

PRELIMINARY SPEC

APTK2012SURCK

HYPER RED

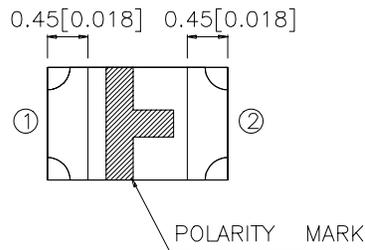
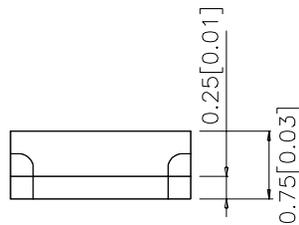
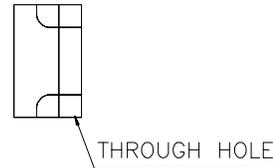
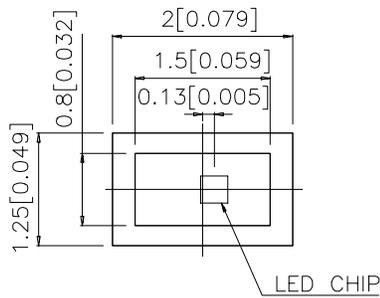
### Features

- 2.0mmX1.25mm SMT LED, 0.75mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

### 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) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
APTK2012SURCK	HYPER RED (InGaAlP)	WATER CLEAR	70	200	100°

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 T<sub>A</sub>=25°C

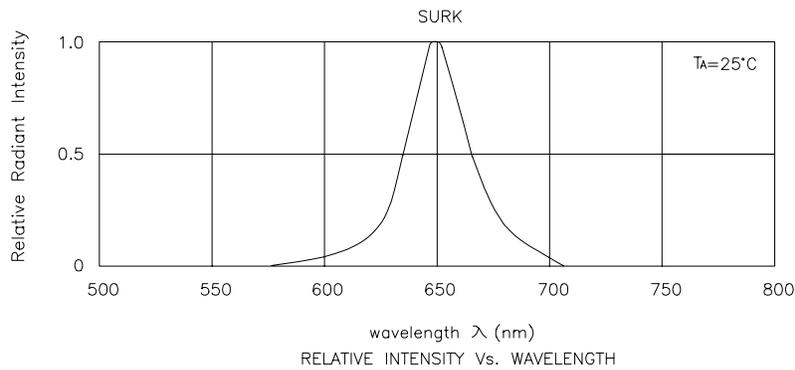
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Hyper Red	650		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominate Wavelength	Hyper Red	635		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Hyper Red	28		nm	I <sub>F</sub> =20mA
C	Capacitance	Hyper Red	35		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Hyper Red	1.95	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Hyper Red		10	μA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

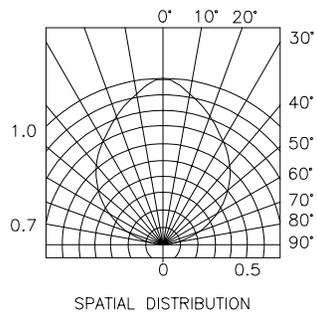
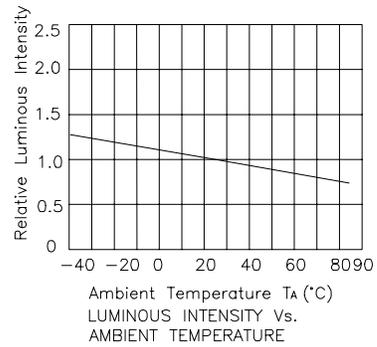
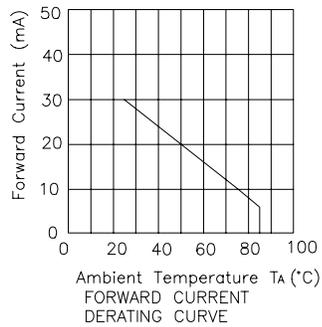
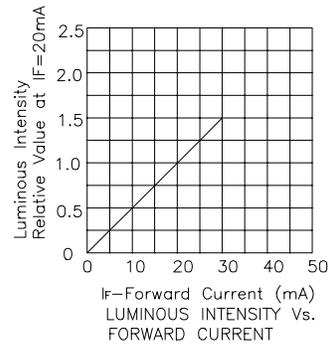
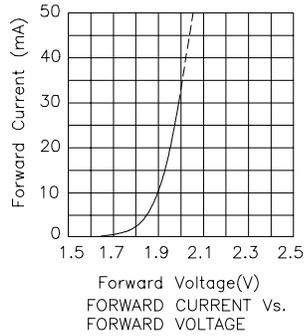
Parameter	Hyper Red	Units
Power dissipation	170	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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

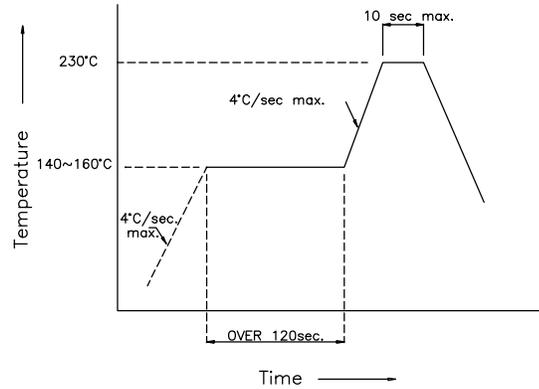


## Hyper Red APTK2012SURCK

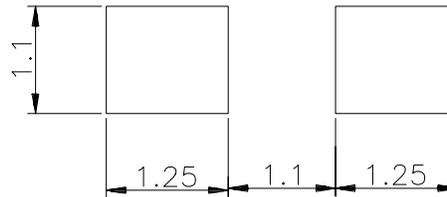


## APTK2012SURCK SMT Reflow Soldering Instructions

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)

