W76761CSURC/E HYPER RED

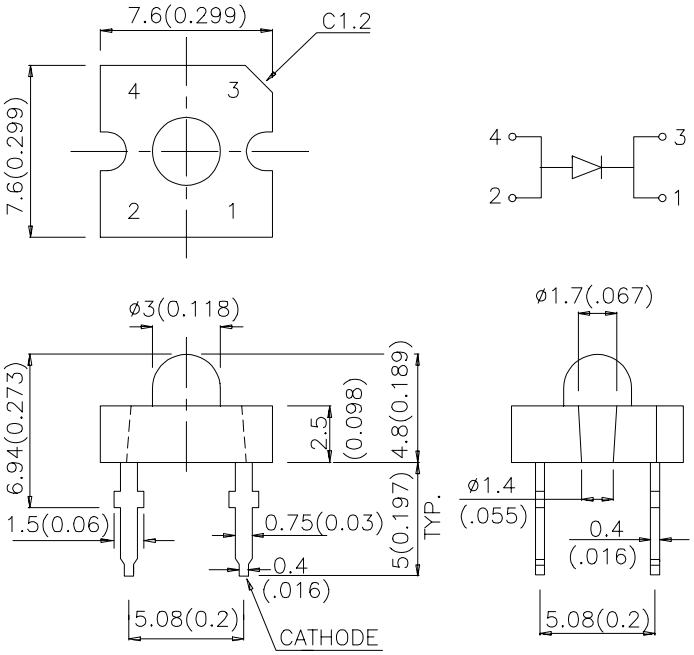
Features

- SUPER FLUX OUTPUT.
- DESIGN FOR HIGH CURRENT OPERATION.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.

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 lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA *70mA		Viewing Angle
			Min.	Typ.	2θ1/2
W76761CSURC/E	HYPER RED (InGaAlP)	WATER CLEAR	1200	2300	20°
	HYPER RED (InGaAlP)		*3800	*8000	

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.
3. Drive current between 10mA and 30mA are recommended for long term performance.
4. Operation at current below 10mA is not recommended.

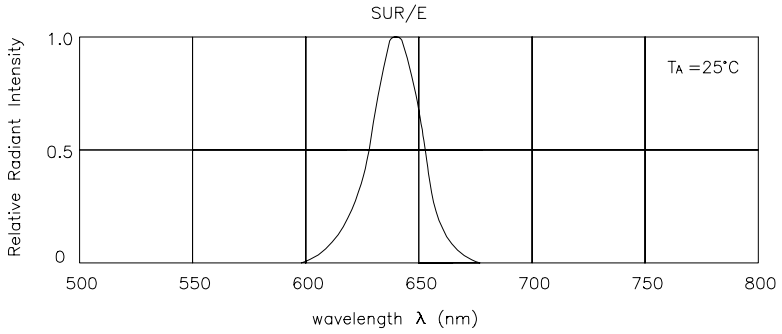
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	640		nm	I_F=20mA
λD	Dominate Wavelength	Hyper Red	630		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	25		nm	I_F=20mA
C	Capacitance	Hyper Red	45		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Hyper Red	1.9	2.5	V	I_F=20mA
I_R	Reverse Current	Hyper Red		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

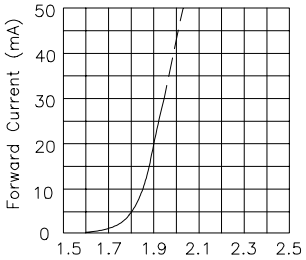
Parameter	Hyper Red	Units
Power dissipation	150	mW
DC Forward Current	30	mA
Peak Forward Current [1]	200	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

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

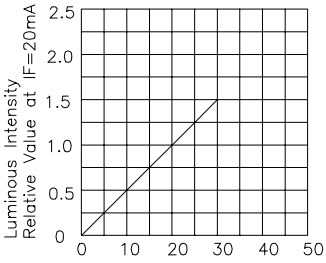


RELATIVE INTENSITY Vs. WAVELENGTH

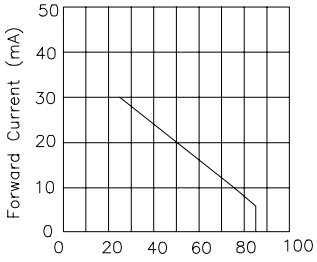
Hyper Red **W76761CSURC/E**



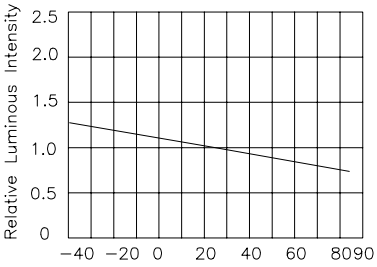
FORWARD CURRENT Vs.
FORWARD VOLTAGE



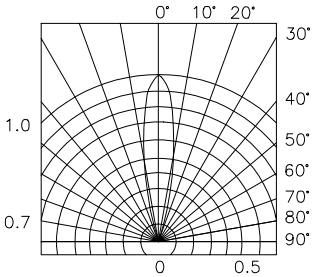
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



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