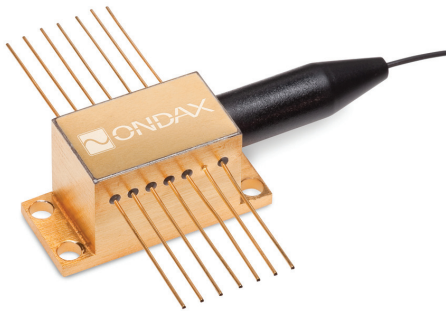


785nm/830nm, 600mW Raman Butterfly Lasers



High Power, Narrow Linewidth
Fiber Coupled Output

Ondax's 785nm and 830nm Raman Butterfly Lasers are wavelength-stabilized, high-power, fiber-coupled lasers designed specifically for Raman applications. The narrowed linewidth, low power consumption, and broad stabilized temperature operating characteristics deliver affordable, portable instrument-quality performance.

All SureLock™ Series lasers are stabilized using the Ondax PowerLocker® Volume Holographic Grating (VHG), ensuring precise, ultra-stable center wavelengths, low temperature dependence, and consistent optical performance over the locked region.

Available with FC/PC or FC/APC connectors.

Specifications:

Features:

- Compact 14-pin butterfly footprint
- Narrow spectral linewidth - 0.15nm
- Wavelength stability across operating range 0.01nm/°C
- Fiber coupled output - 105 μm MM fiber
- NoiseBlock™ narrow-band ASE suppression filters and beamsplitters available in matching wavelengths to further reduce linewidth and ASE noise

Applications:

- Raman Spectroscopy
- Metrology
- Bio-instrumentation
- Sensing
- Analytical Instrumentation

Specification Summary

Parameter	Symbol	Min	Typ	Max	Unit
Output Power	P_o			600	mW
Center Wavelength (vacuum)	L_p	784.5 829.5	785 830	785.5 830.5	nm
Linewidth	$\Delta\lambda$	0.06	0.10	0.20	nm
Central Stabilized Temperature ¹	T_c	20		40	°C
Stabilized Temperature Range ¹	T_r	14			°C

Operating Specifications

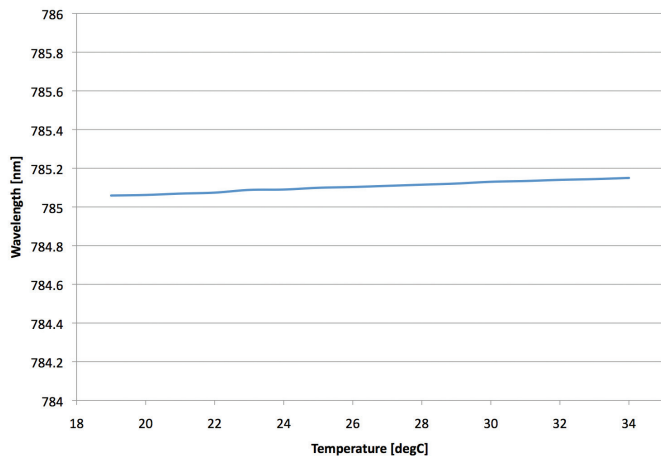
Parameter	Symbol	Min	Typ	Max	Unit
Threshold Current	I_{th}		325		mA
Operating Current	I_{op}		1100	1500	mA
Operating Voltage	V_{op}		1.9	2.2	V
TEC Current				2	A
TEC Voltage				4	V
Fiber Type		105 μm core/ 900 μm tubing			
Connector		FC/PC or FC/APC			
Numerical Aperture	NA		0.22		
Operating Temperature ²	T_{op}	0	25	50	°C
Storage Temperature ²	T_s	-20		80	°C

¹ Temperature set point is internal TEC set point. R-T thermistor data is available to determine actual thermistor setting. All specifications are at rated power with a case temperature of 25°C unless otherwise noted.

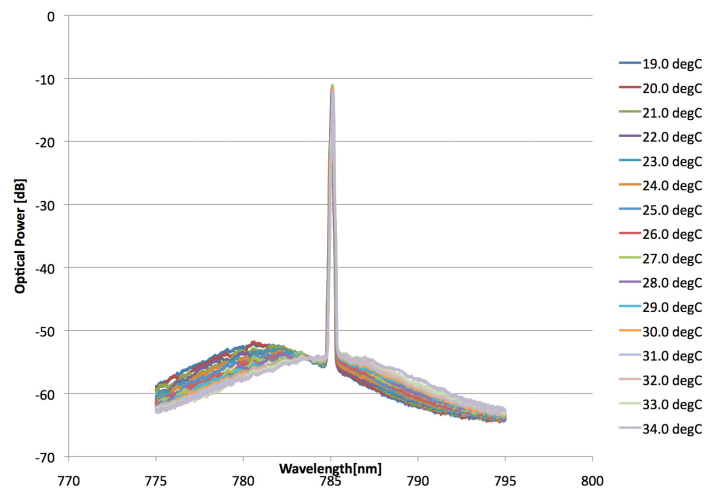
² Non-condensing

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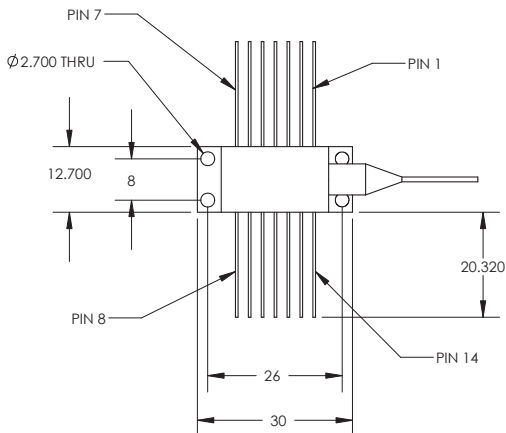
Wavelength Stability



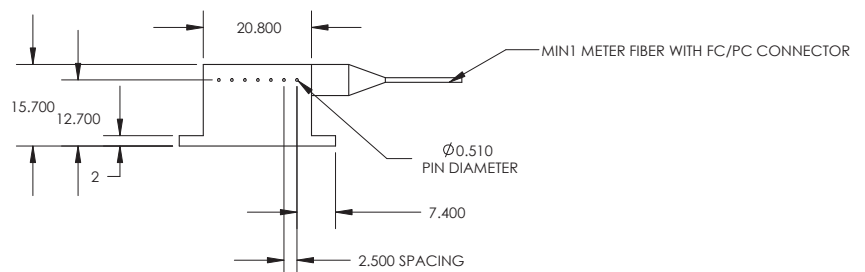
Optical Spectrum (Sample)



Top View



Side View



Pinout

Pin	Description	Pin	Description
1	TEC +	8	Not Connected
2	Thermistor	9	Not Connected
3	PD Anode	10	Laser Anode
4	PD Cathode	11	Laser Cathode
5	Thermistor	12	Not Connected
6	Not Connected	13	Case Ground
7	Not Connected	14	TEC

