

1209-7-1112M



250W IR Acousto-Optic Modulator

(Low corrosion Case)

1106

SPECIFICATIONS

Spectral Range:	2.5 μ m - 11 μ m
Operating Wavelength:	10.6 μ m (others on request)
Interaction Medium:	Single Crystal Germanium
Acoustic Velocity:	5.5mm/ μ s
Centre Frequency (fc):	40MHz
RF Bandwidth (Δ f):	20MHz
Input Impedance:	50 Ω
Input VSWR:	< 1.7:1 at 40MHz
Optical Insertion Loss:	< 7%
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Linear Horizontal, Parallel to Base
Optical Power (Maximum):	250 Watts
Active Aperture:	7 mmH x 14 mmL
Water Cooling (minimum):	1L/minute at < 20 $^{\circ}$ C
Outline Dimensions:	(See reverse)

TYPICAL PERFORMANCE at 10.6 μ m

Input beam diameter:	3mm	7mm
Optical access time:	0.35 μ s	0.83 μ s
Diffraction Efficiency:	> 85%	> 85%
Optical Power *	100 Watts	250 Watts
RF Power:	70 Watts nominal	
Bragg Angle:	38.5mrad	
Separation Angle at fc :	77.1mrad	

* For higher powers please contact Isomet

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

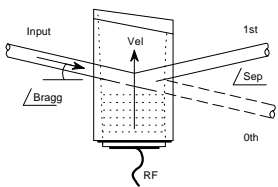
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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Quality Assured.

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



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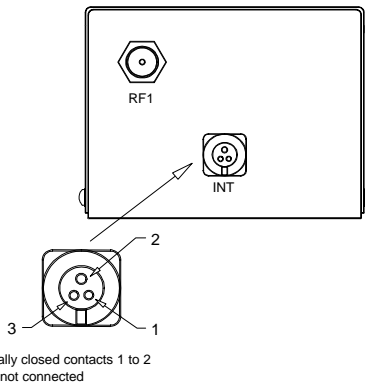
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OUTLINE DRAWING

All case parts in contact with coolant are fabricated in Nickel plated Brass

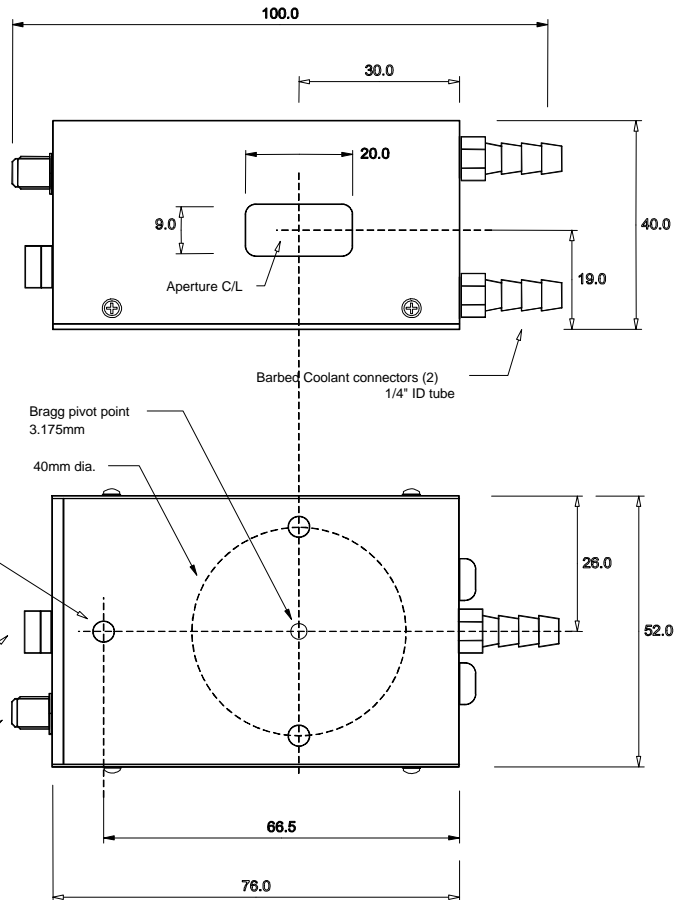
Dim'n: mm
1 inch = 25.4mm



THIS DEVICE REQUIRES WATER COOLING TO PREVENT THERMAL RUNAWAY THE INTEGRAL NC THERMAL INTERLOCK SWITCH OPENS AT 32 degC

THE WATER COOLED CASE PARTS ARE NICKEL PLATED BRASS IT IS RECOMMENDED THAT A CORROSION INHIBITOR SUCH AS 'COPAL' BY FERNOX IS ADDED TO THE COOLING SYSTEM

- 10-32 or M5, 6mm dp (3)
- 3-pin snap Interlock Connector
- SMA RF Connector



DRIVERS

Modulator Driver/Amplifier
Deflector Driver/Amplifier

RFA241
RFA321

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