SPECIFICATIONS

Standard A/R Spectral Range: 2.5μm – 5μm
(or specified “V” coat)

Interaction Medium: Single Crystal Germanium
Acoustic Velocity: 5.5mm/μs

Centre Frequency (fc): 80MHz
RF Bandwidth (Δf): 10MHz
Input Impedance: 50Ω
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 < 20ºC
Outline Dimensions: (See reverse)

TYPICAL PERFORMANCE

Input beam diameter: 3mm

Optical access time: 0.35us
Diffraction Efficiency: > 80%
Optical Power: 50 Watts *

Wavelength: 3um  5um
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
Due to RF drive power dissipation, the M1208 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