



FIBERA, INC.

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MULTI-CHANNEL WAVELENGTH LOCKER

**Patents pending*

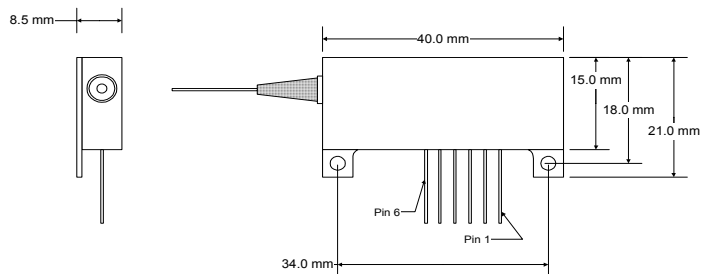
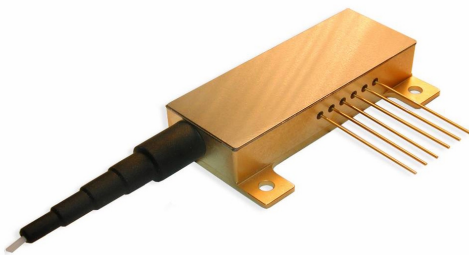
- **Multi-Channel capability**
- **Superior accuracy**
- **Athermal, no temperature control / compensation**
- **Industry standard I/O**
- **Hermetically sealed to ensure long term reliability**
- **Telcordia™ GR-1221-Core compliant**

The Fibera **Multi-Channel Wavelength Locker (MCWL)** series is a high accuracy wavelength stabilizer based on a newly developed, proprietary optical technology. Our wavelength lockers are capable of stabilizing the laser frequency to within ± 1.25 GHz for ITU grid spacing as low as 25GHz.

The Fibera MCWL is hermetically sealed and is insensitive to environmental temperature variations. Hermetic sealing not only ensures the accuracy of laser wavelength, but also the reliability of the device.

The Fibera MCWL is ideal for laser wavelength stabilization and wavelength management in DWDM wavelength transmitters, routers and ADD/DROP applications.

The same Wavelength Locker can be utilized in multiple ITU grids, reducing the number of components in the system. This reduction of system components simplifies the overall system configuration minimizing your exposure to part procurement uncertainty.



Mechanical Dimensions

SPECIFICATIONS

Parameters	Units	Value
Technology		Advanced Etalon
Wavelength Range (ITU grid)	nm	1520-1620
Center Channel Stability	GHz	$\leq \pm 1.25$ (100, 50 & 25 GHz) *
Storage Temperature	$^{\circ}\text{C}$	-40 to +85
Capture Range	GHz	-65 to +25 (100 GHz)
		-33 to +12 (50 GHz)
		-17 to + 6 (25 GHz)
Polarization Dependent Accuracy	GHz	$\leq \pm 0.4$
Temperature Sensor Monitor	mV/ $^{\circ}\text{C}$	10
Temperature Sensor Supply Voltage	V	4 - 10
Optical Return Loss	dB	≥ 50
Optical Power Operating Range	dBm	-25 to 7
Photodiode Calibration Offset	dB	$\leq \pm 0.8$
Etalon PD Responsivity at ITU Grid	A/W	≥ 0.08
Operating Temperature	$^{\circ}\text{C}$	0 to +70
Dimensions	mm	40 x 21 x 8.5

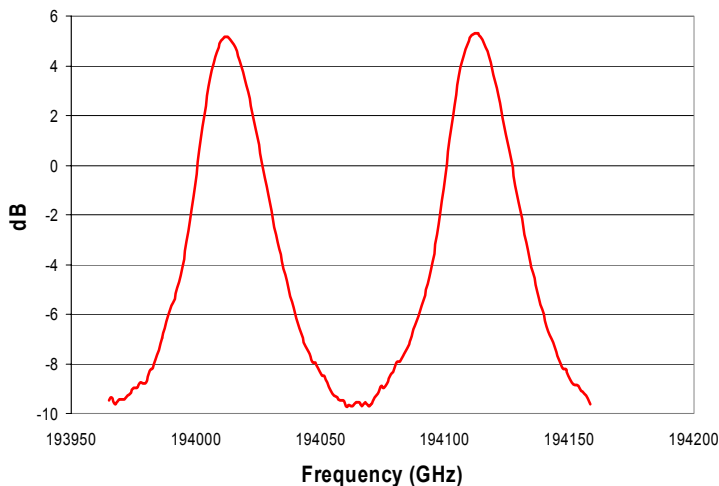
ELECTRICAL PINS

Pin1	PD1 anode (+)
Pin2	PD2 anode (+)
Pin3	Cathode (-)
Pin4	Temp Sensor Voltage
Pin5	Temp Sensor Monitor
Pin6	Temp Sensor Ground

* Without temperature correction

** Telcordia™ data available upon request

Performance Spectrum of 100GHz Wavelength Locker



Performance Spectrum of 50GHz Wavelength Locker

