

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA *70mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
WP7676CSURC	HYPER RED (InGaAlP)	WATER CLEAR	280	500	70°
			*480	*1000	

Notes:

1. $\theta_{1/2}$ 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.
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
λ_{peak}	Peak Wavelength	Hyper Red	640		nm	I _F =20mA
λ_D	Dominant Wavelength	Hyper Red	628		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red	27		nm	I _F =20mA
C	Capacitance	Hyper Red	45		pF	V _F =0V; f=1MHz
V _F	Forward Voltage	Hyper Red	1.9	2.5	V	I _F =20mA
I _R	Reverse Current	Hyper Red		10	uA	V _R = 5V

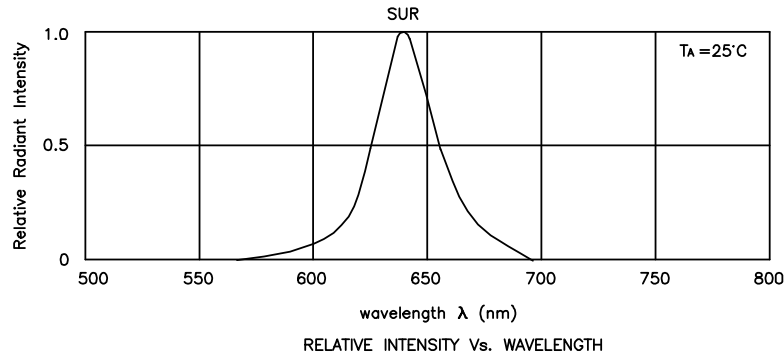
Absolute Maximum Ratings at T_A=25°C

Parameter	Hyper Red	Units
Power dissipation	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:

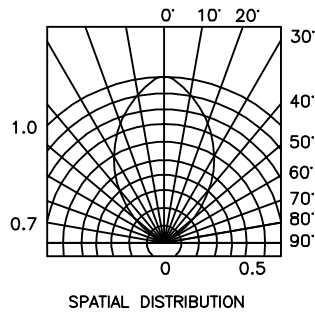
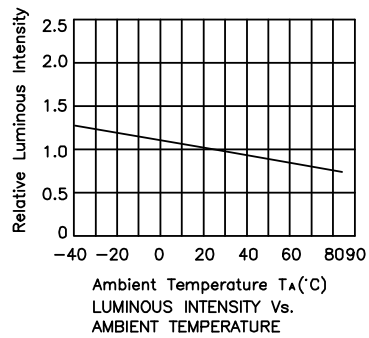
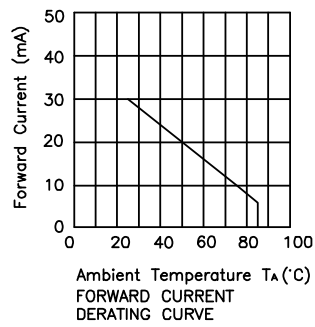
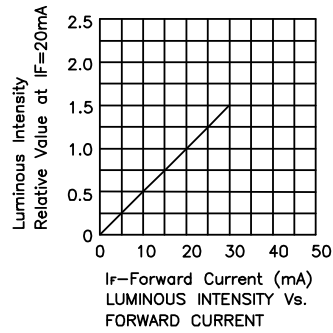
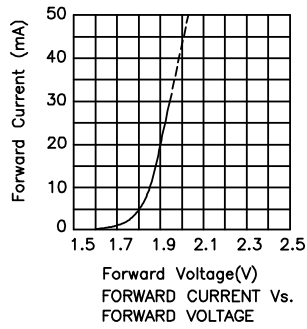
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.

Kingbright



Hyper Red

WP7676CSURC



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.