

Description:

The Ondax series of Single Frequency Collimated Laser Modules feature wavelengths from 635nm to 785nm with an integrated TEC and driver circuit in a compact, self-contained, and rugged package. The built-in temperature controller maintains the laser diode temperature within $\pm 0.01^\circ\text{C}$ resulting in excellent power stability that varies less than 1% over long term.

The wavelength stabilization with the Ondax Volume Holographic Grating (VHG) PowerLocker™ technology guarantees long term wavelength stability.

Features:

- Single mode narrow linewidth ($< 0.1\text{pm}$)
- Coherence length ($> 2\text{m}$)
- Compact, rugged package
- Custom wavelengths available

Applications:

Flow Cytometry, Metrology, Bio Instrumentation, Graphic Arts, Raman Spectroscopy, Analytical Instrumentation, Sensing, Data Storage, etc.

Single Mode Narrow Linewidth:
 $< 50\text{MHz}$, $< 0.0001\text{nm}$, $< 0.0017\text{cm}^{-1}$

Wavelength Stability: $< \pm 0.001\text{nm/hr}$



Specifications:

Operating Specifications

	638	658	685	785	Units
Lasing Wavelengths L_p	636-640, in 2nm increments	654-662, in 2nm increments	681-685, in 2nm increments	780.25, 781.787, in 2nm increments	nm
Typical Power	8-9	30-35	40-45	75-80	mW

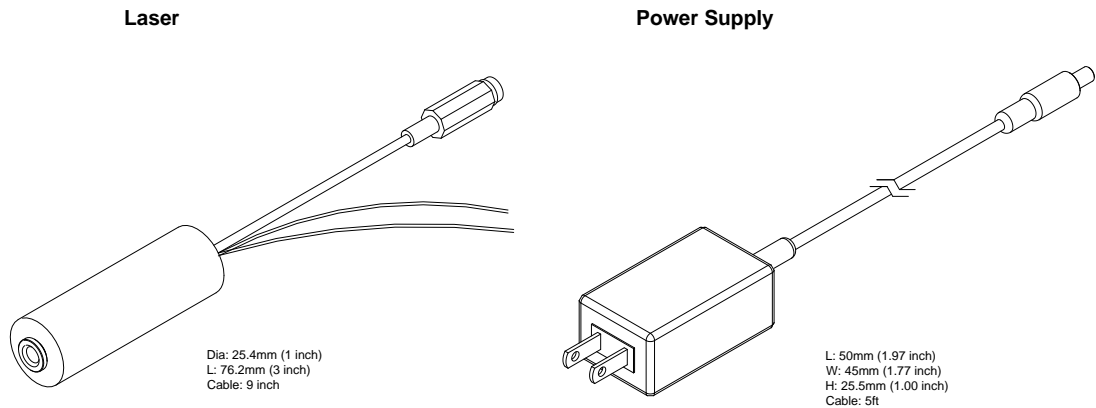
Optical	Min	Typ	Max	Unit
Polarization Ratio		$> 100:1$		
Linewidth		30	50	MHz
Noise (RMS) (0 ~ 20MHz)		0.25	0.5	%
Power Stability (1 hr)		0.1	0.5	%
Power Stability (24 hrs)		0.3	1	%
Spatial Mode	Single Mode			
Beam Size: ($2W_o$)				
	638 nm	0.5 x 2		mm
	658 nm	0.7 x 1.1		mm
	685 nm	0.9 x 1.4		mm
	785 nm	0.9 x 1.7		mm
Beam Divergence		1	2	mrاد
Pointing Stability			± 25	μrad
Electrical				
Operating Voltage		3.5		VDC
Operating Current			0.5	A
Modulation Input	0		5	VDC
Modulation Speed			3	KHz
Electrical Connections	Power (+ Red, - Black), TTL (White) GND (Black)			
Mechanical				
Storage Temperature	0		40	deg. C
Operation Temperature	10		40	deg. C
Operation Humidity	Non-Condensing			
Dimensions (D x L)	25.4 x 76.2 mm (1" x 3")			

1: Available in TTL Model.

Specifications are subject to change without notice. Each purchased laser is provided with test data. Please refer to this data before using the laser.

115-81029-XXX 033009

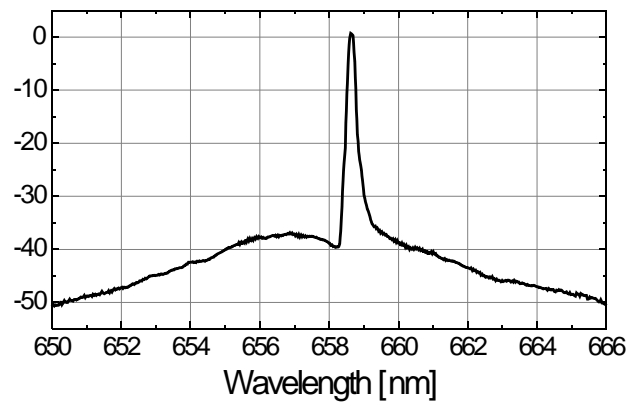
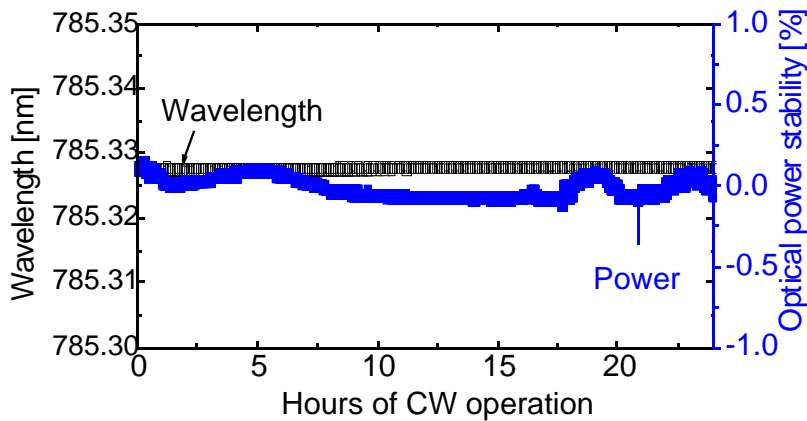
PACKAGE:



TYPICAL CHARACTERISTICS:

Wavelength and Power Stability

Spectral Shape



Model Numbers:

RO - X X X - PLR - X X - X

↑
 Wavelength:
 e.g 785

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 Power:
 e.g 80

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 0: No Modulation
 1: With TTL Modulation



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