

M1153-G68S-4

(PRELIMINARY)

High Power MIR AO Modulator



4121

The M1153 is a high efficiency Germanium AO modulator/low resolution deflector developed specifically to operate with high power unpolarized mid-IR lasers.

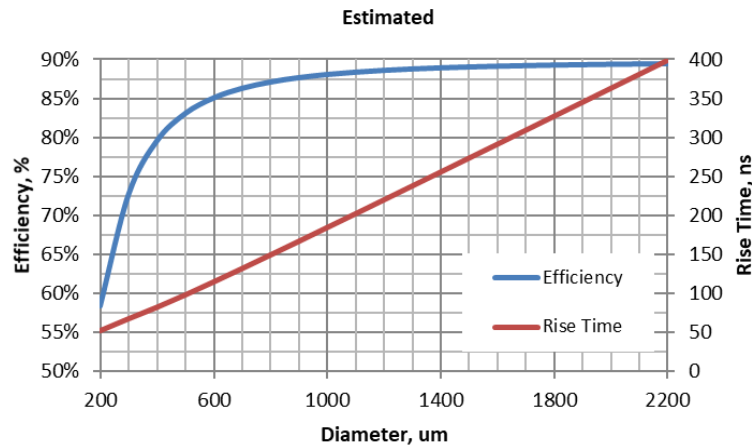
SPECIFICATIONS

A/R operating wavelength ranges:	2.05um or 2.5 – 5um*
Interaction Material:	Germanium
Acoustic Velocity:	3.53mm/usec
Active Aperture:	4mmH x 9mmW
Centre Frequency (fc):	68MHz
FM Bandwidth:	10MHz
Static Insertion Loss:	< 6%
Maximum Optical Power:	200 Watts, 3mm dia. Gaussian beam

Wavelength	2.05um	3um	5um
RF Power for max D/E	8W	16W	45W
Bragg Angle	19.3mrad	28.9mrad	48.2mrad
Separation Angle	39.5mrad	57.8mrad	96.4mrad

Laser Polarization:	Any
Water Cooling (Minimum):	1 Liter/Min. @ < 20°C

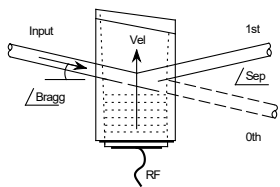
Typical Modulation performance at 3um:



* Optional designs are available for other wavelengths in the 2.5um - 11.2um range.

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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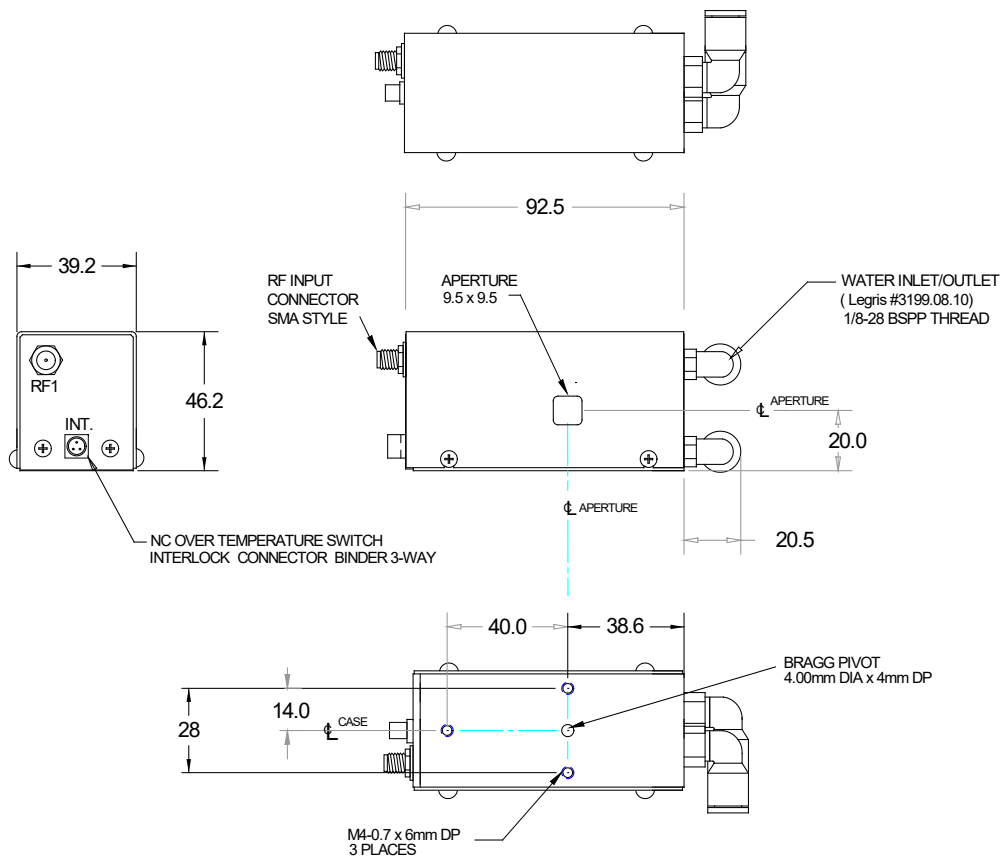
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OUTLINE DRAWING

Dimensions: mm



Notes:

The M1153 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. (Copper case option available)
It is strongly recommended that a corrosion inhibitor such as "Optishield" is added to the cooling system.
See note: AN1906

DRIVERS

Modulator Driver

(7W) 552F-7-68
(25W) RFA168-1-25, (50W) RFA168-1-50

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