48500 Kato Road
Fremont, CA 94538, USA
Tel: (510) 490-9930
Fax: (510) 490-9330
www.optoplex.com

Athermal Fabry-Perot Wavelength Locker

Optoplex's Athermal Fabry-Perot Wavelength Locker is a thermally stable, etalon-based device that can be widely used in wavelength monitoring or ITU-grid channel locking in DWDM systems, laser stabilization for tunable laser, optical power and network monitoring. The wavelength locker has a wide capture range and excellent wavelength accuracy. A built-in thermistor can be used to calibrate out residue thermal effects when even higher wavelength accuracy is required or for a very narrow-FSR locker. The key optical component of the wavelength locker is an Etalon which is made in-house with Optoplex's proven technology in thin-film optical coating and optical contact.

Key Features and Benefits

- Athermal design
- C+L-band coverage by a single device
- Extremely low temperature dependence
- High wavelength accuracy
- Periodical locking covers all channels
- Built-in thermistor for better locking accuracy
- Telcordia GR-468 & 1221 compliant

Applications

- Precision laser locking for DWDM and ultra DWDM transmitter
- Wavelength monitoring
- Laser stabilization for tunable laser module
- DWDM channel frequency and optical power monitoring

Ordering Information

WL - □ □ C □ □ □ □ □ □

Band
C = C-Band
L = L-Band
T = C+L Band

Channel Spacing
0 = 25 GHz
1 = 50 GHz
2 = 100 GHz
3 = 200 GHz
A = 12.5 GHz
B = 37.5 GHz
T = 33.3 or 66.7 GHz

Package Type
C = Compact

Connector Type
FC = FC/UPC
FA = FC/APC
LC = LC/UPC
SC = SC/UPC
MU = MU/UPC
XX = No connector

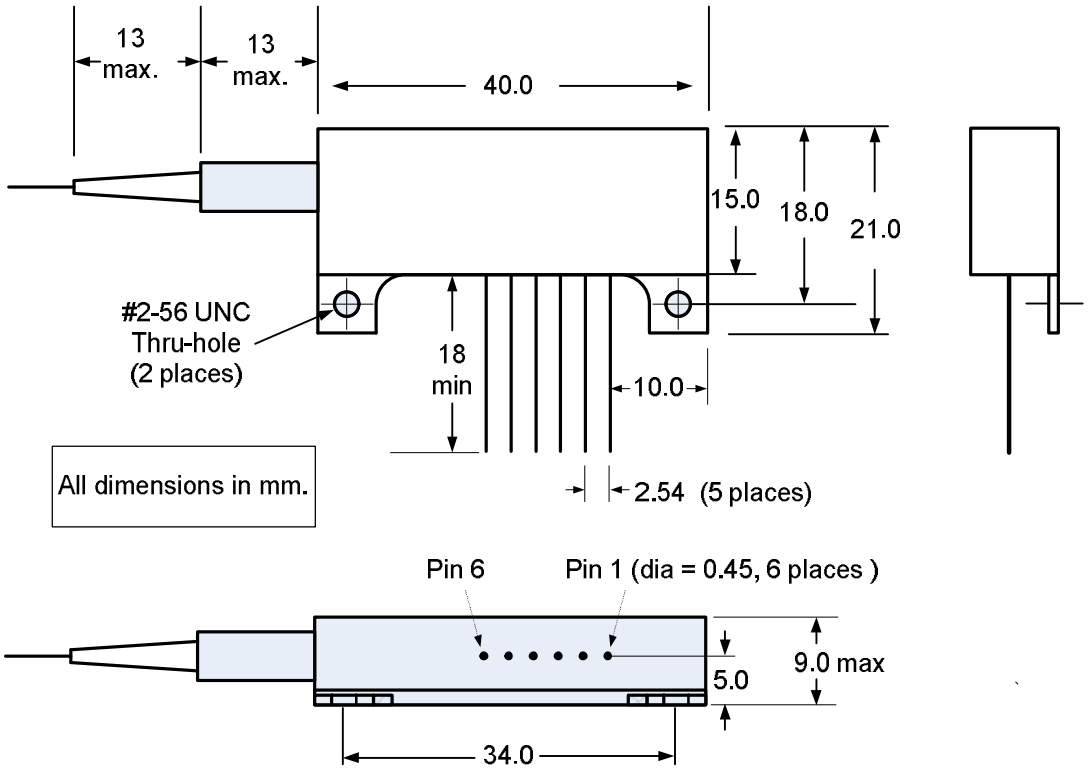
Specification
C = Custom
S = Standard

Sequential Number
Starts from 001

Optical Performance Specifications

Parameter	Unit	25GHz	50GHz
Wavelength Range	*nm*	1525-1565: C 1560-1620: L 1520-1620: C+L	
Center Wavelength		ITU	
Wavelength Accuracy over T, Pol and	*GHz*	±1	±2
Polarization Dependent Accuracy	*GHz*	0.4	0.6
Wavelength Capture Range (from ITU)	*GHz*	9	18
Locking Slope at ITU Point	*dB/GHz*	~ 0.5 – 0.8	~ 0.5 – 0.8
Input Power Range	*dBm*	<10	<10
ORL Min	*dB*	45	45
PD Calibration Offset	*dB*	0.4	0.6
PD1 Responsivity (Reference)	*A/W*	0.1 to 0.4	0.16 to 0.32
PD2 Responsivity (Etalon)	*A/W*	0.1 to 0.4	0.16 to 0.32
PD Dark Current @5V (reverse bias)	*nA*	1	1
Temperature Sensor Supply Voltage	*V*	4 to 10	4 to 10
Temperature Sensor Monitor	*mV/C*	7 to 13	7 to 13

Standard Footprint and Pinout



Optoplex Corporation, 48500 Kato Road, Fremont, CA 94538, USA.
Tel: (510) 490–9930, Fax: (510) 490–9330, www.optoplex.com, sales@optoplex.com