

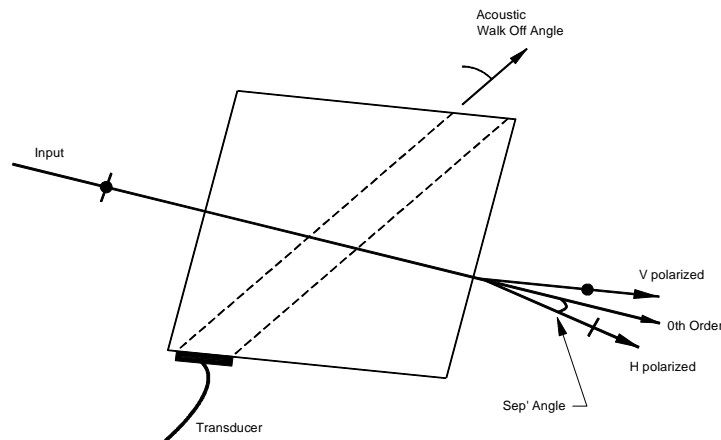
AOTF920-xx

NIR AO Tuneable Filter



0114

- **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 (TeO₂), 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:

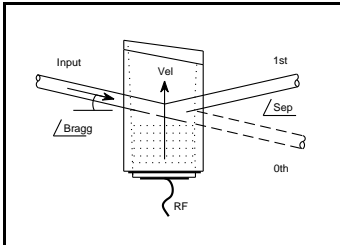
The drive frequency for any given AOTF is limited to a maximum RF tuning range of one octave (2:1) within the overall range shown in the tables overleaf.

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
 E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

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



AOTF920-xx

NIR AO Tuneable Filter



0114

Model AOTF920-14 (35cm-1) Specifications

Aperture: 5mm x 5mm
Incidence Angle: 30 deg'

Wavelength (nm) *	700	800	1200	1500	1700	1800	2400
Frequency (MHz)	95	80	52	42	37	35	24
Bandwidth (nm)	2.0	2.5	6.5	11.0	14.0	15.5	27.0
Acceptance Angle, V (deg)	3.8	3.9	4.75	5.2	5.5	5.8	6.3
Acceptance Angle, H (deg)	3.4	3.6	4.48	4.9	5.2	5.5	6.1
Separation Angle (deg)	5.2	5.1	5.0	5.0	5.0	5.0	5.0
RF Drive Power (mW)	200	300	500	800	1000	1200	2000

Model AOTF920-20 (25cm-1) Specifications

Aperture: 5mm x 5mm
Incidence Angle: 30 deg'

Wavelength (nm) *	700	800	1200	1500	1700	1800	2400
Frequency (MHz)	95	80	52	42	37	35	26
Bandwidth (nm)	1.5	2.0	4.5	7.5	9.5	11.0	18.0
Acceptance Angle, V (deg)	2.8	3.0	3.6	4.2	4.4	4.5	5.2
Acceptance Angle, H (deg)	2.6	2.8	3.4	3.9	4.1	4.3	4.9
Separation Angle (deg)	5.25	5.1	5.0	5.0	5.0	5.0	5.0
RF Drive Power (mW)	150	200	400	600	750	850	1450

Model AOTF920-24 (20cm-1) Specifications

Aperture: 5mm x 5mm
Incidence Angle: 30 deg'

Wavelength (nm) *	700	800	1200	1500	1700	1800	2400
Frequency (MHz)	95	80	52	42	37	35	26
Bandwidth (nm)	1.0	1.5	4.0	6.2	8.0	9.0	15.5
Acceptance Angle, V (deg)	3.0	3.2	3.8	4.3	4.5	4.7	5.5
Acceptance Angle, H (deg)	2.8	2.9	3.5	4.0	4.2	4.3	5.0
Separation Angle (deg)	5.25	5.1	5.0	5.0	5.0	5.0	5.0
RF Drive Power (mW)	120	150	320	500	650	700	1200

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

E-mail: ISOMET@ISOMET.COM

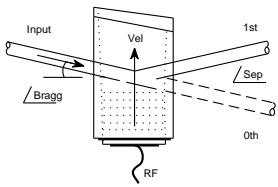
Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding



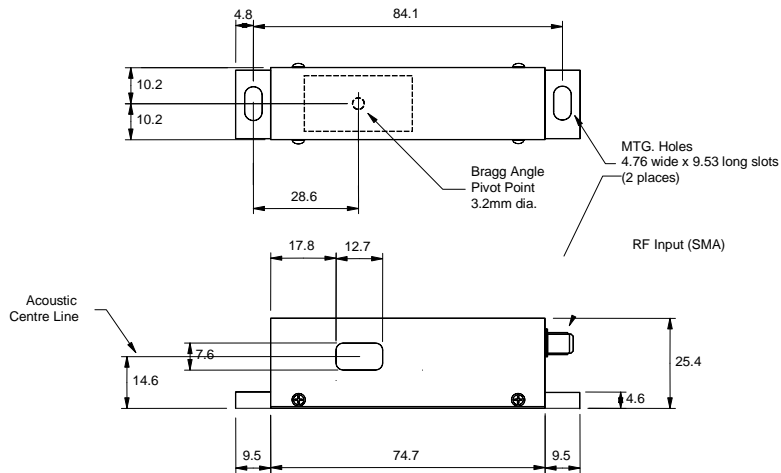
AOTF920-xx

NIR AO Tuneable Filter

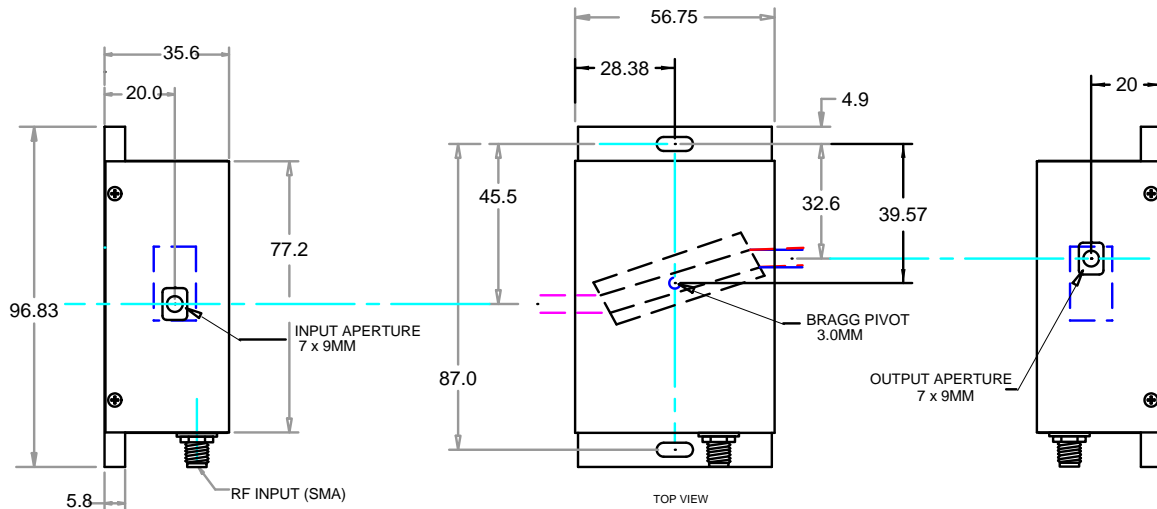


0114

AOTF920-14
Case Dimensions, mm



AOTF920-20 and -24
Case Dimensions, mm



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
 E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

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