

Kingbright

7.6mmX7.6mm SUPER FLUX LED LAMP

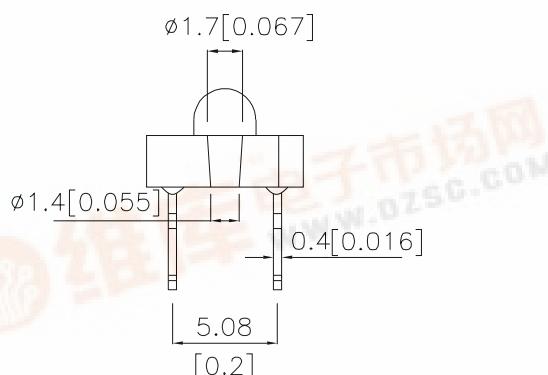
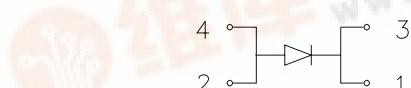
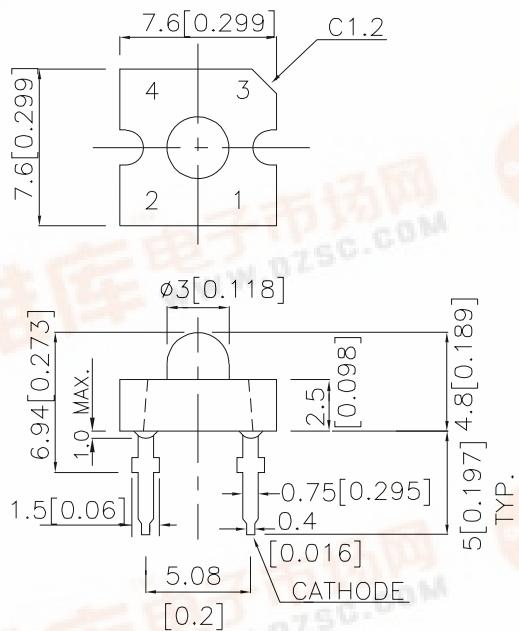
Part Number: WP76761CSURC      HYPER RED

**Features**

- SUPER FLUX OUTPUT.
- DESIGN FOR HIGH CURRENT OPERATION.
- OUTSTANDING MATERIAL EFFICIENCY.
- 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	I <sub>v</sub> (mcd) [2] @ 20mA *70mA		Viewing Angle [1]
			Min.	Typ.	
WP76761CSURC	HYPER RED (InGaAIP)	WATER CLEAR	900	2000	20°
			*3300	*7000	

Notes:

- 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- \* Luminous intensity with asterisk is measured at 70mA under 40ms pulse width; Luminous intensity / luminous flux: +/-15%.
- Drive current between 10mA and 30mA are recommended for long term performance.
- Operation at current below 10mA is not recommended.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Min.	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Hyper Red		640		nm	I <sub>F</sub> =20mA
λ <sub>D</sub> [1]	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> [2]	Forward Voltage	Hyper Red	1.6		1.8	V	I <sub>F</sub> =20mA
			1.8		2.0		
			2.0		2.2		
			2.2		2.4		
			2.4		2.6		
I <sub>R</sub>	Reverse Current	Hyper Red			10	uA	V <sub>R</sub> = 5V

Notes:

- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.

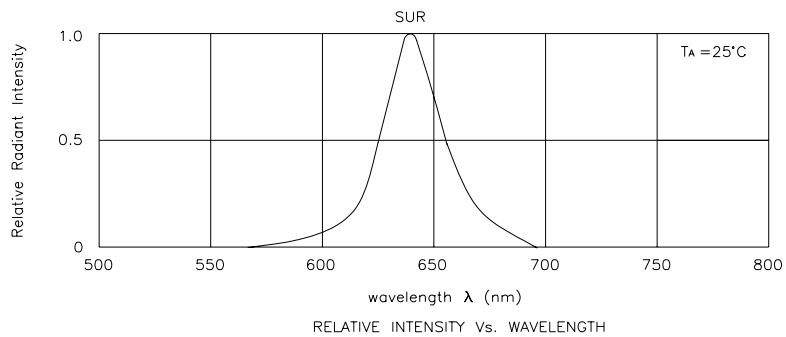
## Absolute Maximum Ratings at T<sub>A</sub>=25°C

Parameter	Hyper Red	Units
Power dissipation	75	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:

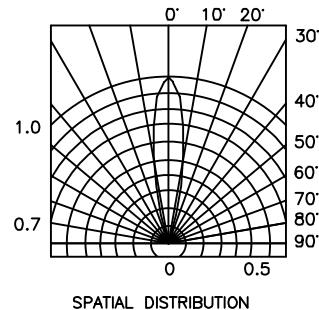
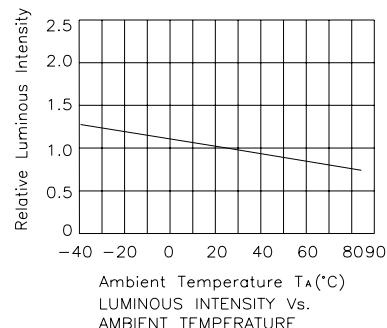
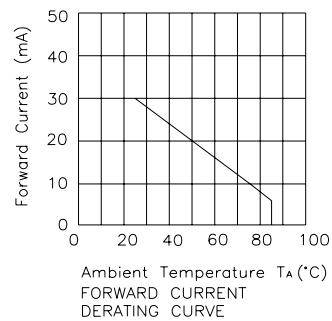
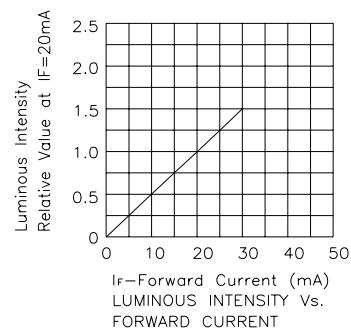
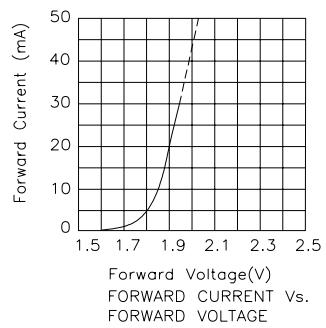
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.
- 5mm below package base.

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Hyper Red

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## PACKING & LABEL SPECIFICATIONS

WP76761CSURC

