Part Number: WP76761CSURC HYPER RED

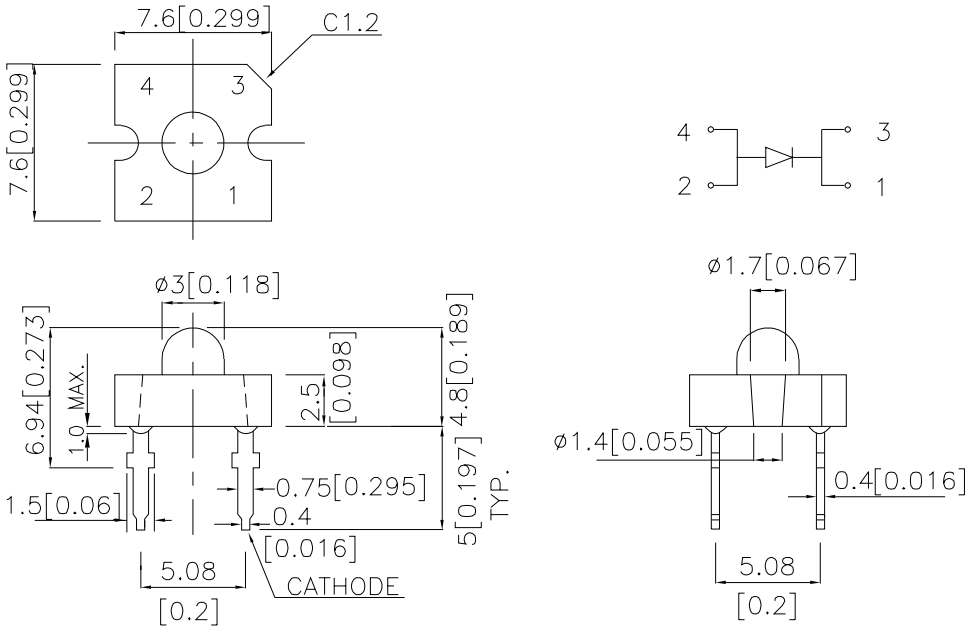
Features

- 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 ±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) [2] @ 20mA *70mA		Viewing Angle [1]
			Min.	Typ.	2 θ 1/2
WP76761CSURC	HYPER RED (InGaAlP)	WATER CLEAR	900	2000	20°
			*3300	*7000	

Notes:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. * Luminous intensity with asterisk is measured at 70mA under 40ms pulse width; Luminous intensity / luminous flux: +/-15%.
3.Drive current between 10mA and 30mA are recommended for long term performance.
4.Operation at current below 10mA is not recommended.

Electrical / Optical Characteristics at T_A=25°C

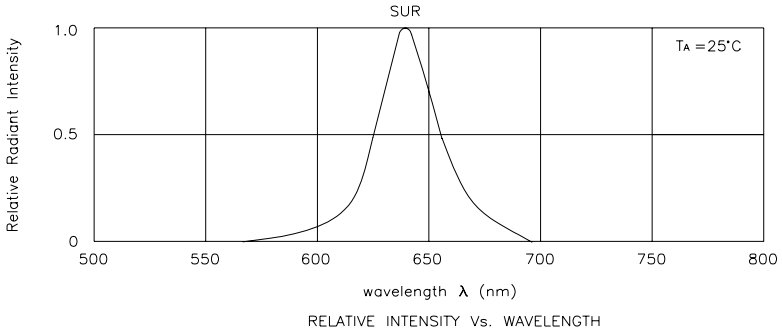
Symbol	Parameter	Device	Min.	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red		640		nm	I_F=20mA
λD [1]	Dominant Wavelength	Hyper Red		628		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red		27		nm	I_F=20mA
C	Capacitance	Hyper Red		45		pF	V_F=0V;f=1MHz
V_F [2]	Forward Voltage	Hyper Red	1.6		1.8	V	I_F=20mA
			1.8		2.0		
			2.0		2.2		
			2.2		2.4		
			2.4		2.6		
I_R	Reverse Current	Hyper Red			10	uA	V_R = 5V

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

Absolute Maximum Ratings at T_A=25°C

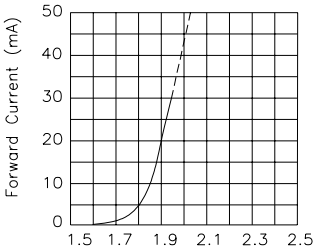
Parameter	Hyper Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

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

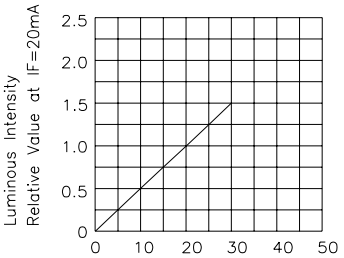


RELATIVE INTENSITY Vs. WAVELENGTH

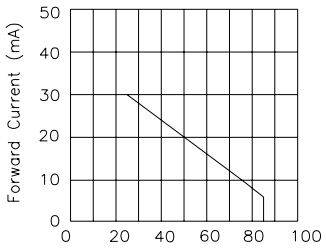
Hyper Red **WP76761CSURC**



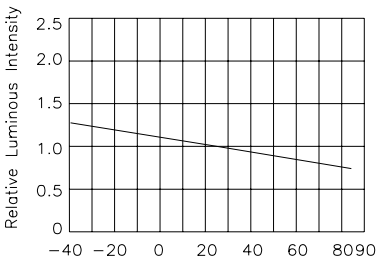
FORWARD CURRENT Vs.
FORWARD VOLTAGE



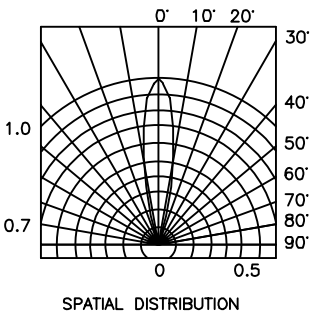
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

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PACKING & LABEL SPECIFICATIONS **WP76761CSURC**