

M1208-G40-3

IR Acousto-Optic Modulator (Metric)



0514

SPECIFICATIONS

| | |
|--------------------------------------|--|
| Standard A/R Spectral Range: | 9.4 μ m or 10.6 μ m "V" coat (9 -11 μ m option available) |
| Interaction Medium: | Single Crystal Germanium |
| Acoustic Velocity: | 5.5mm/ μ s |
| Centre Frequency (fc): | 40MHz |
| RF Bandwidth (Δ f): | 10MHz |
| Input Impedance: | 50 Ω |
| Input VSWR: | < 1.5:1 at 40MHz |
| Optical Insertion Loss: | < 5% |
| 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>10.6μm</u> |
| RF Drive Power: | < 65W |
| Bragg Angle (mrad): | 38.5 |
| Separation Angle (mrad): | 77.1 |

* For higher powers please contact Isomet

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

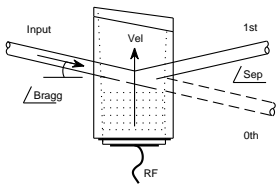
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Quality Assured.

**In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding**



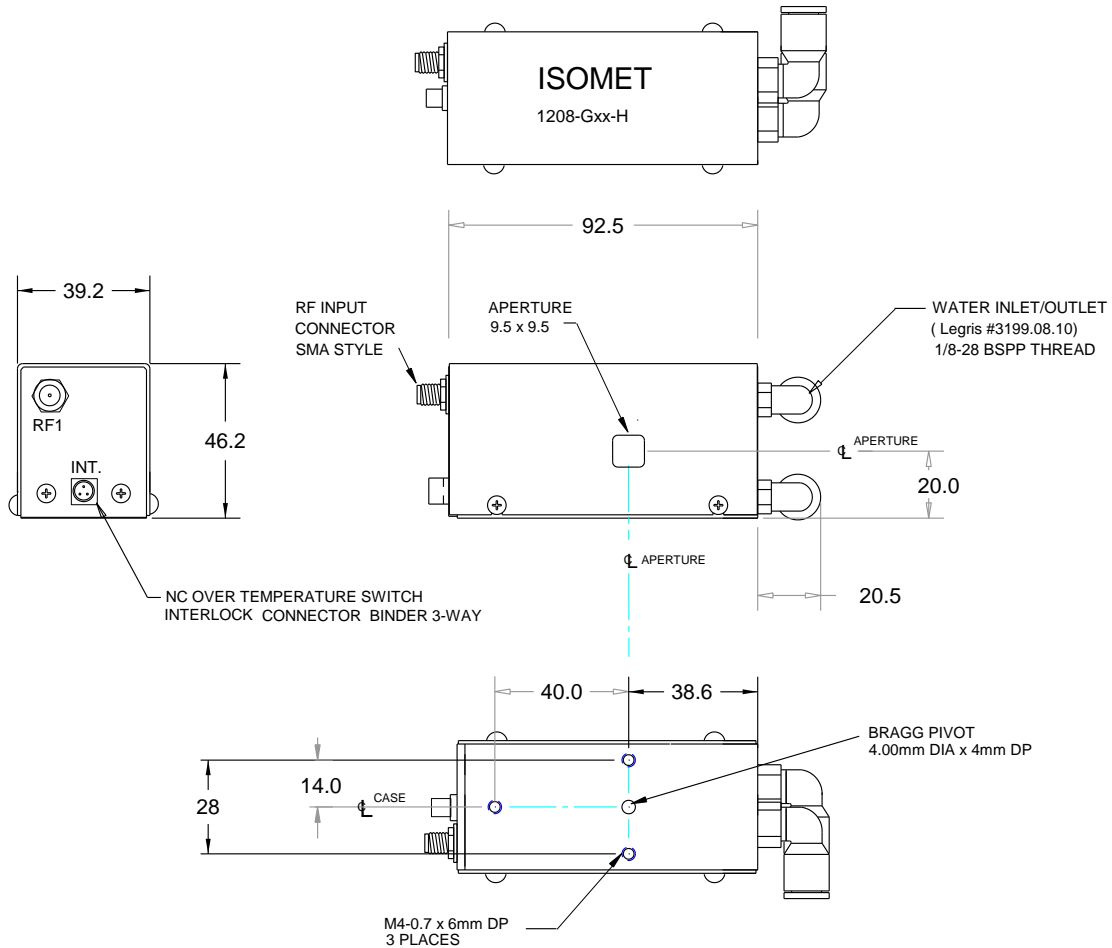
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OUTLINE DRAWING



Due to RF drive power dissipation, the M1208 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

RFA241

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