

1209-9-1010

300W IR Acousto-Optic Modulator



0511

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 - 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):	> 5 MHz
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):	300 Watts
Active Aperture:	9 mmH x 20 mmL
Water Cooling (minimum):	2L/minute at < 20°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%
Optical Power *	300 Watts
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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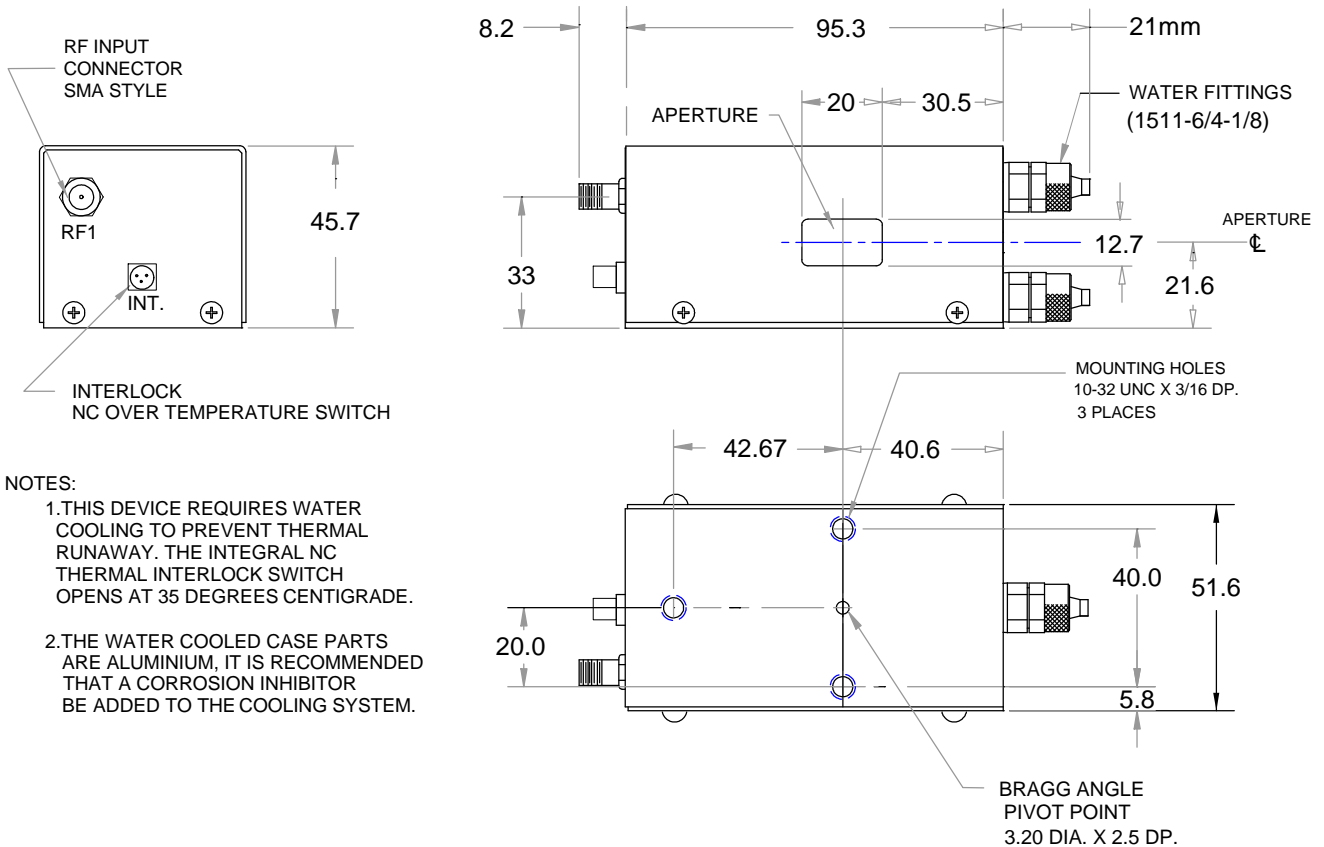
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OUTLINE DRAWING

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



NOTES:

1. THIS DEVICE REQUIRES WATER COOLING TO PREVENT THERMAL RUNAWAY. THE INTEGRAL NC THERMAL INTERLOCK SWITCH OPENS AT 35 DEGREES CENTIGRADE.
2. THE WATER COOLED CASE PARTS ARE ALUMINIUM, IT IS RECOMMENDED THAT A CORROSION INHIBITOR BE ADDED TO THE COOLING SYSTEM.

Options:

- BR : Case parts in contact with coolant fabricated in Nickel plated Brass
- M : Metric M5 mounting hole threads

DRIVERS

Modulator Driver/Amplifier

RFA441A

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