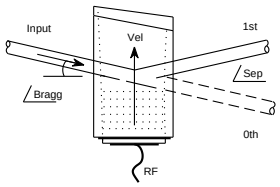


M1310-G40-H
High Power AO Modulator

0115

APPLICATIONS

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

FEATURES

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

The M1310-G40 series are optimized for duty cycled applications and 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=9	9mmH x 30mmW	
Centre Frequency (fc):	40MHz	
RF Bandwidth:	10MHz	
Maximum recommended duty cycle:	25%	
Diffraction Efficiency at fc:	> 85%, 90% typical	
RF Power for Max. D/E:	< 180 Watts peak (-9)	
Static Insertion Loss:	< 5%	
Maximum Optical Power:	600 Watts, 7mm dia. Gaussian beam	
	9.3um	10.6um
Bragg Angle:	33.9 mrad	38.6 mrad
Separation Angle:	67.7 mrad	77.1 mrad
Laser Polarization:	Linear, Horizontal	
Water Cooling (Minimum):	> 2 Liter/Min. @ < 20ºC	
Modulator performance :		
Optical Rise Time	0.12usec / mm beam diameter	
Diffraction Efficiency	> 85%, 90% typical	
Modulator Drive Electronics:	RFA641 (40MHz)	

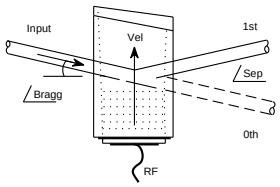
Options:

-BR: Brass case parts

* : other wavelengths in the 2.5μm - 11.2μm range.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, 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



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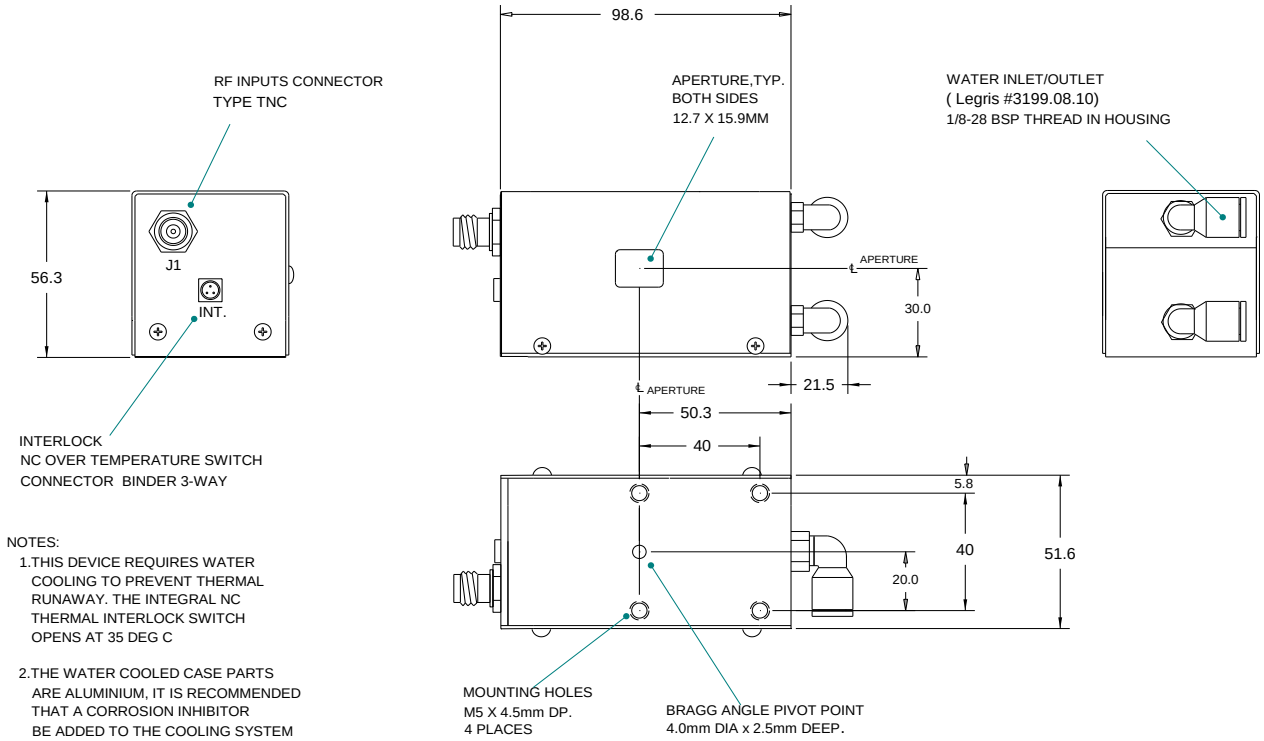
OUTLINE DRAWING



NOTES:

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

Dimensions: mm

Refer application note AN0901 regarding Coolant Specification

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