

WP7143SURC

HYPER RED

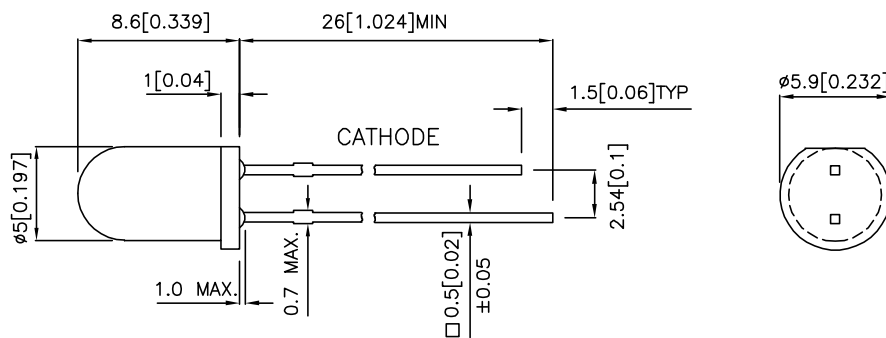
### Features

- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.
- 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.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
WP7143SURC	HYPHER RED (InGaAlP)	WATER CLEAR	480	850	30°

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

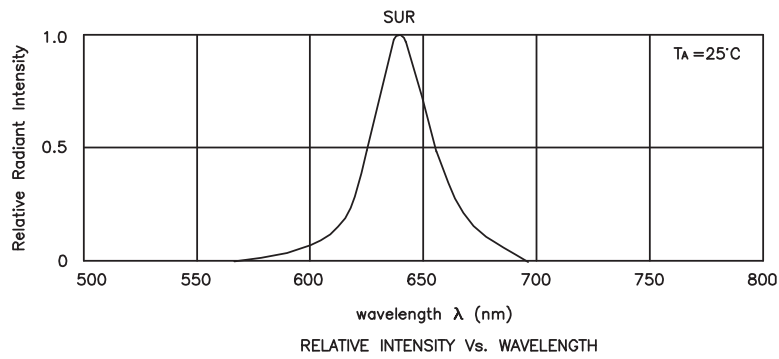
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	640		nm	IF=20mA
λD	Dominant Wavelength	Hyper Red	628		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	27		nm	IF=20mA
C	Capacitance	Hyper Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Hyper Red	1.9	2.5	V	IF=20mA
IR	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	

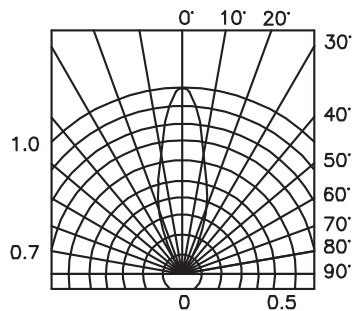
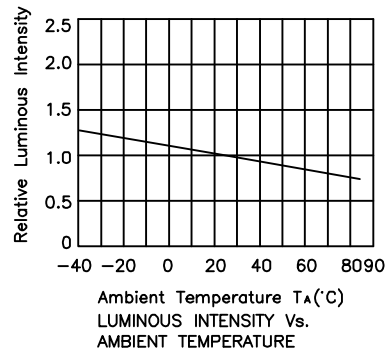
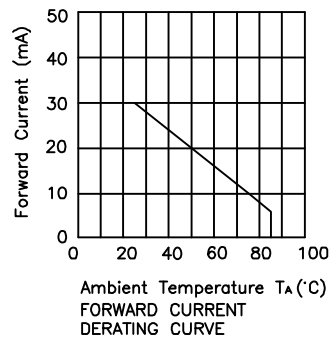
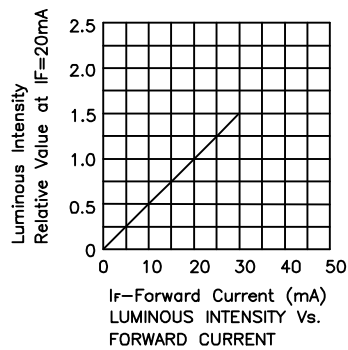
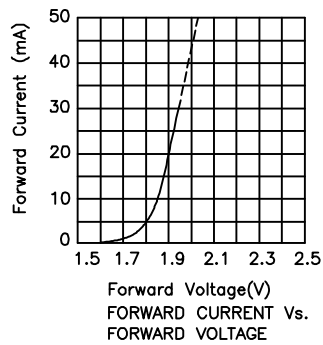
Notes:

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



## Hyper Red

### WP7143SURC



#### Remarks:

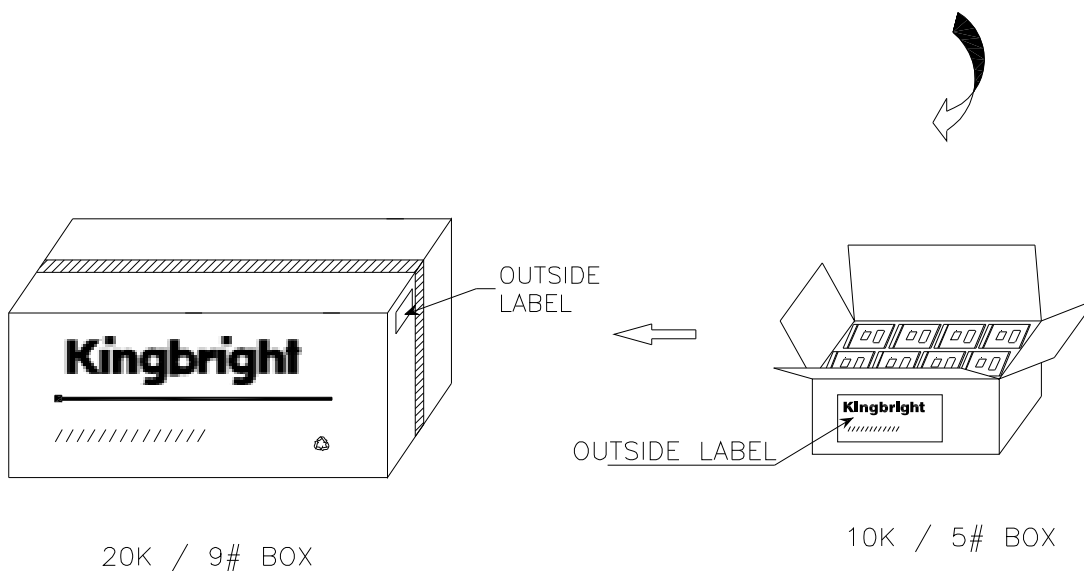
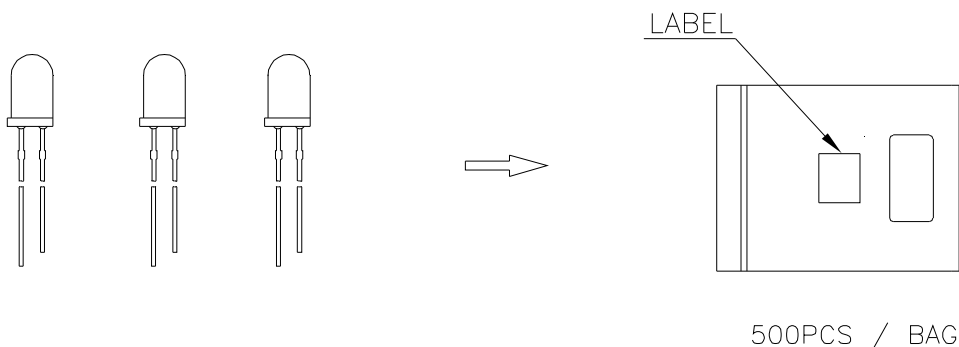
If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:


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

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**WP7143SURC**



<b>Kingbright</b>				
Q.C.	<table border="1"> <tr> <td style="text-align: center;">QC</td> </tr> <tr> <td style="text-align: center;">xxx xx. xxxx</td> </tr> <tr> <td style="text-align: center;">PASSED</td> </tr> </table>	QC	xxx xx. xxxx	PASSED
QC				
xxx xx. xxxx				
PASSED				
TYPE NO : WP7143XXX				
QUANTITY : 500 pcs				
S/N : xxx	CODE: xx			
LOT NO : 				
RoHS Compliant				