

M1208-G13L-8



IR Acousto-Optic Raman Nath Modulator (Metric)

0622

SPECIFICATIONS

Raman-Nath 13.56MHz acousto-optic modulator designed for high efficiency loss modulation of the zero-order beam.

Standard A/R Spectral Range:	5 - 6 μ m
Interaction Medium:	Single Crystal Germanium
Acoustic Velocity:	5.5mm/ μ s
Centre Frequency (fc):	13.56MHz
RF Bandwidth (Δ f):	5MHz
Input Impedance:	50 Ω
Input VSWR:	< 1.5:1 at 13.56MHz
Optical Insertion Loss:	< 4%
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Linear Horizontal, Parallel to Base
Active Aperture:	8 mmH x 8 mmL
Water Cooling (minimum):	2 litre/minute at < 20°C
Outline Dimensions:	(See reverse)

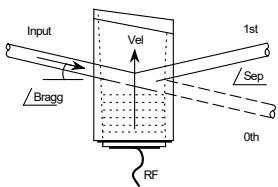
TYPICAL PERFORMANCE

<u>Input beam diameter:</u>	<u>4mm</u>	
Optical access time:	0.47 μ s	
Kick Out Efficiency:	> 95%, 99% goal	
Optical Power:	300 Watts (CW) *	
<u>Wavelength:</u>	<u>5.0μm</u>	<u>6.0μm</u>
RF Drive Power:	< 34W	< 50W
Input Angle (mrad):	0 +/- 2	0 +/- 2
Separation Angle (mrad):	12.33	14.8

* For higher powers please contact Isomet

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue 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



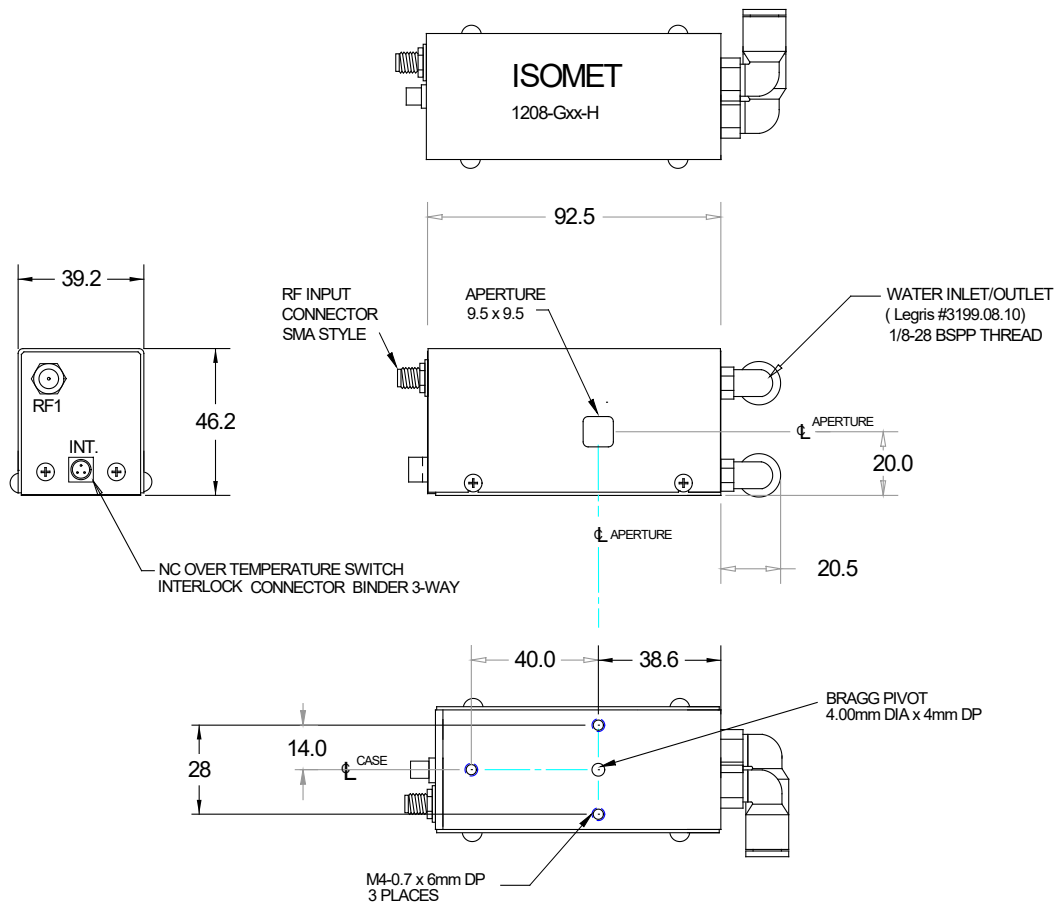
M1208-G13L-8



IR Acousto-Optic Raman Nath Modulator (Metric)

0622

OUTLINE DRAWING



Due to RF drive power dissipation, the M1208 requires water-cooling to prevent thermal runaway (>2L/min at < 20degC). The integral NC thermal interlock switch opens at 32 degC.

Refer application note AN1906 regarding Coolant Specification

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

RFA213

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue 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