

# High Speed Optical Tunable Filter

## Applications

Fiber swept laser source  
Optical sensor application  
Optical coherence tomography

## Features

Ultra high speed scan rate  
Temperature tuned  
Wide tuning range  
Small form factor  
Simple design  
Encapsulated

## Description

The patent pending high speed optical tunable filter series feature half-symmetrical confocal cavity to produce Fabry-Perot etalon.

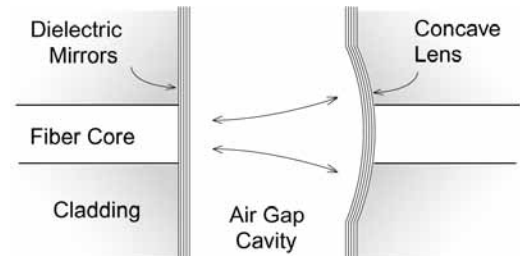
The etalon is formed without guiding optics or optical collimation, resulting in robust and vibration-resistant filters with minimal parts count. The filters are encapsulated in a proprietary temperature tuned package.

## Typical Data

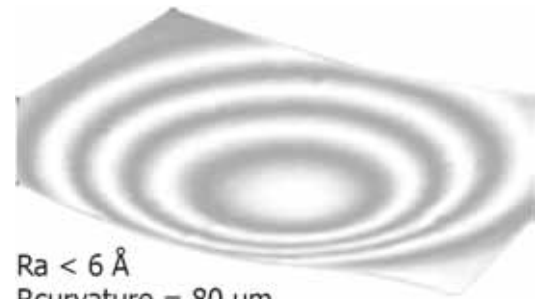
Operation Wavelength	1300/1550nm
Fixed Free Spectral Range	40 ~ 140nm
Finesse	~ 200 to 600
Side Band Rejection	~ 25 dB
Maximum Input power	20 mW (w 0.2 nmBW)
Temperature Coefficient	~ 1 nm/°C
Capacitance	~ 0.5 uF
Tuning Voltage @DC	~16/19 V/FSR
	-20 to 100 V
Scan Frequency	DC ~ 40 KHz
Connector	Optional
Dimensions	0.4"x0.7"x1.8"
4x #2-56 Mounting Taps	0.54" x 1.64" Center



## Configuration

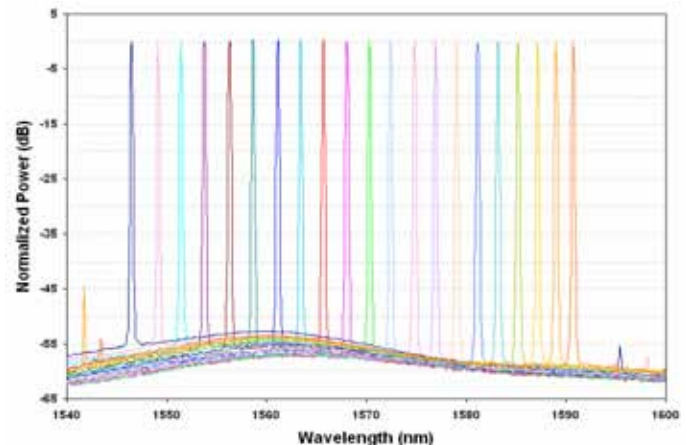


## Concave Lens Profile (40x60 um)



$R_a < 6 \text{ \AA}$   
 $R_{\text{curvature}} = 80 \text{ um}$

## Fiber Laser Spectrum



LambdaQuest

光技術をサポートする



株式会社オプトサイエンス

<http://www.optoscience.com>

東京本社 〒160-0014 東京都新宿区内藤町1番地 内藤町ビルディング  
TEL:03(3356)1064 FAX:03(3356)3466 E-mail:info@optoscience.com  
大阪支店 〒532-0011 大阪市淀川区西中島7-7-2 新大阪ビル西館  
TEL:06(6305)2064 FAX:06(6305)1030 E-mail:osk@optoscience.com  
名古屋営業所 〒450-0002 名古屋市中村区名駅2-37-21 東海ソフトビル  
TEL:052(569)6064 FAX:052(569)8064 E-mail:ngo@optoscience.com