

Kingbright

1.6X0.8mm SMD CHIP LED LAMP

AP1608SURC

HYPER RED

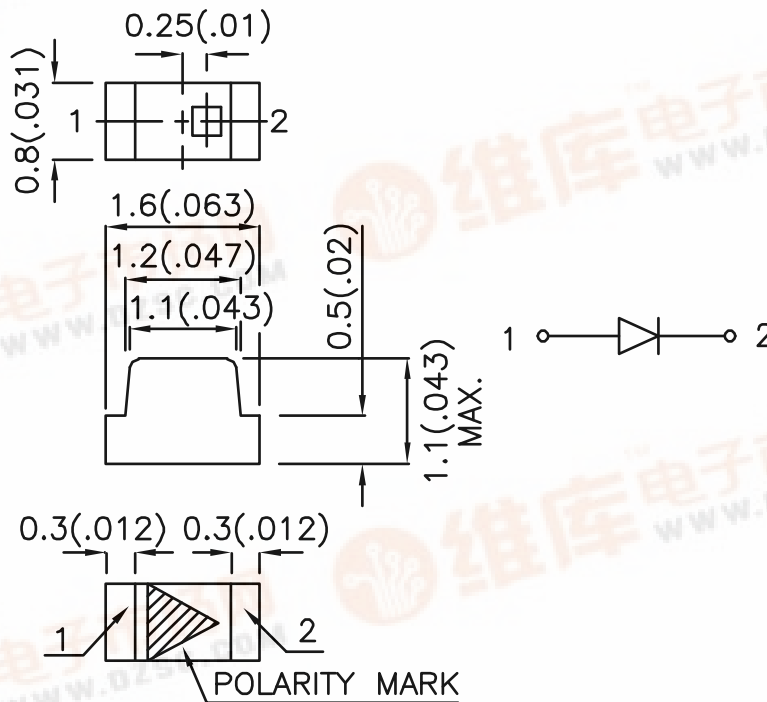
Features

- 1.6mmX0.8mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE: 2000PCS / 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 $\pm 0.1(0.004)$ unless otherwise noted.
3. Specifications are subject to change without notice.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
AP1608SURC	HYPER RED (InGaAlP)	WATER CLEAR	70	200	120°

Note:

1. θ 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

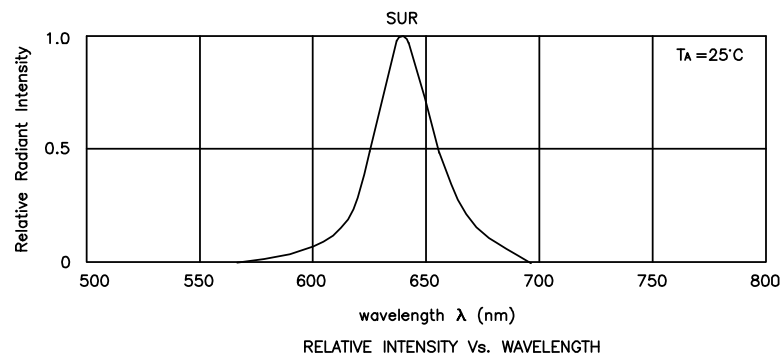
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Hyper Red	640		nm	IF=20mA
λ_D	Dominant Wavelength	Hyper Red	628		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red	27		nm	IF=20mA
C	Capacitance	Hyper Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Hyper Red	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	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	

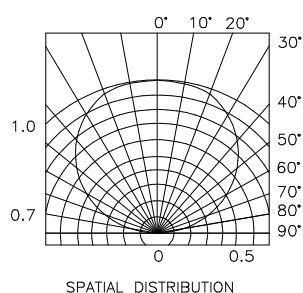
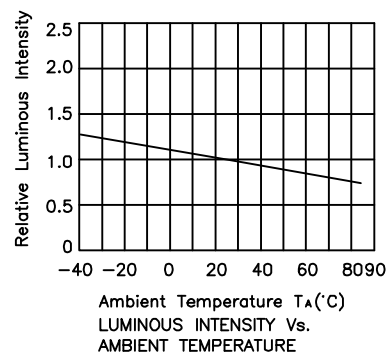
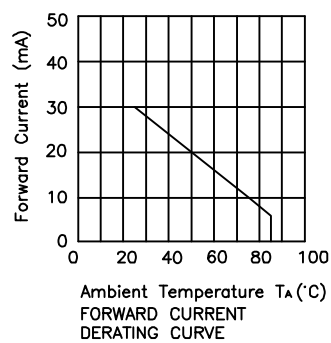
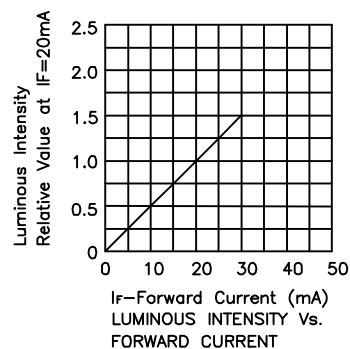
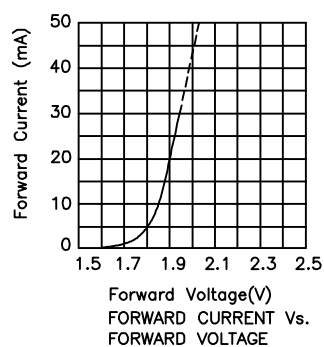
Note:

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



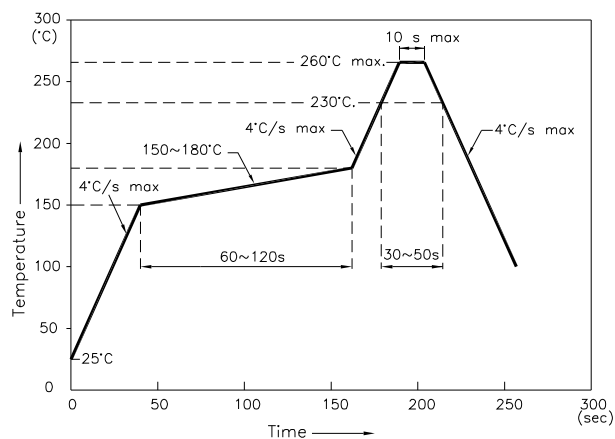
Hyper Red

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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.

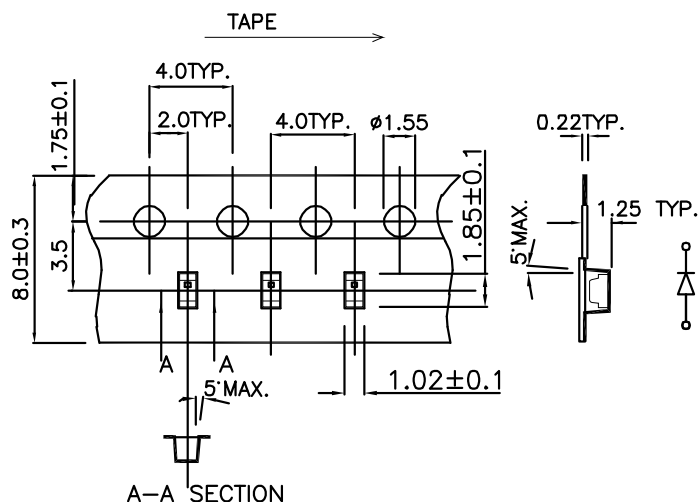
Recommended Soldering Pattern

(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: $\pm 1\text{nm}$ (Test condition is based on the sorting standard).
- 2.Luminous intensity: $\pm 15\%$ (Test condition is based on the sorting standard).
- 3.Forward voltage: $\pm 0.1\text{V}$ (Test condition is based on the sorting standard).