

Fabry-perot Etalon Based Wavelength Tunable Filter

Model #: FPTF

Description:

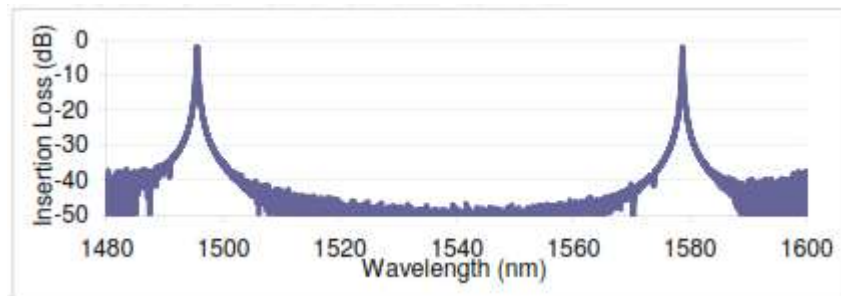
Fabry-perot etalon based wavelength tunable filter. Driven by a piezoelectric actuator, the device can be tuned across a wide band range. New techniques have been applied in FPTF to guarantee high accuracy fiber alignment and to support fast tuning rate. It is an ideal solution for applications in wavelength scanning, spectrum analysis, signal selection and noise rejection.

Key Features

- High resolution
- Efficient low loss design
- High sweep frequency
- Vibration and shock resistance
- Excellent thermal stability

Applications

- FBG sensing interrogation
- Wavelength-swept sources
- Spectrum analysis
- Optical channel monitoring and selection
- Optical noise filtering

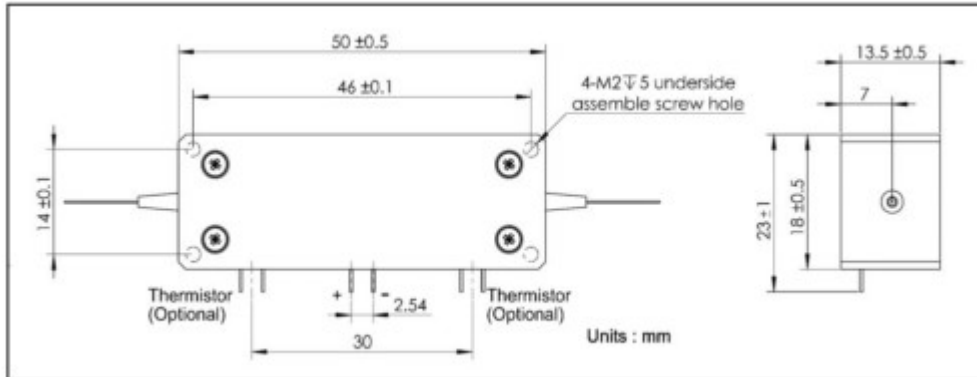


Specifications:

Parameter	Unit	Specifications				
Operating Wavelength Range	nm	C + L band				
Typ. FSR	nm	100 – 200 (optional)				
Typ. Finesse		400	1000	2000	5000	10000
Peak Insertion Loss*	dB	1.2	1.4	1.6	2	2.5
Max. Optical Power (CW)	mW	50	20	10	4	2
Typ.. -3 dB Pass Bandwidth	nm	FSR/Finesness				
Slow Tuning Frequency	kHz	<5				
Resonant Tuning Rate**	KHz	65 ± 10			75 ± 10	
Voltage for FSR for Slow Tuning	V	22 ± 5			42 ± 5	
Voltage for FSR for Resonant Tuning	V	<3.5			<4.5	
Max. Tuning Voltage	V	80				
Fiber Type		SMF-28e+				
Optional NTC Thermistor	R(25°C)	100				
	B Value	3950				
		(calculated from resistance value at 25 and 50°C)				
Max. Polarization Dependent Loss	dB	0.3 (at peak transmission wavelength)				
Operating Temperature	°C	0 to +70				
Storage Temperature	°C	-40 to + 80				
Dimension	mm	13.5 x 18 x 50				

*Each connector may contribute extra 0.3 dB IL

**Two values correspond to two different designs

Package Dimension

Ordering Information:
FPTF-A-BBB-CCC-DD-E-F-G-H

A: wavelength range	BBB: FSR	CCC: fineness	DD – resonant frequency
B – C+L band	150 – 150 ± 20 nm	400 - 400	65 – 65 ± 10 kHz
X - other	XXX - other	XXX - other	75 – 75 ± 10 kHz

E: connector type	F: fiber type	G: fiber length	H – thermistor
1 – FC/APC	B – 250 um bare fiber	1 – 1.0 m	Y – with thermistor
N – no connectors	L - 900 um loose tube	XXX - other	N – without thermistor
X - other	X - other		