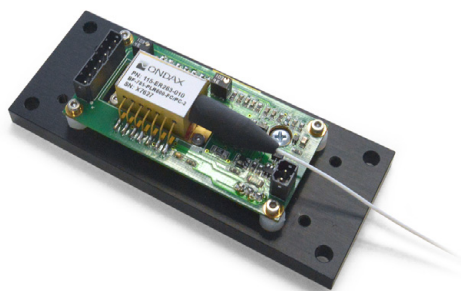


OEM Butterfly Module

785/830/976/1064nm 600mW



High Power, Narrow Linewidth
Fiber Coupled Output

Features:

- Compact footprint - only slightly larger than the 14-pin butterfly laser
- High power - up to 600mW
- Narrow spectral linewidth - <0.15nm
- Wavelength stability across operating range 0.01nm/°C
- Fiber coupled output - 105 μ m MM fiber

Applications:

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

Ondax's Raman OEM Butterfly Lasers are wavelength-stabilized, high-power, compact fiber-coupled laser modules designed specifically for incorporation into Raman spectroscopy systems. The ultra-compact electronics provide constant temperature control, along with variable analog current control and an interlock connection to simplify integration. An included base plate allows for mounting in virtually any orientation.

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. The narrowed linewidth, low power consumption, and broad stabilized temperature operating characteristics deliver affordable, portable instrument-quality performance.

Available at 785nm, 830nm, 976nm and 1064nm. Comes with an FC/PC connector.

Specifications:

Specification Summary

Parameter	Symbol	Min	Typ	Max	Unit
Output Power	P_o			600	mW
Center Wavelength (vacuum)	L_p	784.5 829.5 975.5 1063.5	785 830 976 1064	785.5 830.5 976.5 1064.5	nm
Linewidth	$\Delta\lambda$		0.07	0.15	nm
Central Stabilized Temperature ¹	T_c	20		40	°C
Stabilized Temperature Range ¹	T_r	14			°C

Operating Specifications

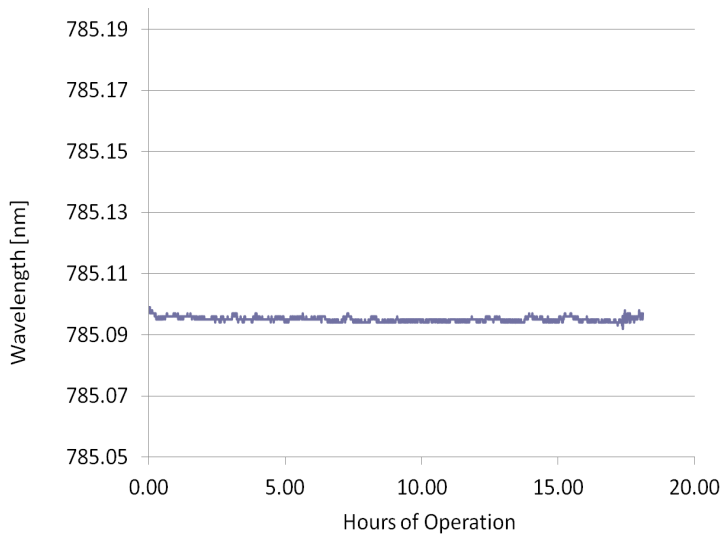
Parameter	Symbol	Min	Typ	Max	Unit
Current	I_{th}		1.3		mA
Input Voltage	V_{op}		5		V
Fiber Type		105 μ m core/ 900 μ m tubing			
Connector		FC/PC			
Numerical Aperture	NA		0.22		
Operating Temperature ²	T_{op}	0	25	50	°C
Storage Temperature ²	T_s	-20		80	°C

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.

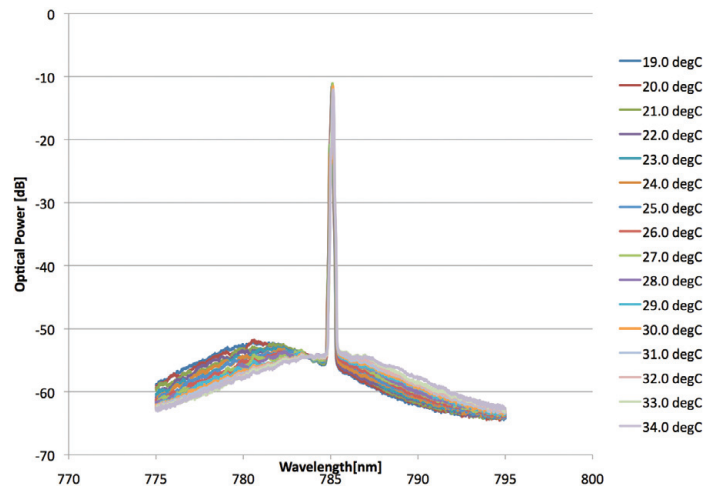
²Non-condensing

785/830nm, 600mW OEM Butterfly Module

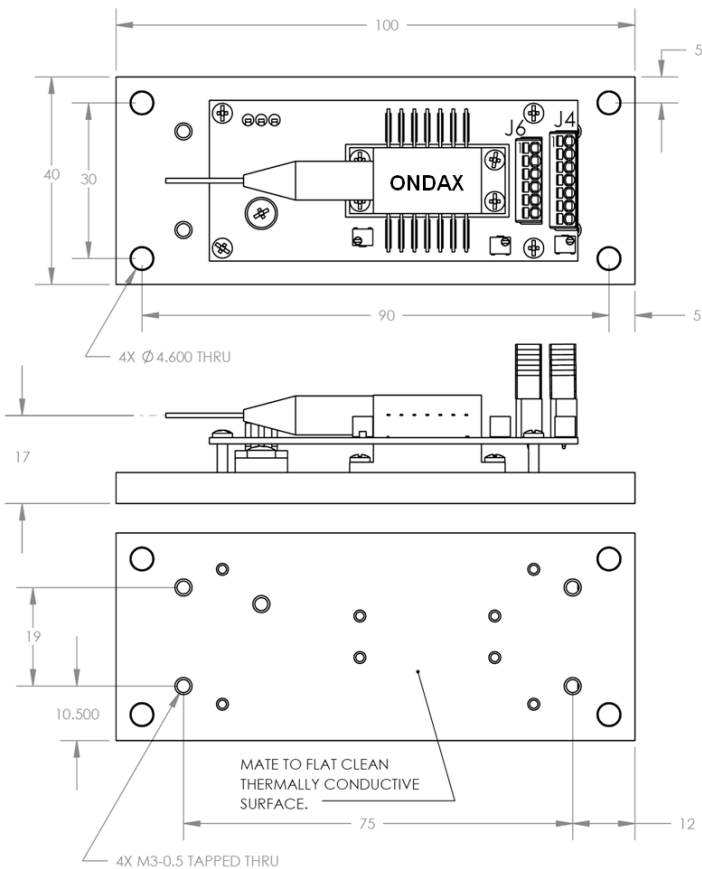
Wavelength Stability



Optical Spectrum (Sample)



Outline Drawing (all dimensions in mm)



Pinout - J4¹

Pin	Description
1	Interlock (open circuit : laser off, close circuit: laser on with 20-40 sec delay)
2	Interlock (open circuit : laser off, close circuit: laser on with 20-40 sec delay)
3	TTL+ (0-1.5V Laser Off, 3.5-5V Laser ON)
4	TTL GND
5	Analog Voltage for Maximum Current
6	Analog Voltage Input (DO NOT EXCEED VOLTAGE VALUE ON J4-PINS)
7	Analog Voltage for Threshold Current

¹ Male Mating Connector:
Phoenix Contact 1778887

Pinout - J6²

Pin	Description
1	4.9-5.25 VDC
2	Power GND
3	Laser Emission Indicator Vout (5v, 50-100mA) output
4	Laser Emission Indicator GND
5	N/A
6	N/A

² Male Mating Connector:
Phoenix Contact 1778874



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For more information about Ondax products and the name of a local representative or distributor, visit www.ondax.com, email sales@ondax.com, or call (626) 357-9600. Specifications subject to change without notice. Each purchased laser is provided with test data. Please refer to this data before using the laser.