

1208-G80-4-(MIR)

IR Acousto-Optic Modulator (Metric)



0514

SPECIFICATIONS

Standard A/R Spectral Range:	2.5 μ m – 5 μ m (or specified "V" coat)
Interaction Medium:	Single Crystal Germanium
Acoustic Velocity:	5.5mm/ μ s
Centre Frequency (fc):	80MHz
RF Bandwidth (Δ f):	10MHz
Input Impedance:	50 Ω
Input VSWR:	< 1.5:1 at 80MHz
Optical Insertion Loss:	< 7%
Reflectivity (average across range):	< 1%/Surface
Laser Polarization:	Linear Horizontal, Parallel to Base
Optical Power (Maximum):	50 Watts (full aperture)
Active Aperture:	4 mmH x 8 mmL
Water Cooling (minimum):	1litre/minute at < 20°C
Outline Dimensions:	(See reverse)

TYPICAL PERFORMANCE

<u>Input beam diameter:</u>	<u>3mm</u>	
Optical access time:	0.35 μ s	
Diffraction Efficiency:	> 80%	
Optical Power:	50 Watts *	
<u>Wavelength:</u>	<u>3μm</u>	<u>5μm</u>
RF Drive Power:	< 7W	< 20W
Bragg Angle (mrad):	21.8	36.4
Separation Angle (mrad):	43.6	72.7

* For higher powers please contact Isomet

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

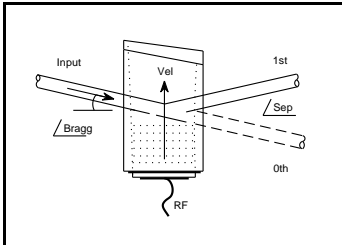
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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**



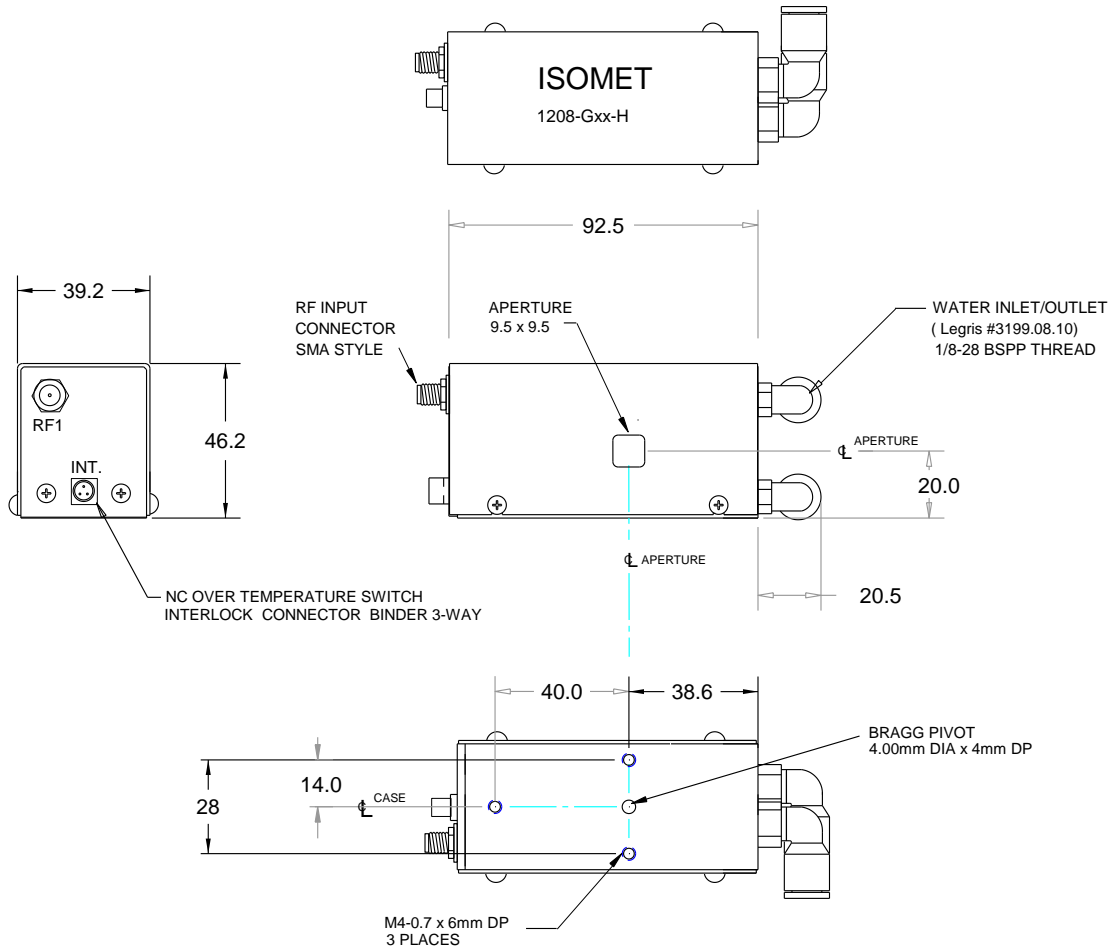
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OUTLINE DRAWING



Due to RF drive power dissipation, the 1208 requires water-cooling to prevent thermal runaway (>1L/min at < 20degC). The integral NC thermal interlock switch opens at 32 deg C.

The water cooled case parts are aluminium. It is strongly recommended that a corrosion inhibitor is added to the cooling system.

DRIVERS

Modulator Driver/Amplifier

RFA181

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