

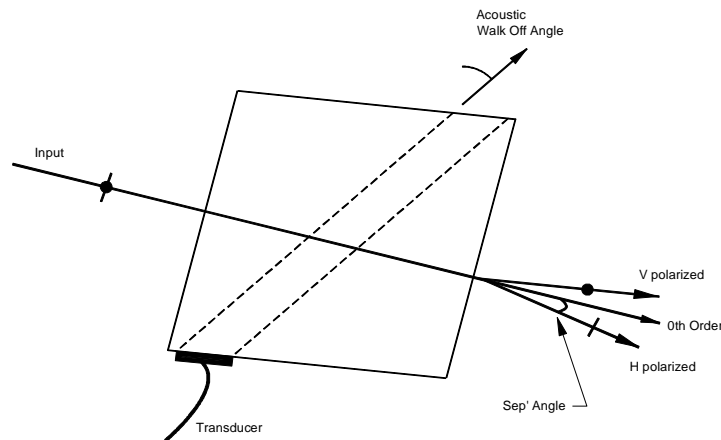
AOTF614-xx

AO Tuneable Filter



0314

- **SOLID STATE**
- **FAST ACCESS TIME**



The AOTF range of acousto-optic devices are solid state optical filters. 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 sources. The best diffraction efficiency is obtained with linearly polarised input light.

Suitable electronics include the iSPA-SF1 series of frequency synthesizer RF driver/amplifiers

Note:

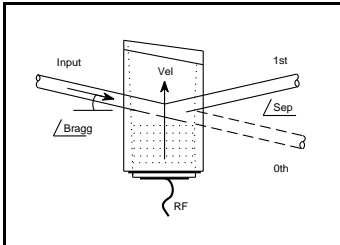
The drive frequency for any given AOTF is limited to a maximum RF tuning range of one octave (2:1) within the overall range shown in the tables overleaf.

This is illustrated by the three examples, 'A', 'B', 'C', highlighted by the coloured bands.

Please specify the desired wavelength range at time of order.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.
 Tel: (703) 321 8301 Fax: (703) 321 8546
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Quality Assured.
 In-house: Crystal Growth,
 Optical Polishing,
 A/R coating, Vacuum Bonding



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Model AOTF614-08 (100cm-1) Specifications

Aperture: 5mm x 5mm
Incidence Angle: 20 deg'

Wavelength (nm) *	400	500	600	700	800	1000	1200
Frequency (MHz)	140	95	75	65	50	40	35
Bandwidth (nm)	1.0	2.3	4.0	6.0	8.0	14.0	22.0
Acceptance Angle (deg)	3.5	3.8	4.2	4.5	5.0	5.5	6.0
Separation Angle (deg)	4.4	4.0	3.75	2.8	2.65	2.5	2.5
RF Drive Power (mW)	100	150	200	270	350	570	800

Model AOTF614-16 (50cm-1) Specifications

Aperture: 5mm x 5mm
Incidence Angle: 20 deg'

Wavelength (nm) *	400	500	600	700	800	1000	1200
Frequency (MHz)	140	95	75	65	50	40	35
Bandwidth (nm)	0.6	1.2	2.0	3.0	4.0	7.0	11.0
Acceptance Angle (deg)	2.5	2.7	3.0	3.2	3.5	3.9	4.2
Separation Angle (deg)	4.4	4.0	3.75	2.8	2.65	2.5	2.5
RF Drive Power (mW)	50	75	100	130	170	270	400

Model AOTF614-24 (35cm-1) Specifications

Aperture: 5mm x 5mm
Incidence Angle: 20 deg'

Wavelength (nm) *	400	500	600	700	800	1000	1200
Frequency (MHz)	140	95	75	65	50	40	35
Bandwidth (nm)	0.4	0.8	1.3	2.0	2.7	4.5	7.0
Acceptance Angle (deg)	3.5	3.8	4.2	4.5	5.0	5.5	6.0
Separation Angle (deg)	4.4	4.0	3.75	2.8	2.65	2.5	2.5
RF Drive Power (mW)	40	50	70	90	120	190	270

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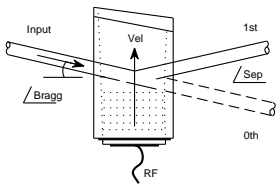
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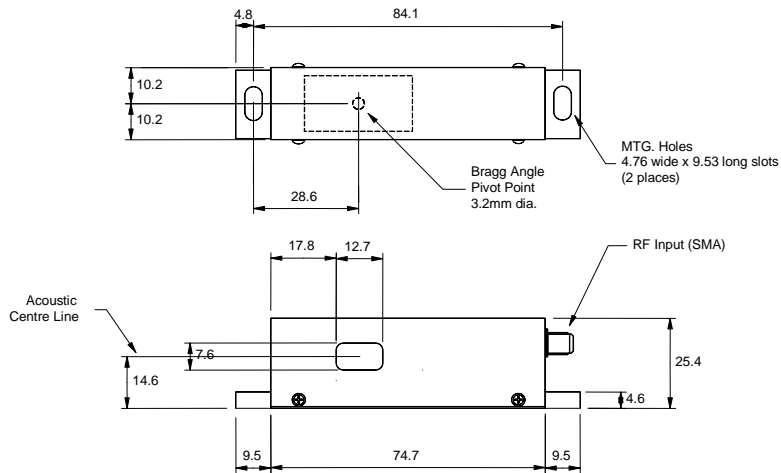
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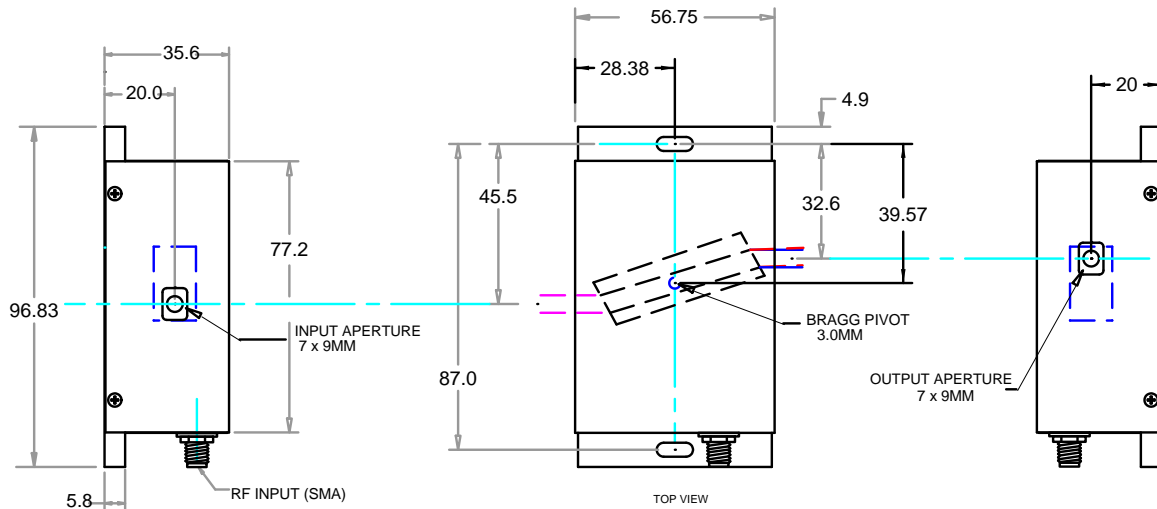


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AOTF614-08
Case Dimensions, mm



AOTF614-16 and -24
Case Dimensions, mm



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