

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

WP1703SURC

HYPER RED

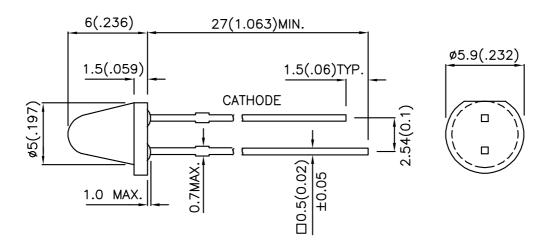
Features

- •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 leads emerge from the package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAF2452 REV NO: V.1
APPROVED: J. Lu CHECKED: Allen Liu

DATE: APR/28/2005 DRAWN: H.Q.YUAN PAGE: 1 OF 4 ERP: 1101002433

Kingbright

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
WP1703SURC	HYPER RED (InGaAIP)	WATER CLEAR	280	700	50°

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	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				

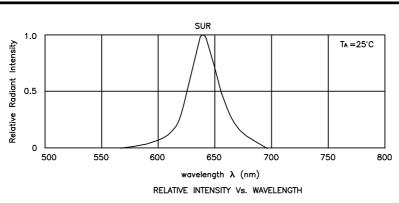
Notes:

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

SPEC NO: DSAF2452 REV NO: V.1 DATE: APR/28/2005 PAGE: 2 OF 4
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: H.Q.YUAN ERP: 1101002433

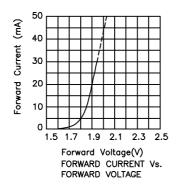
 $^{1.\,\}theta 1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

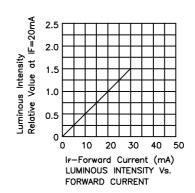
Kingbright

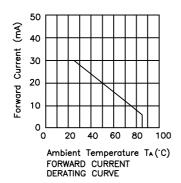


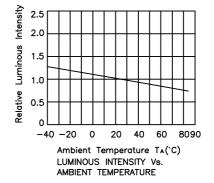
Hyper Red

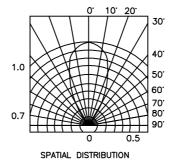
WP1703SURC











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:

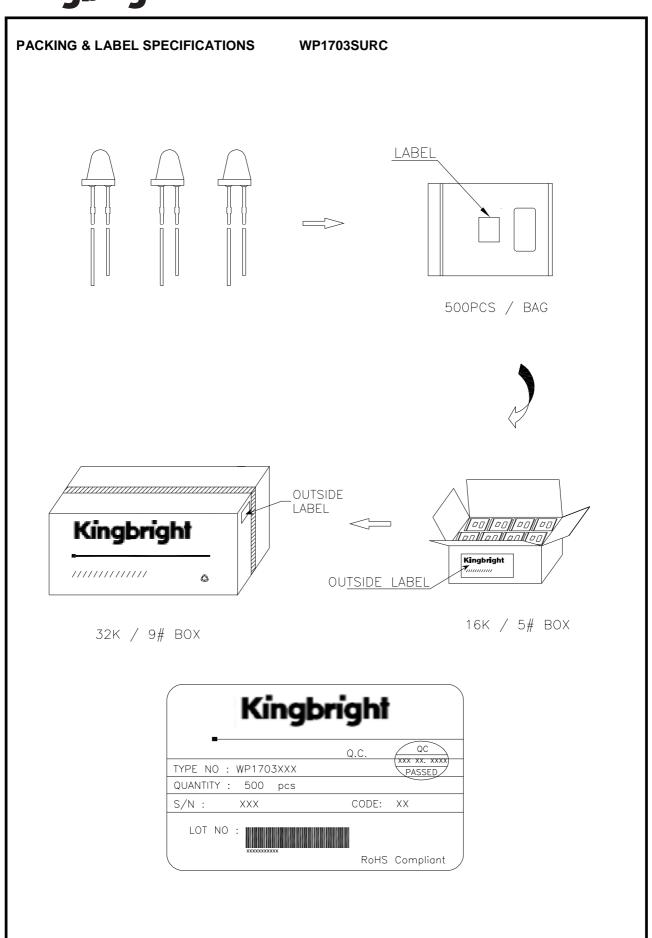
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

 SPEC NO: DSAF2452
 REV NO: V.1
 DATE: APR/28/2005
 PAGE: 3 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: H.Q.YUAN
 ERP: 1101002433

Kingbright



SPEC NO: DSAF2452 APPROVED: J. Lu REV NO: V.1 CHECKED: Allen Liu DATE: APR/28/2005 DRAWN: H.Q.YUAN PAGE: 4 OF 4 ERP: 1101002433