

AOM740-H

High Power AO Modulator



0715

APPLICATIONS

- Material Processing
- Via Hole Drilling
- Surface texturing
- Hole Perforation

FEATURES

- Low loss
- High Optical Power
- All Solid-State

The AOM740 series have been designed to minimize thermal lensing and reduce beam degradation at high optical powers.

SPECIFICATIONS (TYPICAL)

Operating Wavelength:	9.4um or 10.6um (specify)*	
Interaction Material:	Germanium	
Active Aperture:		
H=6	6mmH x 30mmW	
H=7	7mmH x 30mmW	
H=8	8mmH x 30mmW	
H=9	9mmH x 30mmW (9.3um)	
Centre Frequency (x=fc):		
AOM740-H	40MHz	
RF Bandwidth:	10MHz	
Diffraction Efficiency at fc:	> 85%, 90% typical	
RF Power for Max. D/E	< 180 Watts total (-7)	
Static Insertion Loss:	< 4%	
Maximum Optical Power:	600 Watts, 7mm dia. Gaussian beam	
Bragg Angle:	<u>9.3um</u>	<u>10.6um</u>
	33.9 mrad	38.6 mrad
Separation Angle:	67.7 mrad	77.1 mrad
Laser Polarization:	Linear, Horizontal	
Water Cooling (Minimum):	> 2 Liter/Min. @ < 20°C	
<u>Modulator performance :</u>		
Optical Rise Time	0.12usec / mm beam diameter	
Diffraction Efficiency	> 85%	
Modulator Drive Electronics:	RFA641 (40MHz)	

Options:

- BR : Brass case parts
- P : Air purge inlets
- * : other wavelengths in the 2.5µm - 11.2µm range.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

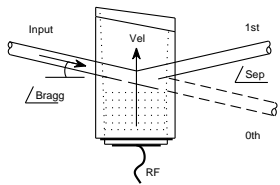
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Quality Assured.

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



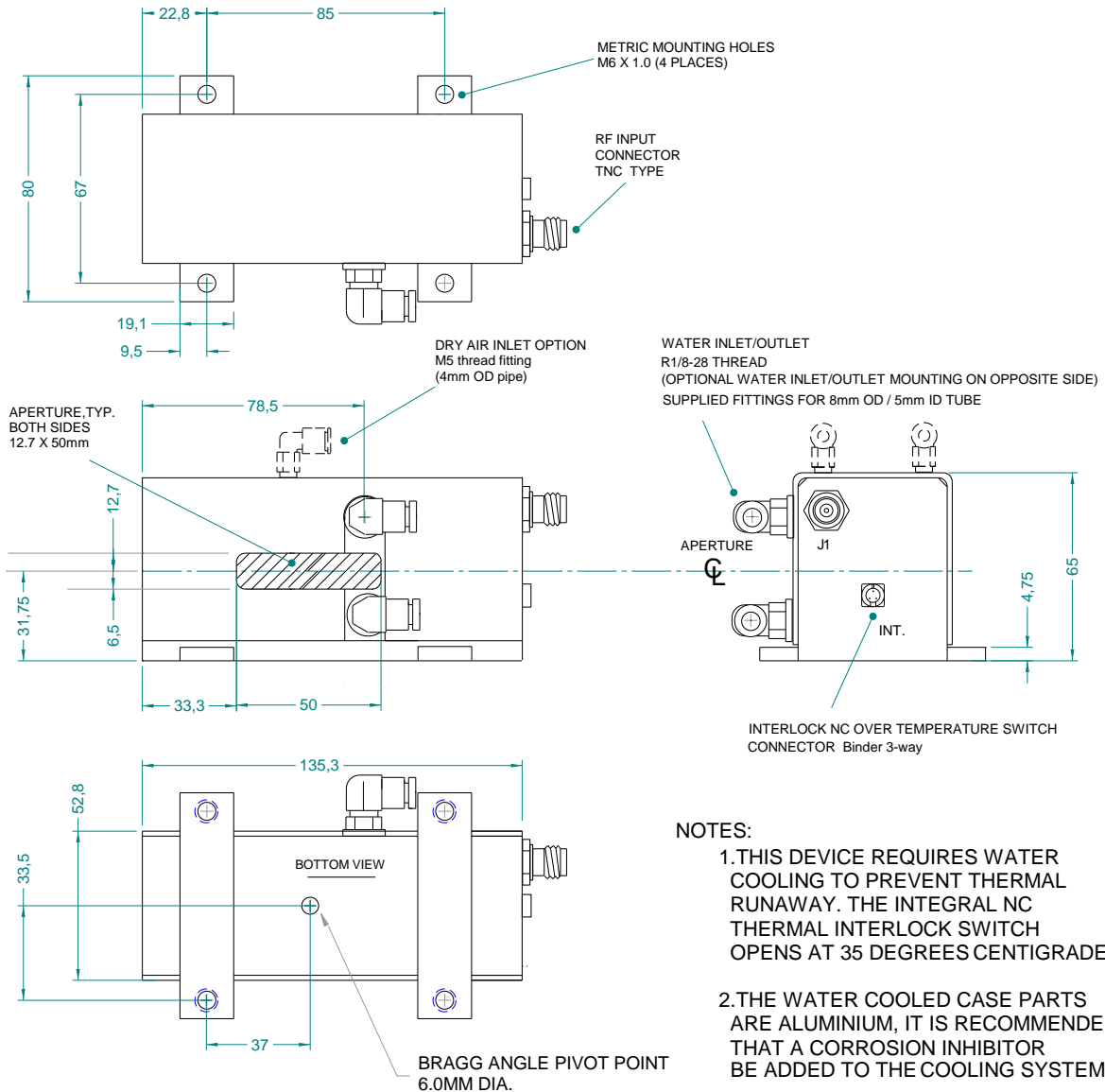
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OUTLINE DRAWING



Dimensions: mm

Refer application note AN0901 regarding Coolant Specification

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