

1209-7-993M



250W IR Acousto-Optic Modulator

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.

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

E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

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



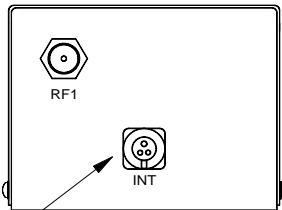
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Dim'n: mm
1 inch = 25.4mm



Normally closed contacts 1 to 2
Pin 3 not connected

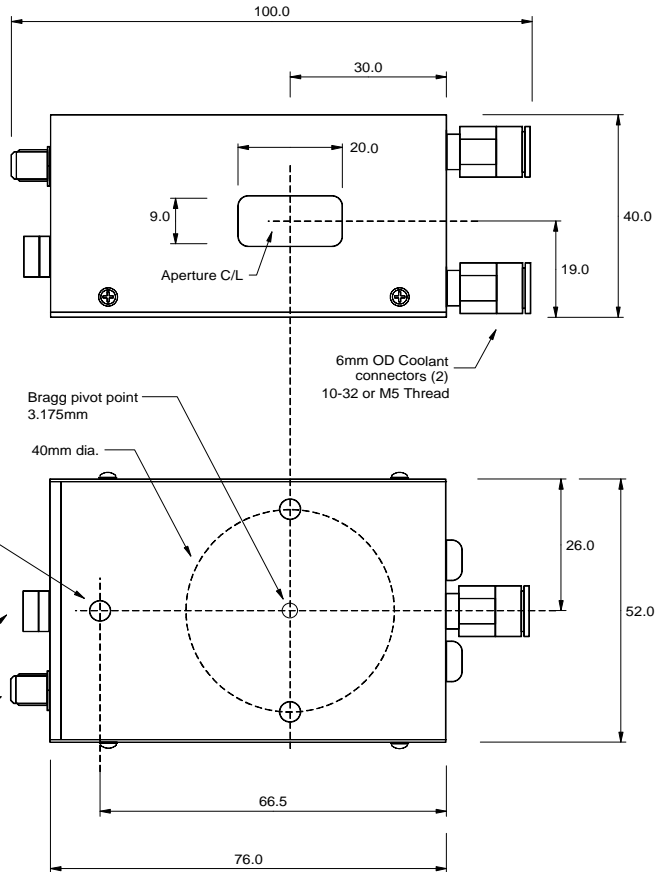
THIS DEVICE REQUIRES WATER COOLING TO PREVENT THERMAL RUNAWAY THE INTEGRAL NC THERMAL INTERLOCK SWITCH OPENS AT 32 degC

THE WATER COOLED CASE PARTS ARE ALUMINIUM 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



(Option: UNC mounting holes)

DRIVERS

**Modulator Driver/Amplifier
Deflector Driver/Amplifier**

**RFA241
RFA321**

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