

1209-9-1010M

300W IR Acousto-Optic Modulator



0513

A high power Germanium modulator offering superior beam output beam quality for scribing and laser drilling applications

SPECIFICATIONS

Spectral Range:	2.5 μ m - 11 μ m
Operating Wavelength:	9.3 or 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):	10MHz
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
Average Optical Power (Maximum):	300 Watts*
Active Aperture:	9 mmH x 20 mmL
Water Cooling (minimum):	2L/minute at < 20 $^{\circ}$ C
Outline Dimensions:	(See reverse)

TYPICAL PERFORMANCE at 10.6 μ m

Input beam diameter:	7mm
Optical access time:	0.83 μ s
Diffraction Efficiency:	> 85%
RF Power:	85 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

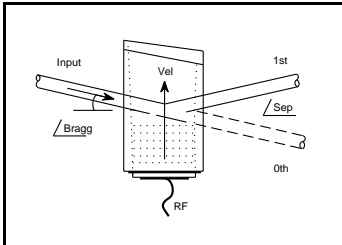
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

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Quality Assured.

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



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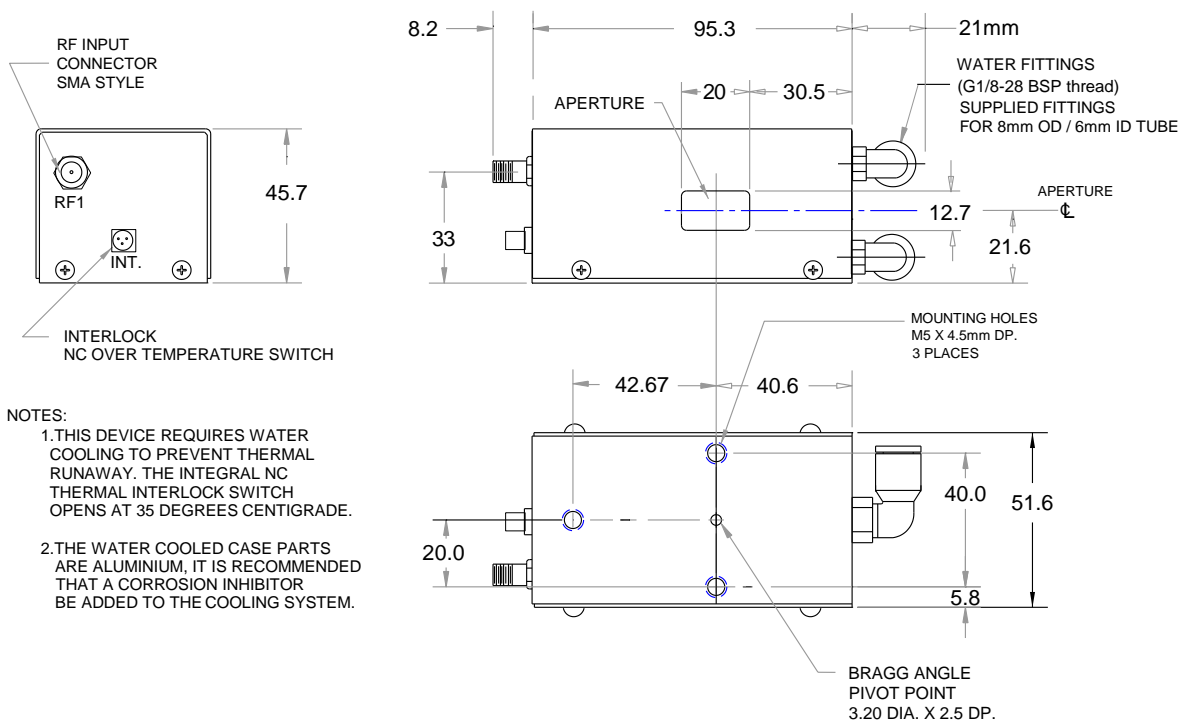
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OUTLINE DRAWING

All case parts in contact with coolant are fabricated in Anodized Aluminium



Options:

-BR : Case parts in contact with coolant fabricated in Brass

Alternate water fittings (G1/8 thread) available

DRIVERS

Modulator Driver/Amplifier

RFA441A

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