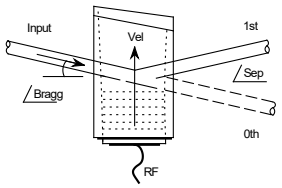


M1396-G40L-7-BR

ISOMET

250W IR Acousto-Optic Modulator

(Low corrosion Case)

0426

SPECIFICATIONS

Spectral Range:	2.5μm - 11μm
Operating Wavelength:	9.3, 9.6 or 10.6μm (others on request)
Interaction Medium:	Single Crystal Germanium
Acoustic Velocity:	5.5mm/μs
Centre Frequency (fc):	40MHz
Diffraction Bandwidth (Δf):	20MHz
Input Impedance:	50Ω
Input VSWR:	< 1.7:1 at 40MHz
Optical Insertion Loss:	< 7%
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Linear Horizontal, Parallel to Base
Optical Power (Maximum):	250 Watts
Active Aperture:	7 mmH x 14 mmL
Water Cooling (minimum):	1L/minute at < 20ºC
Outline Dimensions:	(See reverse)

TYPICAL PERFORMANCE

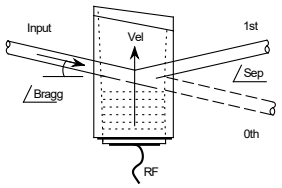
Input beam diameter:	3mm	7mm	
Optical access time:	0.35us	0.83us	
Diffraction Efficiency:	> 85%	> 85%	
Optical Power *	100 Watts	250 Watts	
	9.3um	9.6um	10.6um
Bragg Angle:	33.9 mrad	35.0mrad	38.6 mrad
Separation Angle:	67.7 mrad	70.0mrad	77.1 mrad
RF Power (typ):	55 W	65W	75 W

* For higher powers please contact Isomet

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 10342 Battleview Parkway, Manassas, VA 20109, USA.
Tel: (703) 321 8301 Fax: (703) 321 8546
E-mail: ISOMET@ ISOMET.COM ***Web Page: WWW.ISOMET.COM***

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



M1396-G40L-7-BR

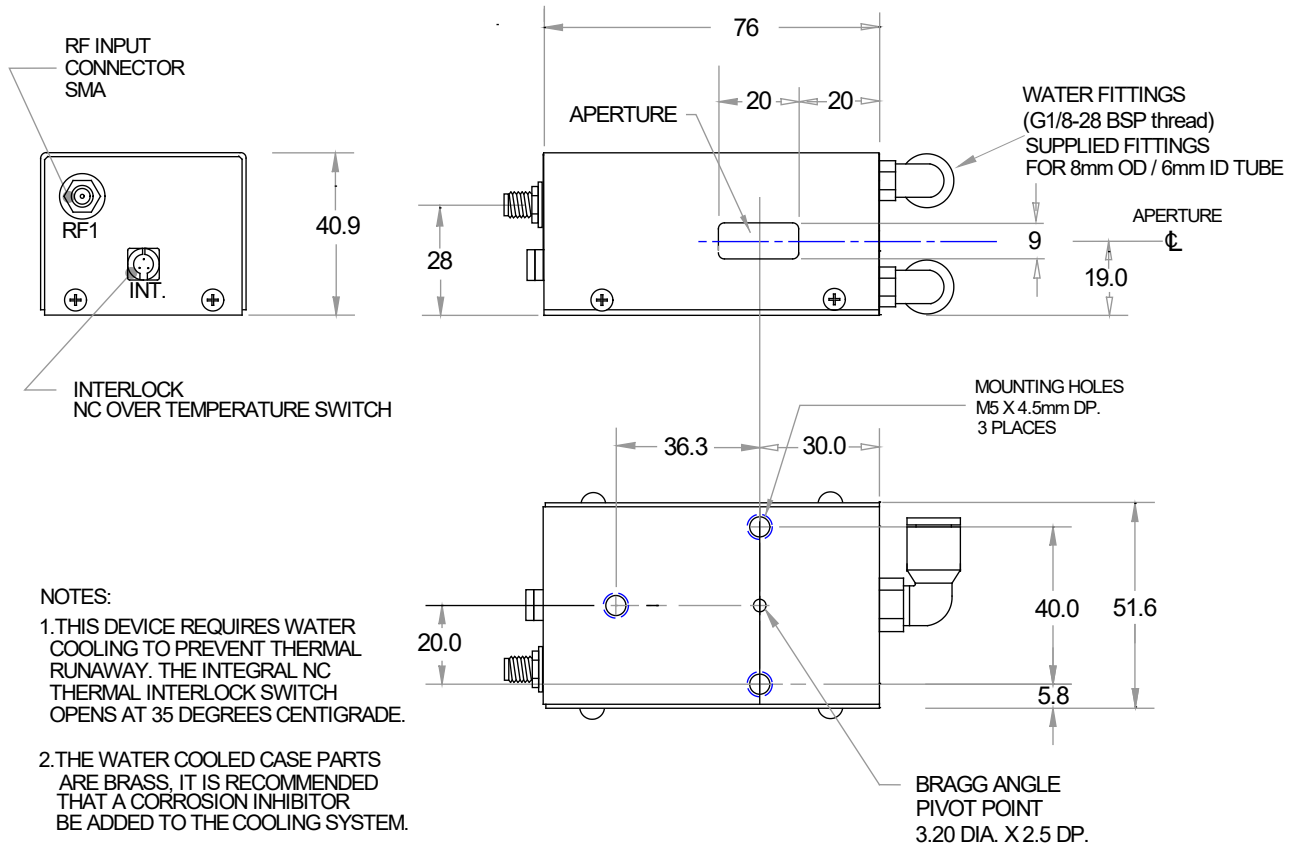
250W IR Acousto-Optic Modulator

(Low corrosion Case)

0426

OUTLINE DRAWING

All case parts in contact with coolant are fabricated in Brass
Aluminium available on request (M1396A-)



NOTES:

1. THIS DEVICE REQUIRES WATER COOLING TO PREVENT THERMAL RUNAWAY. THE INTEGRAL NC THERMAL INTERLOCK SWITCH OPENS AT 35 DEGREES CENTIGRADE.
2. THE WATER COOLED CASE PARTS ARE BRASS, IT IS RECOMMENDED THAT A CORROSION INHIBITOR BE ADDED TO THE COOLING SYSTEM.

Dimensions: mm

Refer application note AN1906 regarding Coolant Specification

DRIVERS

Modulator Driver	**RA5BR-40-1-70**
Deflector Driver	**iCSA-040-1-70-BR**
Amplifier only	**RFA050-1-70**

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