

- High Power CW Operation- 300 milliwatts
- Highly Visible to the Eye.
- Wavelength 635 ±3 nm Standard

The LDX-2315-635 laser diode is a high power, multimode, visible red laser diode. These AlGaInP broad-area, gain-guided lasers are produced using MOCVD growth which offers high efficiency, low threshold current, and excellent reliability. The low wavelength of these devices is over five times more visible to the eye than standard 670 nm laser diodes.

Because these devices are more sensitive to operating temperature than longer wavelength devices, it is essential that the lasers be operated with adequate cooling. An operating temperature of 15 °C is recommended; the efficiency and lifetime of the devices will be improved with even lower operating temperatures.

These devices are available in a High-Heat-Load package which has an integral thermoelectric cooler and thermistor. They are also available on an open heatsink package, as well as other package options; please inquire.

Device ratings:

Parameter	Min.	Typ.	Max.	Units
Output Power @ 15 °C	300		400	mW
Threshold Current	700	1000	1300	mA
Operating Current at Rated Power	1100	1400	1800	mA
Operating Temperature	-20	15	20	°C

Device characteristics at 15°C and at 300 mW output power:

Parameter	Min.	Typ.	Max.	Units
Forward Voltage	1.8	2.2	2.6	Volts
Wavelength	632	635	638	nm
Spectral Width		1	3	nm (FWHM)
Divergence- Parallel		7	9	degrees (FWHM)
Divergence- perpendicular	35	40	45	degrees (FWHM)
Polarization Ratio		>50:1		
Aperture Size		150 x 1		µm
Slope Efficiency	0.50	0.7	1.0	mW/mA