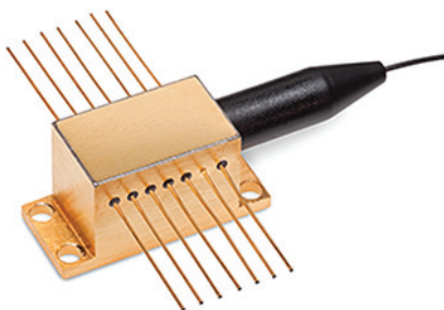


# 785nm, 600mW Raman Butterfly Lasers



High Power, Narrow Linewidth  
Fiber Coupled Output

Ondax's 785nm Raman Butterfly Laser is a wavelength-stabilized, high-power, fiber-coupled laser 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:

### Specification Summary

Parameter	Symbol	Min	Typ	Max	Unit
Output Power	$P_o$			600	mW
Center Wavelength (vacuum)	$L_p$	784.5	785	785.5	nm
Linewidth	$\Delta\lambda$		0.15	0.25	nm
Central Stabilized Temperature <sup>1</sup>	$T_c$	20		40	°C
Stabilized Temperature Range <sup>1</sup>	$T_r$	14			°C

## Features:

- Compact 14-pin butterfly footprint
- Narrow spectral linewidth - 0.15nm
- Wavelength stability across operating range 0.01nm/°C
- Fiber coupled output - 105  $\mu$ m MM fiber

## Applications:

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

### Operating Specifications

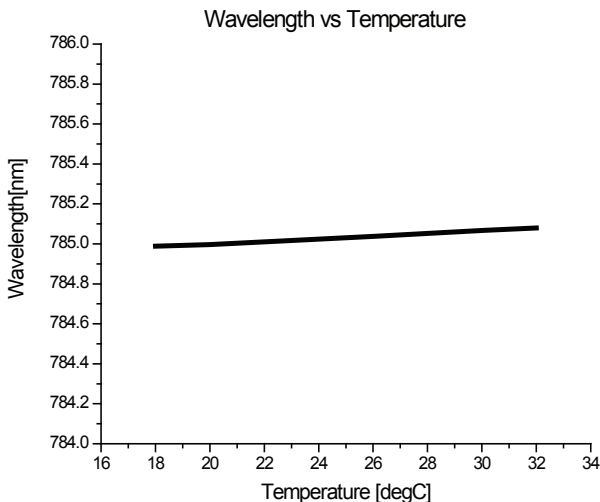
Parameter	Symbol	Min	Typ	Max	Unit
Threshold Current	$I_{th}$		325		mA
Operating Current	$I_{op}$		1100	1500	mA
Operating Voltage	$V_{op}$		1.9	2.2	V
TEC Current				2	A
TEC Voltage				4	V
Fiber Type		105 $\mu$ m core/ 900 $\mu$ m tubing			
Connector		FC/PC or FC/APC			
Numerical Aperture	NA		0.22		
Operating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

<sup>1</sup> 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.

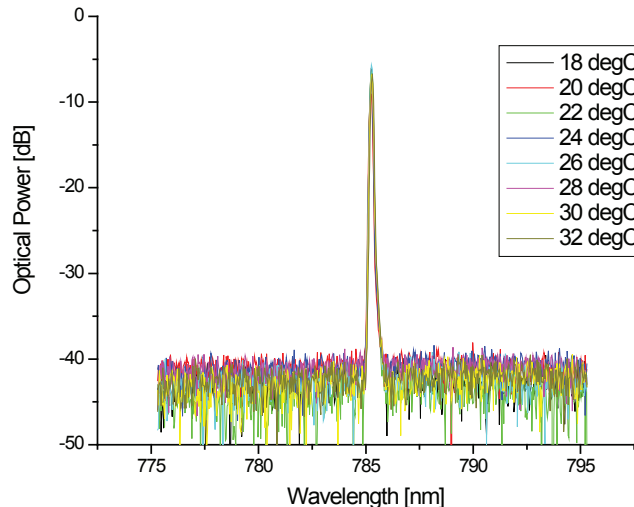
<sup>2</sup>Non-condensing

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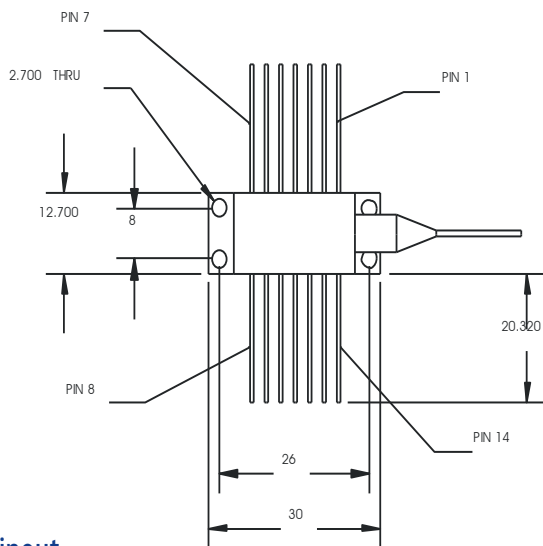
## Wavelength Stability



## 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

