

## 680 nm 800 mW Laser Diode

- High Power CW Operation- 800 milliwatts
- High Brightness- 150  $\mu\text{m}$
- Wavelength 680  $\pm$ 5 nm Standard

The LDX-2815-680 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		800	1000	mW
Threshold Current	600	800	1000	mA
Operating Current at Rated Power	1400	1600	2000	mA
Operating Temperature	0	20	40	°C

Device characteristics at 20°C and at 800 mW output power:

Parameter	Min.	Typ.	Max.	Units
Forward Voltage	1.8	2.1	2.4	Volts
Wavelength	675	680	685	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		150 x 1		$\mu\text{m}$
Slope Efficiency	0.90	1.1	1.3	mW/mA