

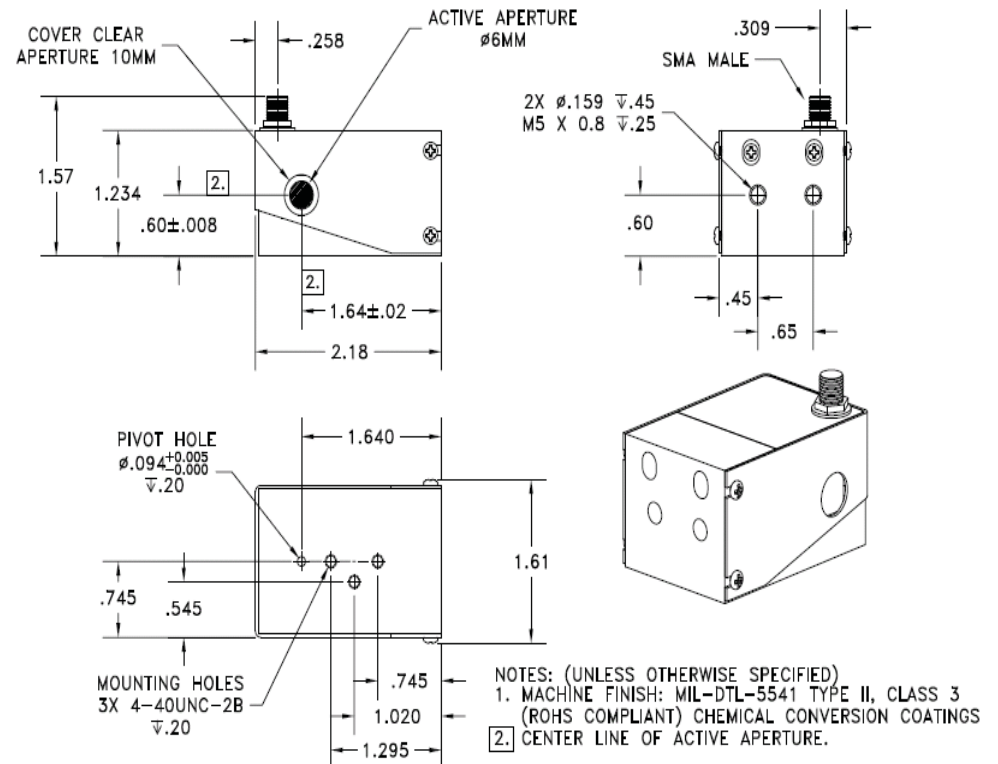
## SPECIFICATIONS

AO Medium	Crystal Quartz
Acoustic Mode	Longitudinal
Acoustic Velocity	5.74mm/μs
Wavelength	343-355nm
Input Polarization	90° to Mounting Plane, Linear P.E.R.>100:1
Output Polarization	90° to Mounting Plane, Linear
Insertion Loss	1%
Center Frequency (Fc)	110+/-5MHz
RF Bandwidth	20 MHz
RF Power	<12W
Active Aperture	6 mm dia.
Flatness Across Bandwidth	<10%
Min Diffraction Efficiency	85%
Peak Valley at 633 nm	.1 WAVES
VSWR	2:1
Scan Angle	1.24 mrad@355nm 1.19mrad@343nm

### Notes:

1. Input Impedance 50 Ohms.
2. Unit to be water cooled .1 GPM <30C. Water channels Metalast plated Aluminum.
3. Mechanical Outline per 97-03283-01-15.
4. Optical window wedge <1'.
5. VSWR frequency range 95-125MHz.
6. DE=95% with optimized alignment at central frequency, with 110 MHz ±10 MHz, nominal. Central frequency can be shifted ±5 MHz while maintaining the 20 MHz bandwidth to meet DE spec. RF power can be optimized to meet DE spec.
7. Peak to valley wavefront as measured on Zygo GPI system.
8. Aperture defined for -.7dB roll off of efficiency at vertical edges.
9. Total Optical Reflectance <.6%.
10. Bragg angle 3.40mrad@355nm, 3.28mrad@343nm
11. Deflection Angle(110MHz) 6.8mrad@355nm, 6.57mrad @343nm.

## OUTLINE DRAWING



Document

03/10/16

Control

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TOLERANCES: .XX ± .01 .XXX ± .005	DR	T. Ng 2/29/2016	Gooch & Housego	
MATERIAL:	CHK		DESCRIPTION: <b>AODF 4110 Quartz 355nm</b> 6mm Aperture	
FINISH:	APP		PART NUMBER:	REV:
	APP		97-03283-01	B
				SHEET 1 OF 1