

# AOTF1331

## AO Tuneable Filter



1106

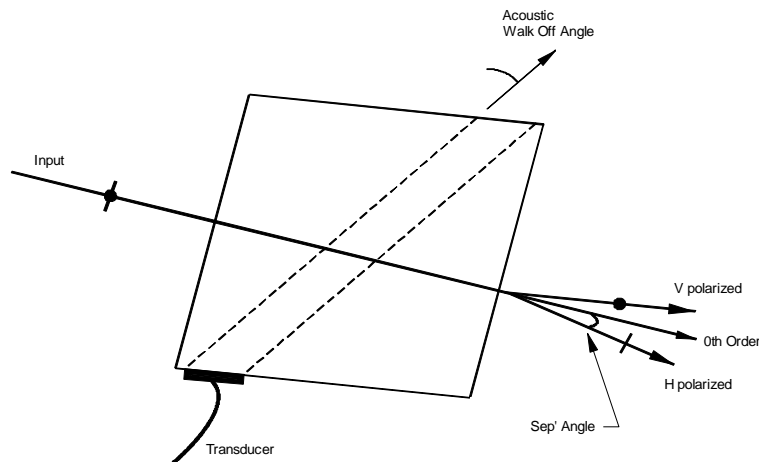
The AOTF1331 Acousto-Optic Tuneable Filter has been optimised for operation in the wavelength range of 2500 nm to 4000nm. The wavelength of the diffracted light is selected by application of a corresponding RF drive frequency. A thermal electric cooler (TEC) is fitted for applications requiring high temperature stability. Isomet grown Tellurium Dioxide ( $\text{TeO}_2$ ), is utilized as the interaction material.

### SPECIFICATIONS

Interaction Material:	$\text{TeO}_2$
Aperture:	7mm x 7mm **
Wavelength Range:	2500nm - 4000nm
Bandwidth:	30nm to 50nm
Acceptance Angle (V):	$5.0^\circ$ (Nominal)
Acceptance Angle (H):	$5.0^\circ$ (Nominal)
Separation Angle:	$6.78^\circ$
Frequency:	24 - 39 MHz
Diffraction Efficiency:	>50% Over Bandwidth
RF Drive Power:	4.0 Watts (Nominal)

\*\* Contact Isomet for alternative apertures

### Concept diagram



**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

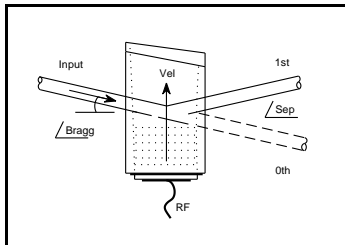
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**Quality Assured.**

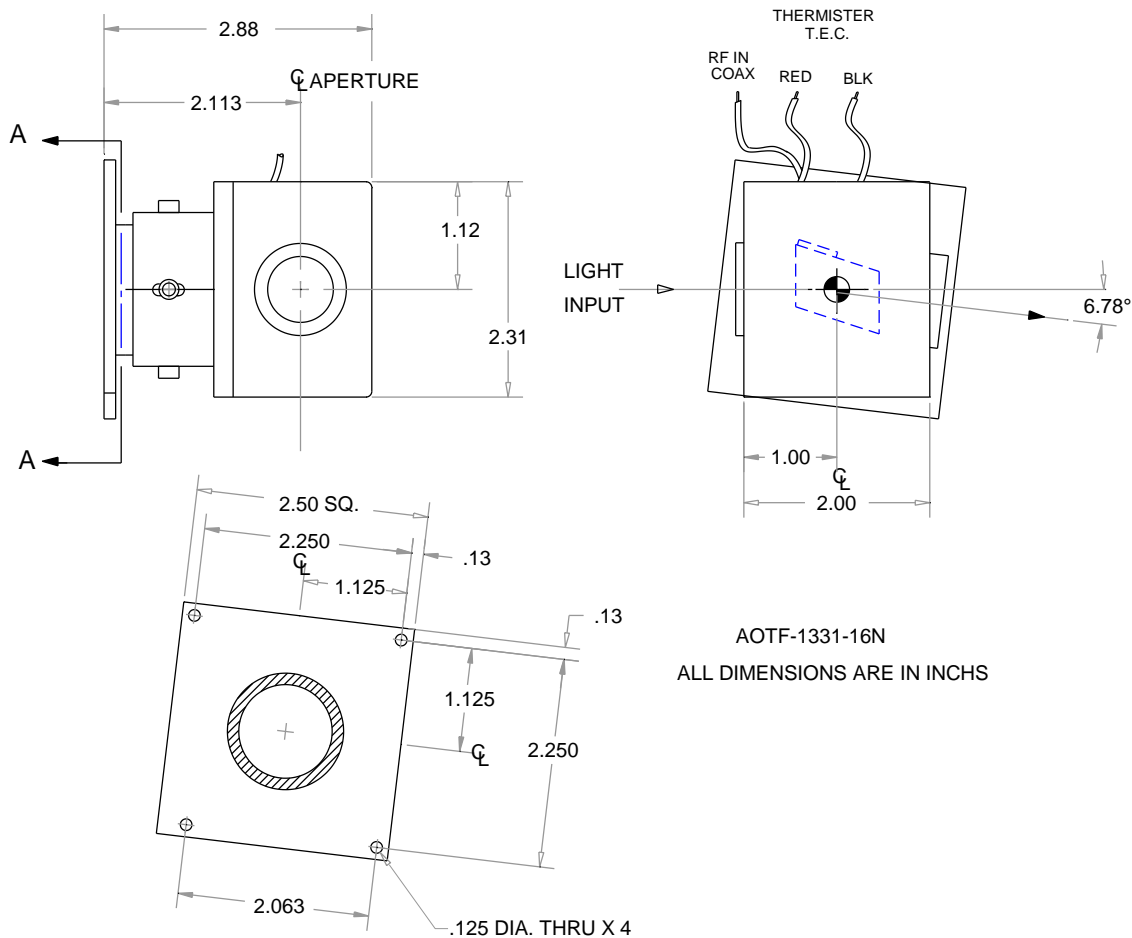
**In-house: Crystal Growth,  
Optical Polishing,  
A/R coating, Vacuum Bonding**



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### OUTLINE DRAWING



AOTF-1331-16N  
ALL DIMENSIONS ARE IN INCHES

SECTION VIEW A-A  
MOUNTING HOLE PATTERN

### ELECTRONICS

Suitable drive electronics include the Isomet iSPA-SF1-y frequency synthesizer/amplifier.

The TEC controller is not supplied.

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