

## T-1 3/4 (5mm) ROUND LED LAMP

PRELIMINARY SPEC

WP2523SURC

HYPER RED

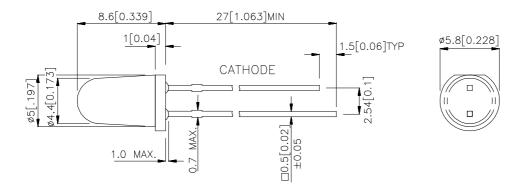
#### **Features**

- •OUTSTANDING MATERIAL EFFICIENCY.
- •RELIABLE AND RUGGED.
- •I.C. COMPATIBLE.
- •RoHS COMPLIANT.

### **Description**

The Hyper Red source color devices are made with DH InGaAIP 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.

SPEC NO: DSAF2454 REV NO: V.1 DATE: APR/19/2005 PAGE: 1 OF 4
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: S.H.CHEN ERP:1101002943

# Kingbright

### **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Тур.	<b>2</b> θ <b>1/2</b>
WP2523SURC	HYPER RED (InGaAIP)	WATER CLEAR	1200	4000	12°

#### Note:

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	640		nm	IF=20mA
λD	Dominant Wavelength	Hyper Red	628		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	27		nm	IF=20mA
С	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		
Power dissipation	170	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	185	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	/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		

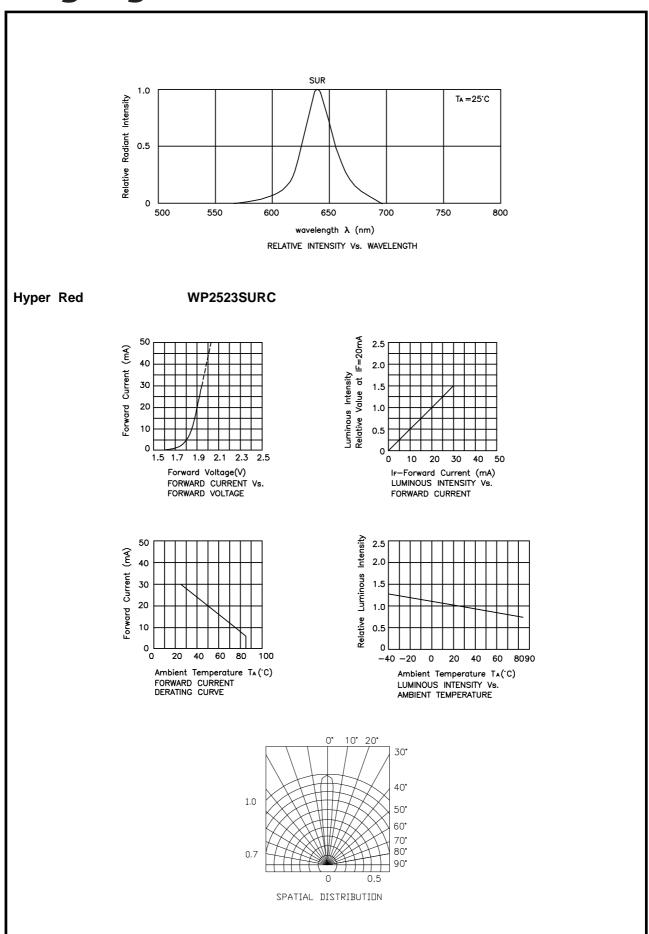
### Notes:

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

SPEC NO: DSAF2454 REV NO: V.1 DATE: APR/19/2005 PAGE: 2 OF 4
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: S.H.CHEN ERP:1101002943

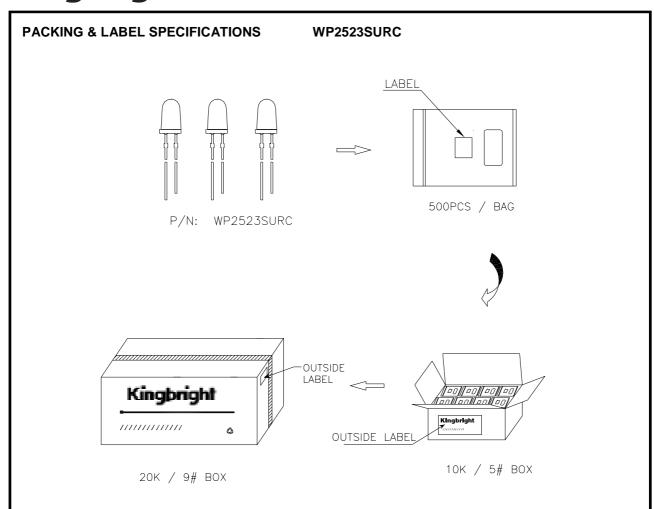
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

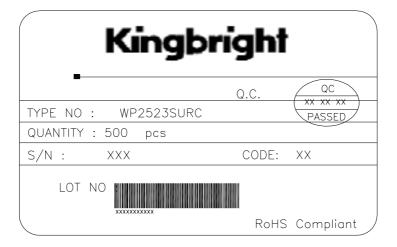
# **Kingbright**



SPEC NO: DSAF2454 REV NO: V.1 DATE: APR/19/2005 PAGE: 3 OF 4
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: S.H.CHEN ERP:1101002943

# Kingbright





#### 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.

SPEC NO: DSAF2454 REV NO: V.1 DATE: APR/19/2005 PAGE: 4 OF 4
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: S.H.CHEN ERP:1101002943