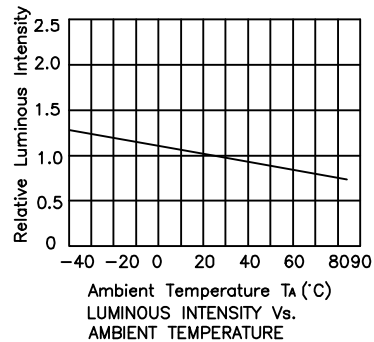
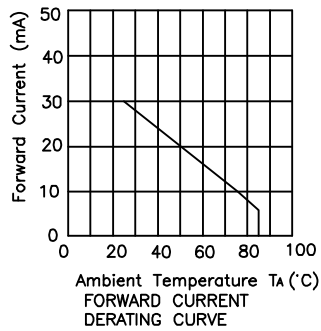
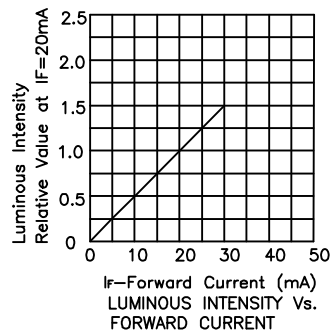
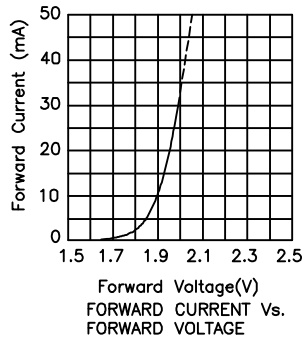
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

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Hyper Red

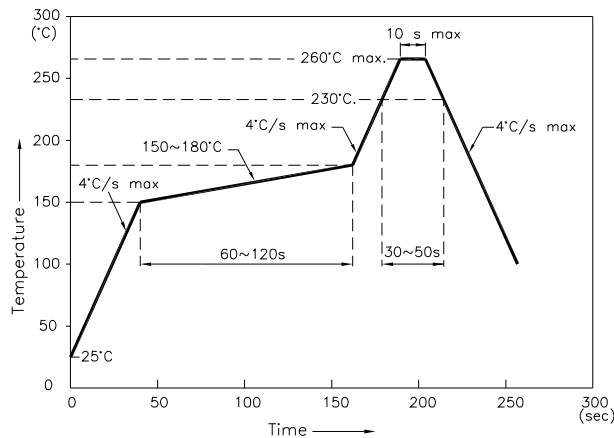
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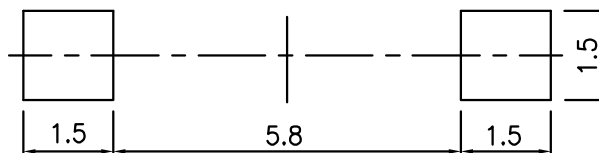
Reflow Soldering Profile For Lead-free SMT Process.



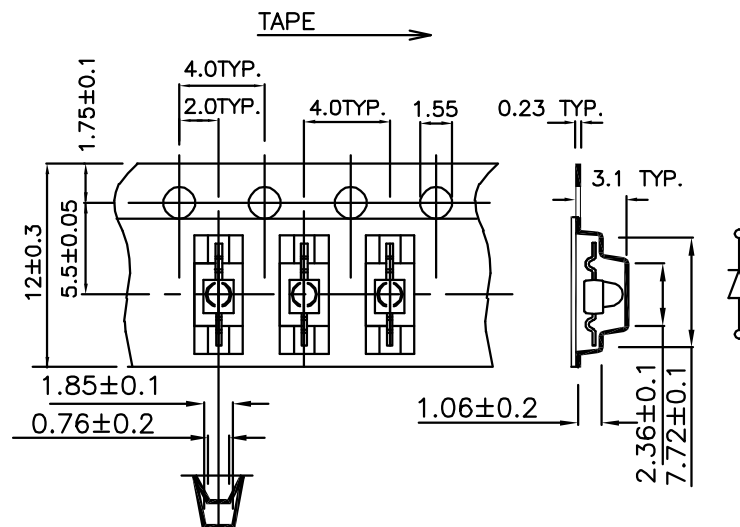
NOTES:

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).