

PRELIMINARY SPEC

WP2523SURC

HYPER RED

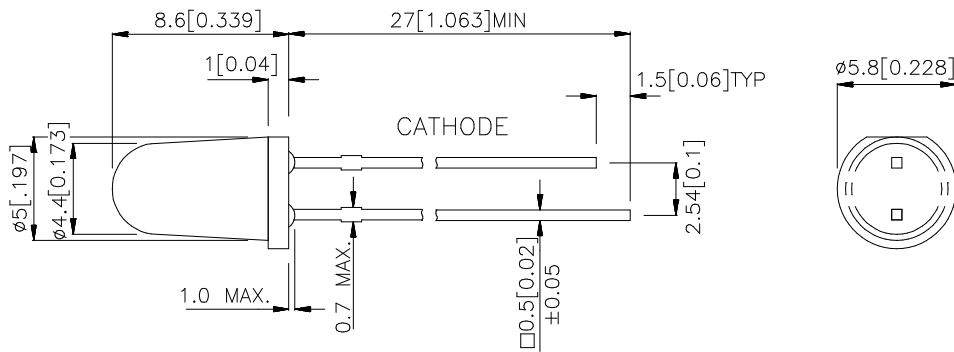
### Features

- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- I.C. COMPATIBLE.
- 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 lead 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.	2 θ 1/2
WP2523SURC	HYPER RED (InGaAlP)	WATER CLEAR	1200	4000	12°

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

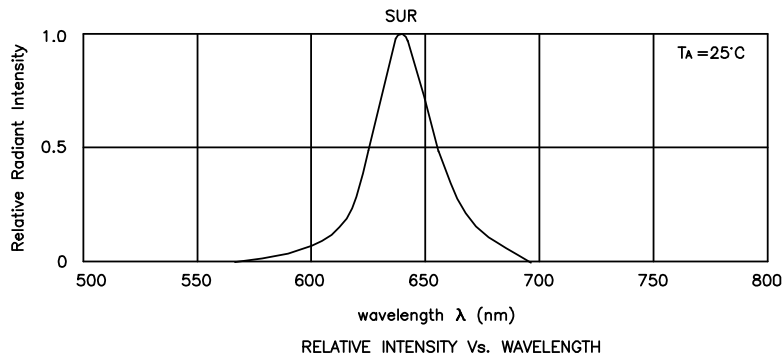
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Hyper Red	640		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominant Wavelength	Hyper Red	628		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Hyper Red	27		nm	I <sub>F</sub> =20mA
C	Capacitance	Hyper Red	45		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Hyper Red	1.9	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Hyper Red		10	uA	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	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

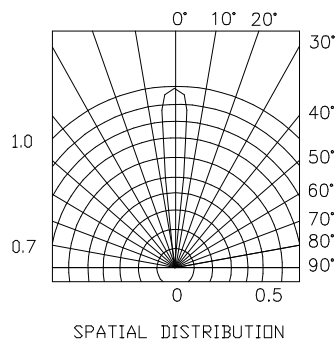
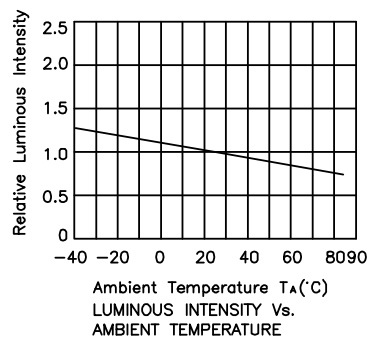
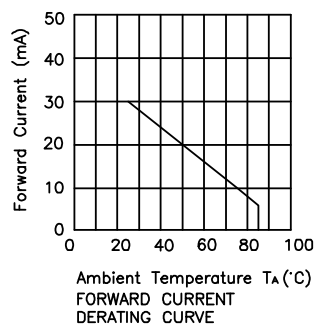
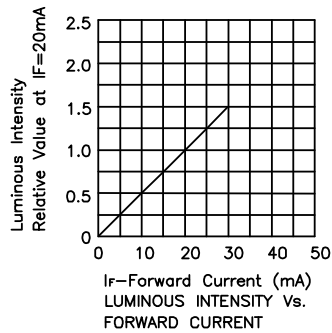
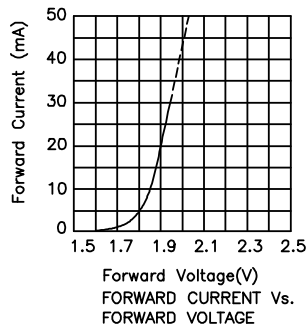
Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.
- 5mm below package base.



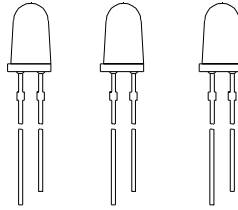
## Hyper Red

### WP2523SURC

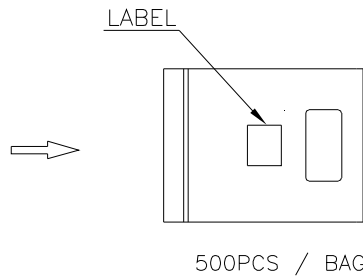


## PACKING & LABEL SPECIFICATIONS

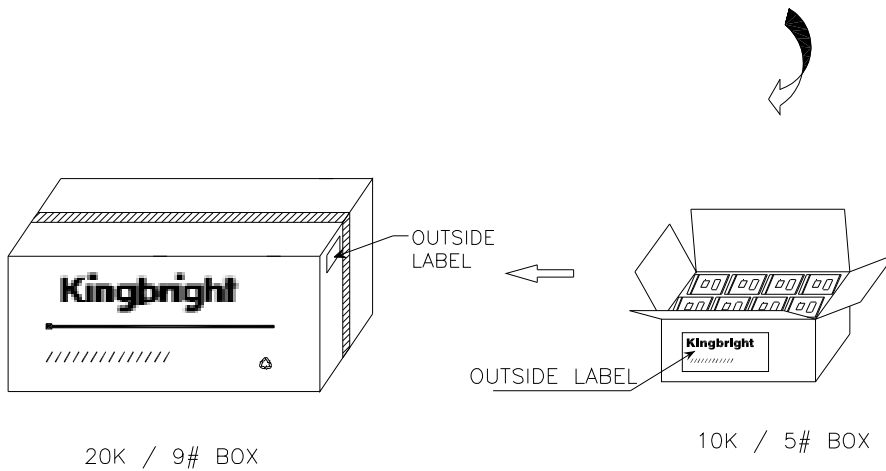
## WP2523SURC



P/N: WP2523SURC



500PCS / BAG



20K / 9# BOX

10K / 5# BOX

<h1>Kingbright</h1>				
Q.C.	<table border="1" style="margin: auto;"> <tr> <td style="text-align: center;">QC</td> </tr> <tr> <td style="text-align: center;">xx xx xx</td> </tr> <tr> <td style="text-align: center;">PASSED</td> </tr> </table>	QC	xx xx xx	PASSED
QC				
xx xx xx				
PASSED				
TYPE NO : WP2523SURC				
QUANTITY : 500 pcs				
S/N : XXX	CODE: XX			
LOT NO				
xxxxxxxxxx				
RoHS Compliant				

**Remarks:**

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

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

Note: Accuracy may depend on the sorting parameters.