

# AOTF1423-7

## AO Tuneable Filter

(Preliminary)



0621

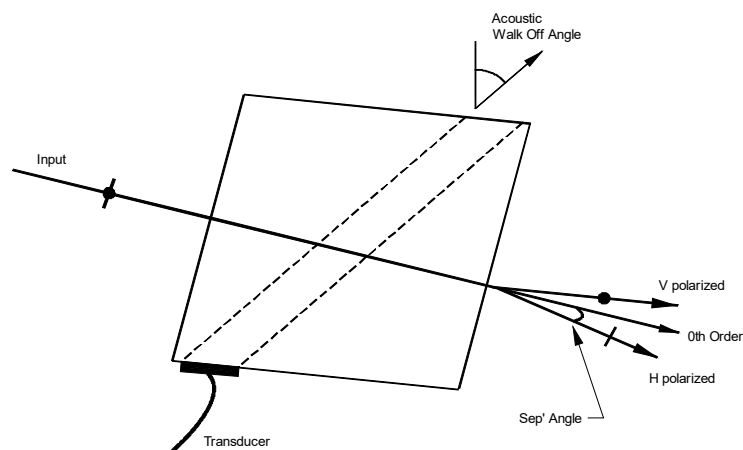
The AOTF1423 Acousto-Optic Tuneable Filter has been optimised for operation in the wavelength range of 2000 nm to 3000nm. The wavelength of the diffracted light is selected by application of a corresponding RF drive frequency. A thermal electric cooler (TEC) is fitted for applications requiring high temperature stability.

### SPECIFICATIONS

Interaction Material:	TeO <sub>2</sub> (s)
Aperture:	7mm x 7mm
Wavelength Range:	2000nm - 3000nm
Wave Number:	20/cm
Bandwidth *:	~ 8nm - 18nm
Acceptance Angle (V):	9.0° (nominal)
Acceptance Angle (H):	9.0° (nominal)
Input polarization:	Vertical
Output polarization:	Horizontal
Output:	Collinear with input
Separation Angle:	7.2°
Frequency:	32 - 48 MHz
Diffraction Efficiency:	>50% over filter range
RF Drive Power:	~ 4 Watts at 2.5um

\* Bandwidth = Wave Number x wavelength<sup>2</sup>  
 ( e.g. in units of nanometres, BW = 20x10<sup>-7</sup> x 3000<sup>2</sup> = 18nm)

### Conceptual diagram



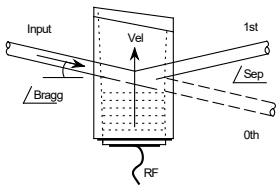
**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**  
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**Quality Assured.**  
**In-house: Crystal Growth,**  
**Optical Polishing,**  
**A/R coating, Vacuum Bonding**

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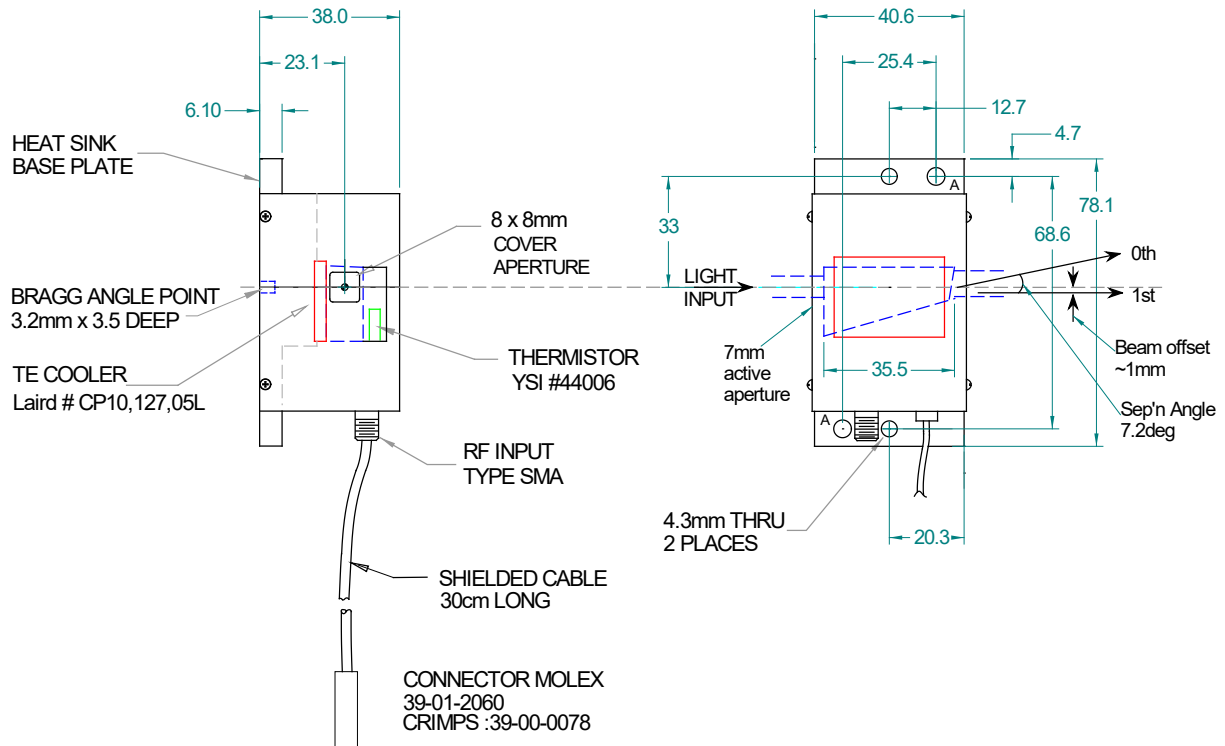
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### OUTLINE DRAWING

Dimensions: mm



### ELECTRONICS

Isomet IMS4-L synthesizer and AF0-40T-4 amplifier.

The TEC controller is not supplied.

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