

Kingbright

T-1 3/4 (5mm) SOLID STATE LAMP

WP1513SURC

HYPER RED

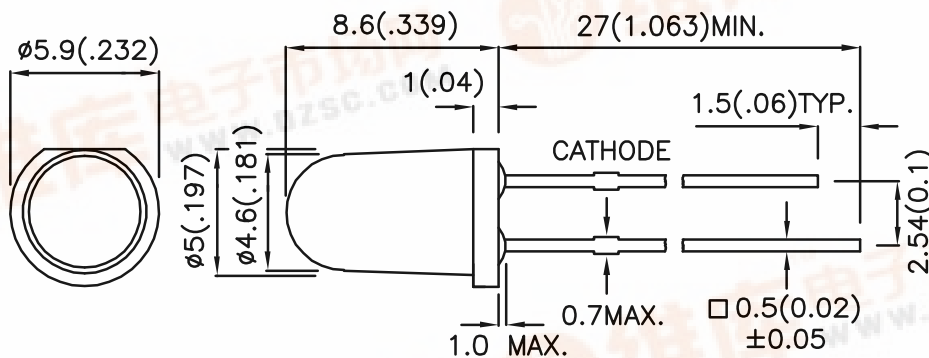
Features

- LOW POWER CONSUMPTION.
- VERSATILE MOUNTING ON P.C. BOARD OR PANEL.
- T-1 3/4 DIAMETER PACKAGE, TAPERED TYPE.
- RELIABLE AND RUGGED.
- 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 leads emerge from the package.
4. Specifications are subject to change without notice.



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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
WP1513SURC	HYPER RED (InGaAlP)	WATER CLEAR	1200	1800	20°

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
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

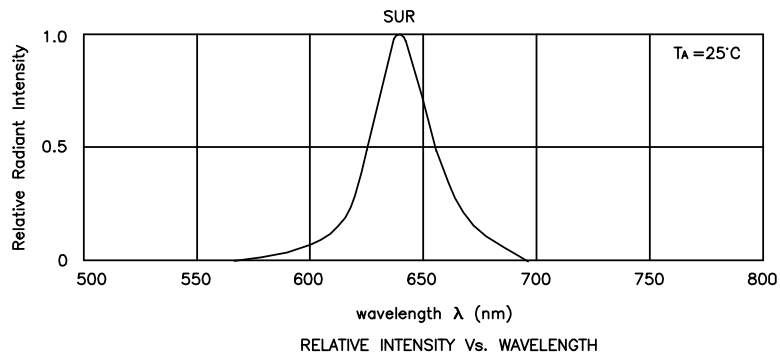
Absolute Maximum Ratings at TA=25°C

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	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

Notes:

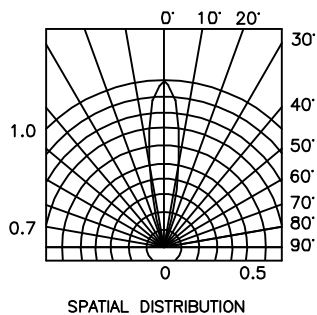
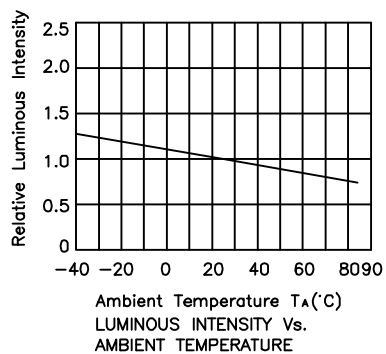
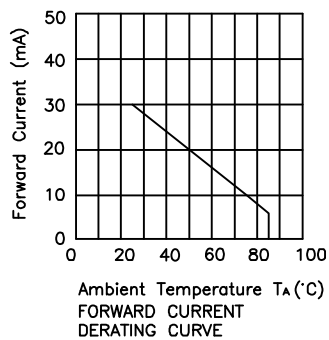
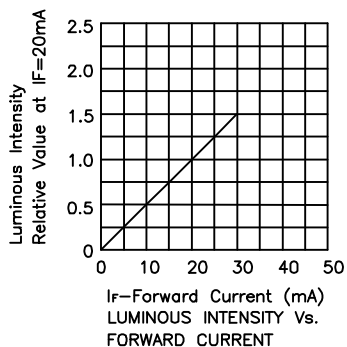
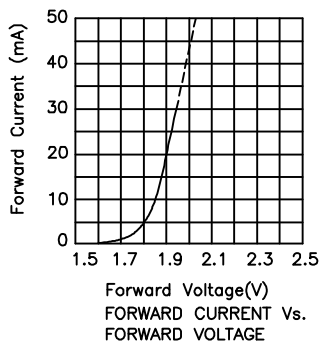
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.
- 5mm below package base.

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Hyper Red

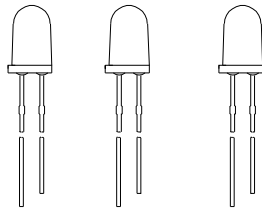
WP1513SURC



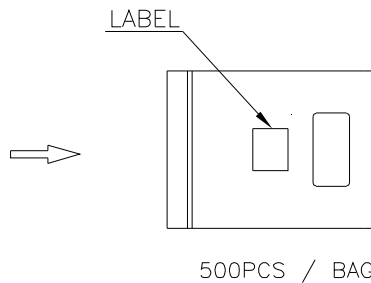
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PACKING & LABEL SPECIFICATIONS

WP1513SURC



P/N: WP1513SURC

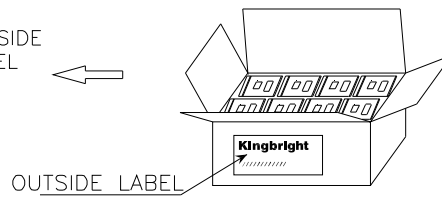


500PCS / BAG



20K / 9# BOX

OUTSIDE LABEL



10K / 5# BOX

OUTSIDE LABEL

<h1 style="margin: 0;">Kingbright</h1>	
Q.C.	<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center;"> <div style="text-align: center;"> <p style="font-size: 8px; margin: 0;">QC</p> <p style="font-size: 8px; margin: 0;">xx xx xx</p> <p style="font-size: 8px; margin: 0;">PASSED</p> </div> </div>
TYPE NO : WP1513SURC	
QUANTITY : 500 pcs	
S/N : XXX	CODE: XX
LOT NO	<p style="font-size: 8px; margin: 0;">xxxxxxxxxx</p>
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.