

M1346-aQ50-3 (2um)

Acousto-Optic Modulator

(PRELIMINARY DATA)



1117

SPECIFICATIONS

Spectral Range:	NIR
A/ R wavelength:	1.9-2.1um (others on request)
Interaction Medium:	Quartz
Acoustic Velocity:	5.7mm/ μ s
Centre Frequency (fc):	50MHz
RF Bandwidth (Δ f):	20MHz
Input Impedance:	50 Ω
Input VSWR:	< 1.5:1 at 50MHz
Clear Aperture:	9 mmH x 14 mmL
Active Aperture:	3 mmH x 14 mmL
Optical Insertion Loss:	< 3%
Reflectivity:	< 0.5%/Surface
Laser Polarization:	<u>Vertically</u> Polarized
Water Cooling (minimum):	1litre/minute at < 20°C
Outline Dimensions:	(See reverse)

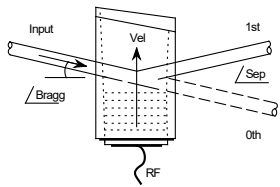
TYPICAL PERFORMANCE at 2um

Optical Power (CW):	100 Watts	
Theoretical saturation RF power:	130 Watts	
Maximum RF Power:	40 Watts average	
Input beam diameter :	1.0mm	2.0mm
Optical access time:	0.14us	0.28us
Diffraction Efficiency-		
40W max CW RF:	> 50% *	> 50% *
120W peak RF, 33% duty cycle:	> 85% peak*	> 85% peak *
Bragg Angle:	8.7 mrad	
Separation Angle at fc:	17.5 mrad	

* Single mode input

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.
 Tel: (703) 321 8301 Fax: (703) 321 8546
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Quality Assured.
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding



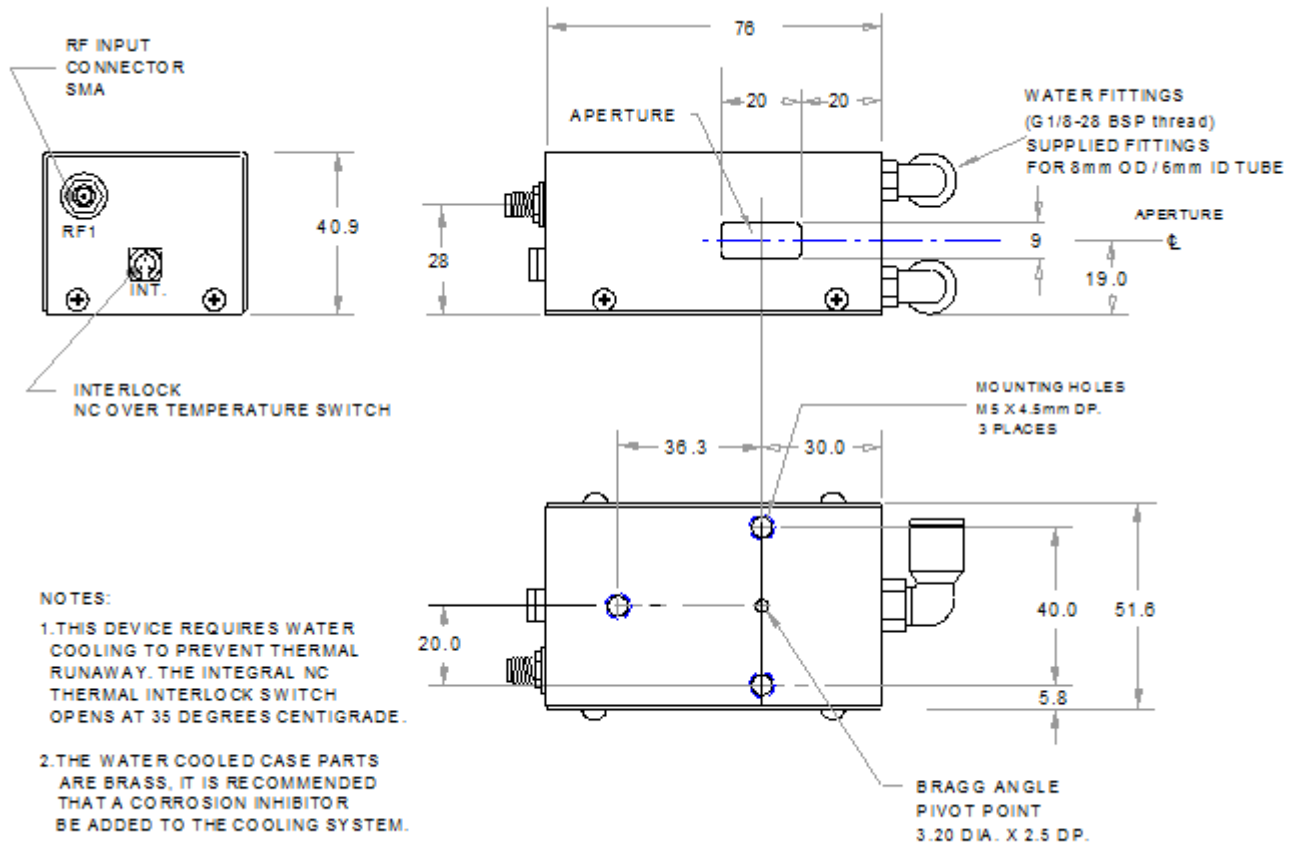
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OUTLINE DRAWING



Water cooling mandatory
Refer application note AN1606 regarding Coolant Specification
All case parts in contact with coolant are fabricated in anodized Aluminium

Recommended Driver

Modulator Driver/Amplifier

RFA251

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