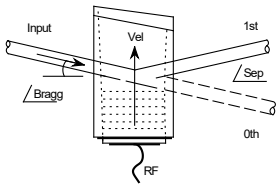

AOTF1082-2

Acousto-Optic Tuneable Filter

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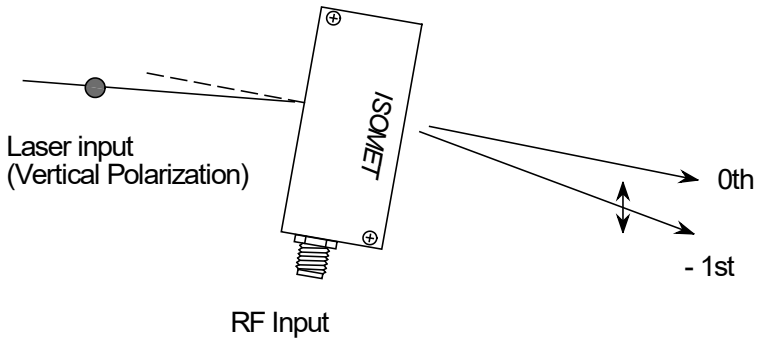
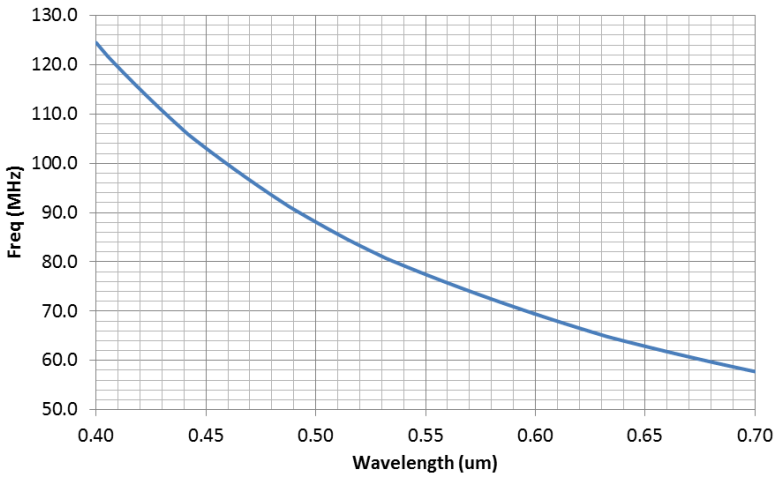
Features: Fast Tuning
Minimal chromatic dispersion



The AOTF1082 acousto-optic tuneable filter is specifically designed for use with laser sources.
The wavelength of the diffracted light is selected according to the frequency of the RF drive signal. Isomet-grown tellurium dioxide (TeO_2), which has been oriented for off-axis mode operation, is utilised as the interaction material. Fast access times and fine spectral bandwidths make these filters ideal for selecting discrete lines from a multi-line laser source.

For **vertical** input polarization, the crystal geometry is designed to minimize chromatic beam deflection of the -1st output. Diffracted output polarization rotated to horizontal.

Typical tuning characteristic



Suitable electronics include:

- **iSK3-100T-1** integrated frequency synthesizer / power amplifier.
- **iMS4-L (or-P)** fully programmable frequency synthesizer plus **AG0-series** amplifier.

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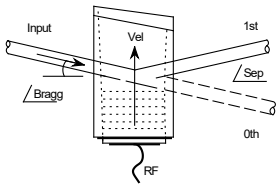
ISOMET CORP, 10342 Battleview Parkway, Manassas, VA 20109, USA.
Tel: (703) 321 8301 Fax: (703) 321 8546
E-mail: ISOMET@ ISOMET.COM ***Web Page: WWW.ISOMET.COM***

Quality Assured.
In-house: Crystal Growth, Optical Polishing, A/R coating, Vacuum Bonding



AOTF1082-2

Acousto-Optic Tuneable Filter

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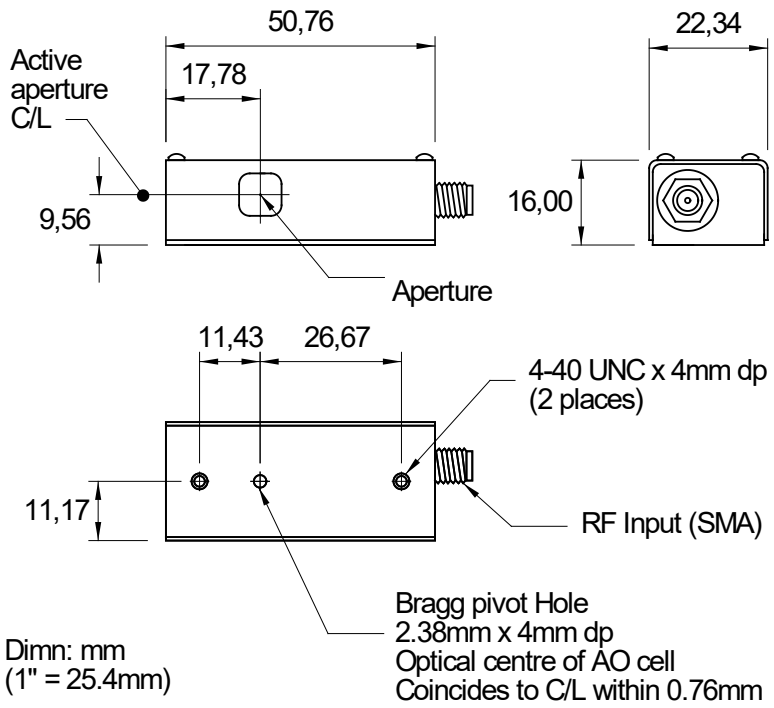
Specifications

Aperture	2.0mm x 2.0mm
Wavelength range	450-650nm
Incidence Angle	3° nominal
Switching speed	< 1usec per mm beam dia.
Static insertion loss	< 5%
Diffraction efficiency	> 90% / line
Separation Angle (mrad)	5° nominal
Chromatic co-linearity	< +/- 0.15mrad

Wavelength (nm)	***457***	***488***	***515***	***647***
Frequency (MHz)	100.7	91.2	84.4	63.2
Bandwidth (nm)	3.2	4.1	4.8	9
RF Drive Power (mW)	<80	<90	<100	<150



Option –M: metric mounting screws M3

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