

1208-G80-3

IR Acousto-Optic Modulator (Metric)



1014

SPECIFICATIONS

Standard A/R Spectral Range:	9 μ m – 11 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):	5MHz
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:	3 mmH x 8 mmL
Water Cooling (minimum):	2 litre/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>9.4μm</u>	<u>10.6μm</u>
RF Drive Power:	< 55W	< 65W
Bragg Angle (mrad):	34.1	38.5
Separation Angle (mrad):	68.2	77.1

* For higher powers please contact Isomet

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

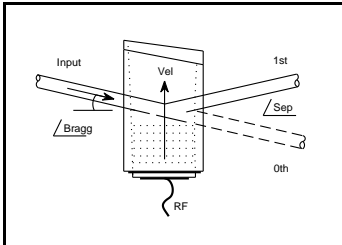
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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**



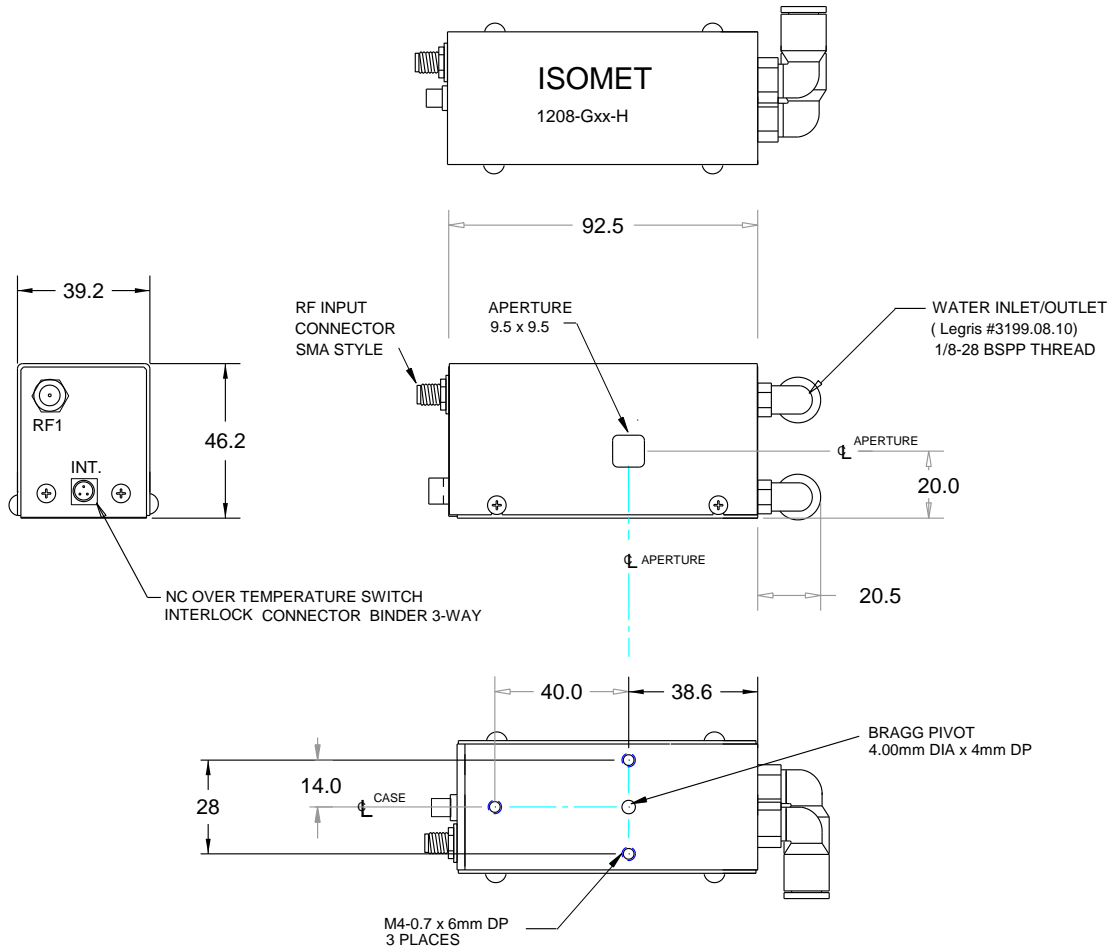
1208-G80-3

IR Acousto-Optic Modulator (Metric)



1014

OUTLINE DRAWING



Due to RF drive power dissipation, the 1208 requires water-cooling to prevent thermal runaway (>2L/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

RFA281

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**