

690 nm 500 mW Laser Diode

- High Power CW Operation- 500 milliwatts
- High Brightness- 100 μm
- Wavelength 690 \pm 3 nm Standard

The LDX-2510-690 laser diode is a high brightness, high power, 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.

These devices are available in a High-Heat-Load package which has an integral thermoelectric cooler, thermistor, and monitor photodiode. 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 @ 20 °C		500	600	mW
Threshold Current	500	650	800	mA
Operating Current at Rated Power	1000	1200	1300	mA
Operating Temperature	0	20	40	°C

Device characteristics at 20°C and at 500 mW output power:

Parameter	Min.	Typ.	Max.	Units
Forward Voltage	1.8	2.1	2.4	Volts
Wavelength	687	690	693	nm
Spectral Width		1	3	nm (FWHM)
Divergence- Parallel		7	9	degrees (FWHM)
Divergence- perpendicular	36	40	44	degrees (FWHM)
Polarization Ratio		>50:1		
Aperture Size		100 x 1		μm
Slope Efficiency	0.90	1.1	1.3	mW/mA