

# M1362-aQ160-10



## UV Acousto-Optic Modulator/Deflector

1116

### SPECIFICATIONS

Operating Wavelength:	266nm +/-10nm
Interaction Material:	Quartz
Centre Frequency (fc):	160MHz
RF Bandwidth:	> 10MHz
Input Impedance:	50Ω(Nominal)
Input VSWR:	<1.5:1 @ 160MHz
Active Aperture, H:	10mm
Clear aperture	16mm
Diffraction Efficiency at fc:	85% minimum, >90% typ'
Optical Insertion Loss:	<5% (<3% typical)
Reflectivity:	<0.5%/Surface
DC Contrast Ratio:	>1000:1 min (2000:1 typical)
Laser Polarization:	Vertical, Perpendicular to scan
Water Cooling (Min):	2L/minute @ 25deg C

### PERFORMANCE vs. WAVELENGTH

Wavelength:	266nm
Peak RF Drive Power	25.0W
Bragg Angle:	3.7mrad
Separation Angle (at fc):	7.4mrad

### PERFORMANCE vs. BEAM DIAMETER

Beam Diameter (mm):	10.0	3.0
Optical Rise time (nsec):	1123	336
Video Bandwidth (MHz):	0.3	1.0

### RF DRIVE ELECTRONICS

Fixed frequency RFA2160-30 (water cooled)  
Tuneable frequency iMS4-L synthesizer plus RFA0160-1 amplifier

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

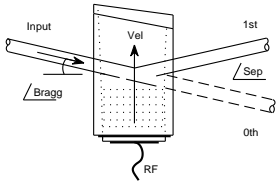
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Quality Assured.

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



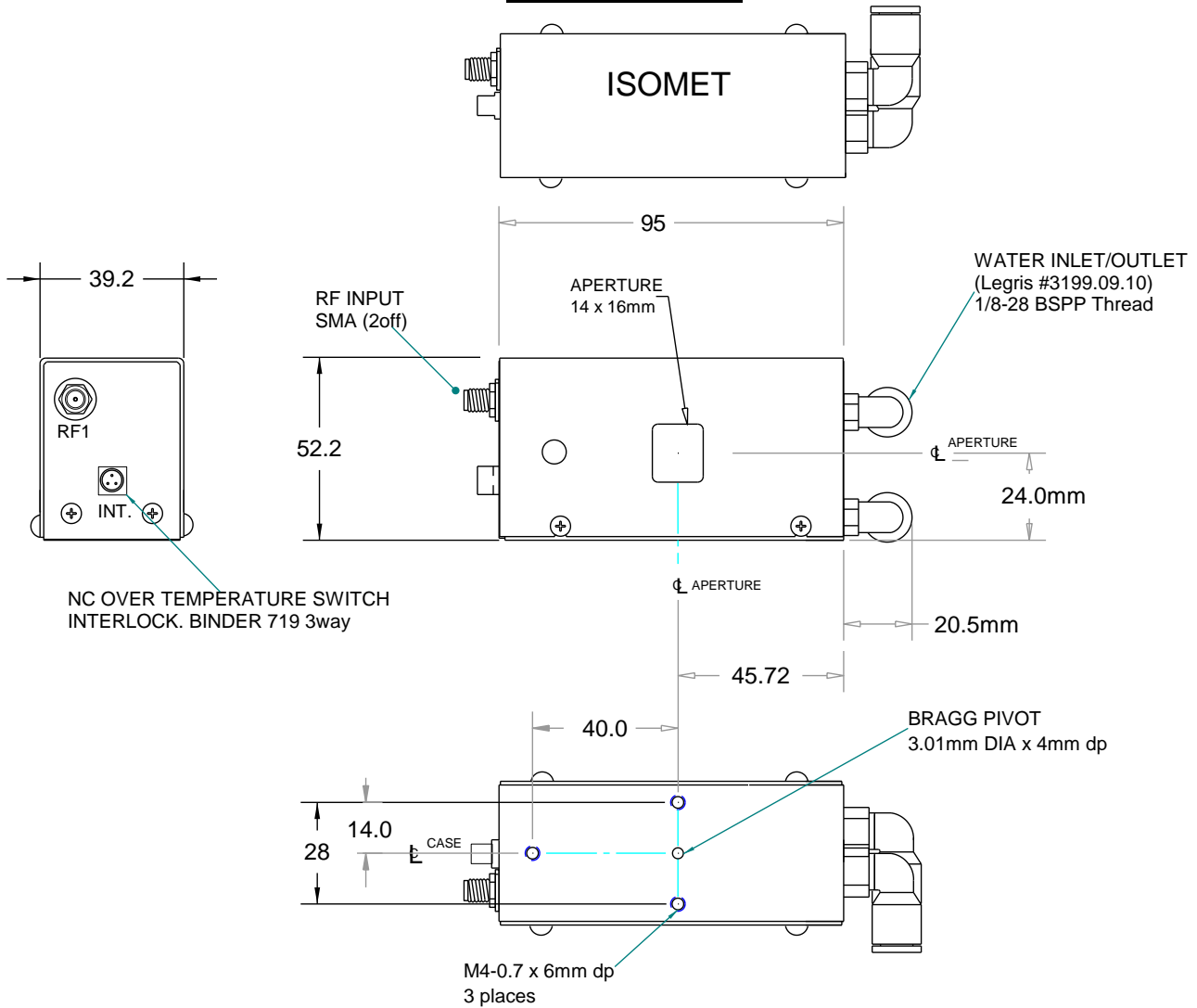
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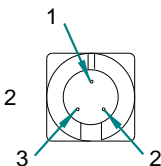
### OUTLINE DRAWING



Water cooled case parts are made from Aluminium.  
Copper alternative is available as an option

**Coolant Specification**  
Refer application note AN1206

Interlock Connector: 3-pin Snap  
Normally Closed Contacts : Pins 1 , 2  
Not connected : Pin 3



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