

P/N: KA-3528SURC

HYPER RED

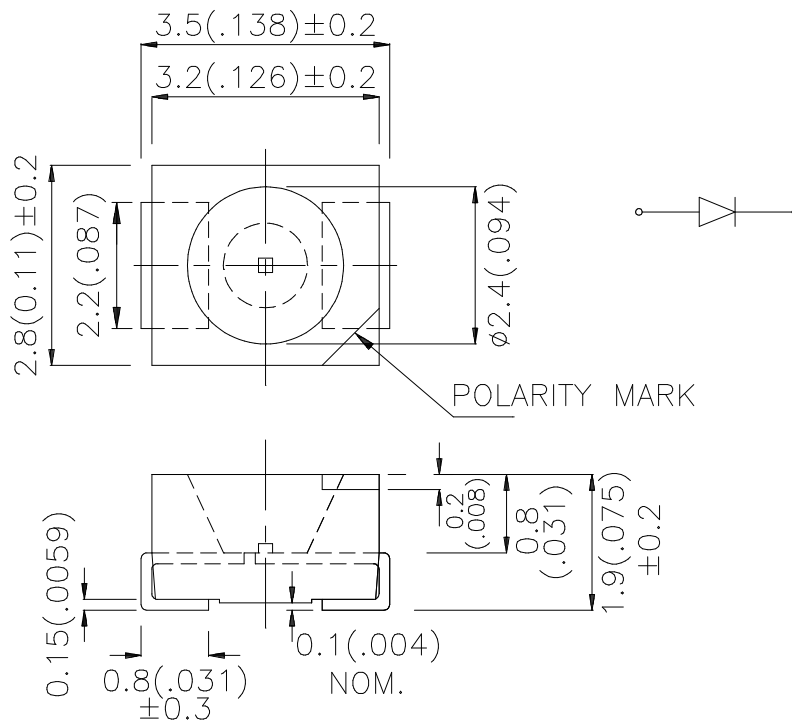
### Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / 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. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
KA-3528SURC	HYPER RED (InGaAlP)	WATER CLEAR	110	230	120°

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

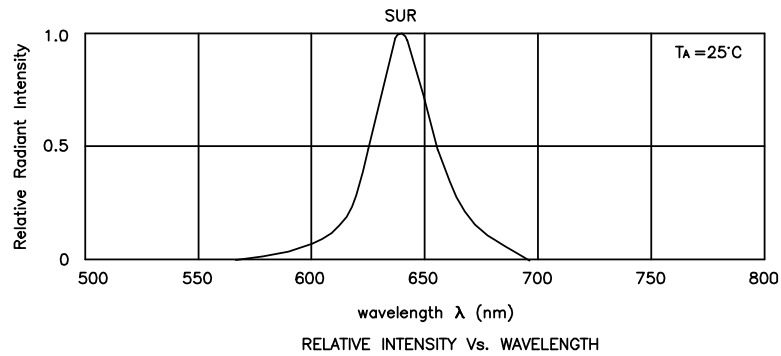
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Hyper Red	640		nm	IF=20mA
$\lambda_D$	Dominant Wavelength	Hyper Red	628		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red	27		nm	IF=20mA
C	Capacitance	Hyper Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	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	125	mW
DC Forward Current	50	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

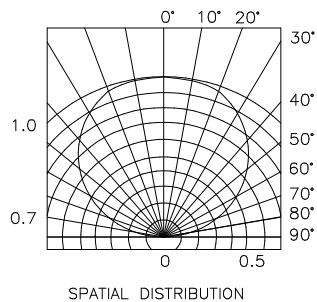
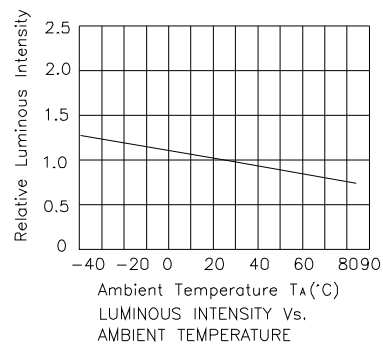
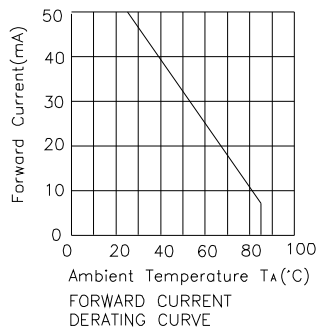
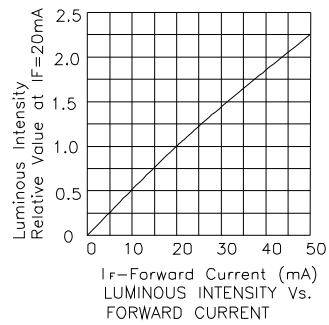
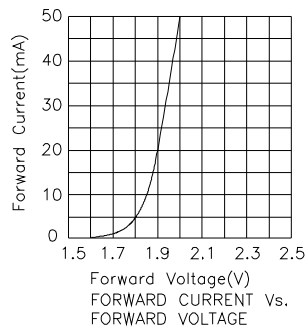
Note:

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



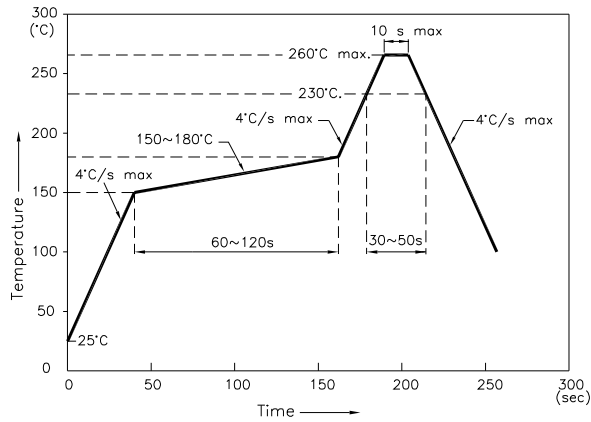
## Hyper Red

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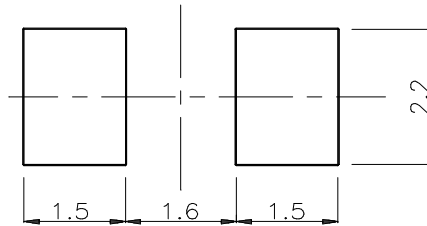
Reflow Soldering Profile For Lead-free SMT Process.



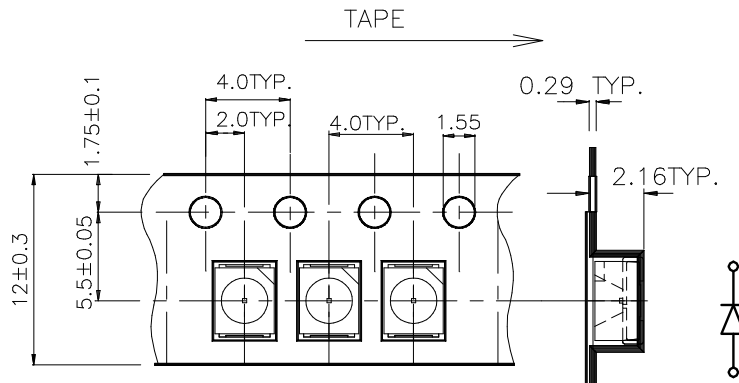
**NOTES:**

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 special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.