

M1099(M)-T40L-2

Acousto-Optic Modulator



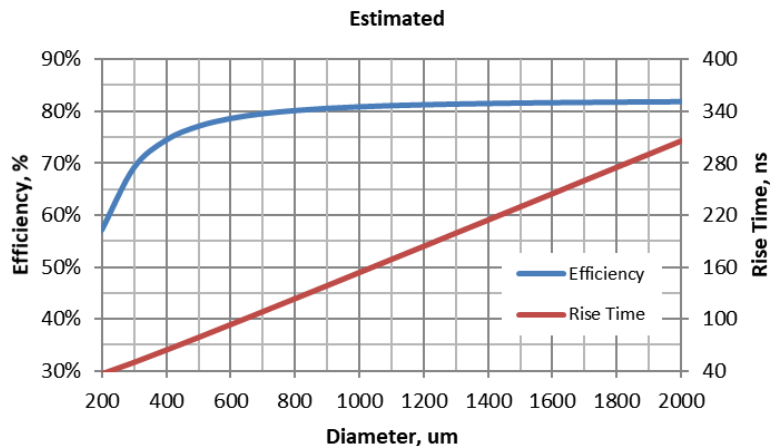
0421

Compact AO Modulator designed for High Power NIR Fibre and DPSS laser applications.
AOM is supplied with a removable water cooled base plate.

SPECIFICATIONS

Standard A/R Wavelengths:	1.9 – 2.1 μm *
Optical Power:	100 Watts CW *
Interaction Medium:	Tellurium Dioxide (TeO_2)
Acoustic Velocity:	4.2mm/ μs
Centre Frequency (F_c):	40MHz
RF Bandwidth:	10MHz
Input Impedance:	50 Ω Nominal
VSWR:	<1.5:1 @ F_c
Clear Aperture:	6.5mm
Active Aperture Height:	2mm
Static Insertion Loss	<3% at 2.0 μm
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Any / vertical preferred *
Static Contrast Ratio:	>1000:1 min (>2000:1 typical)

TYPICAL PERFORMANCE at 1.9 μm *

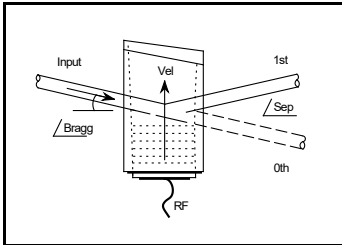


	1900nm	2090nm
RF Power (theoretical):	7 W	8.5W
Typical Diffraction Efficiency, 6W drive:	>80%	>75%
Bragg Angle:	9.05 mrad	9.95 mrad
Separation Angle:	18.1 mrad	19.9 mrad

* see foot notes

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, 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



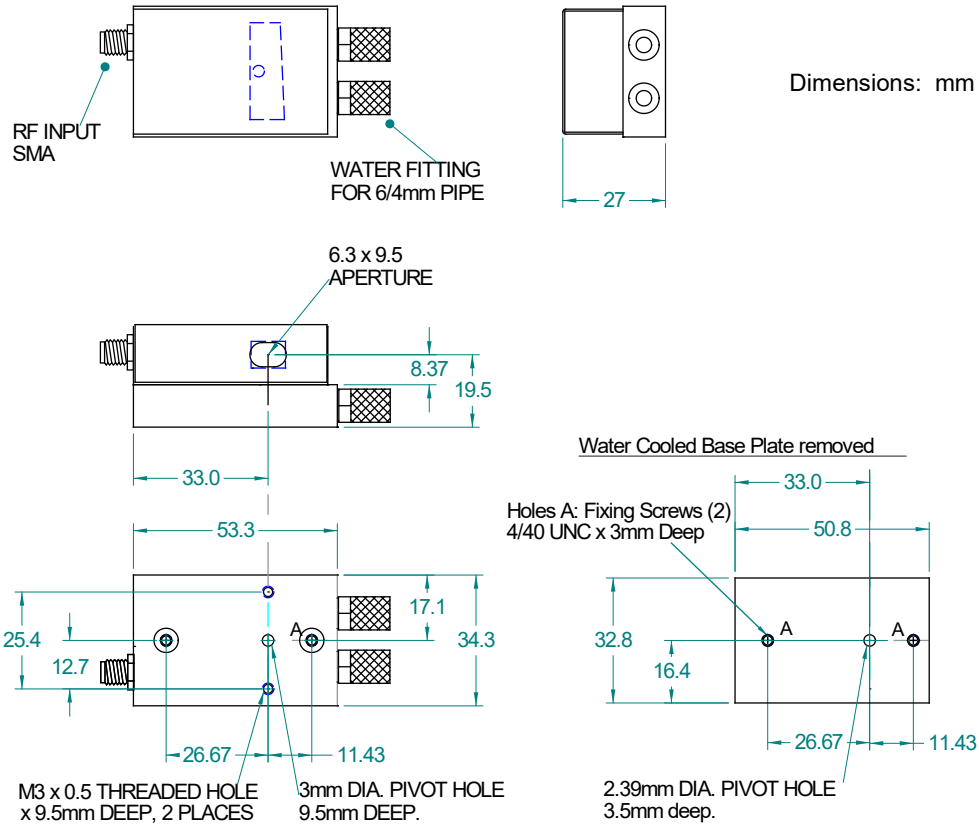
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OUTLINE DRAWING



Metric fixing holes, M3-0.5 thread: add suffix M, (M1099M-T...)

Mount device to heat conducting surface or to supplied water cooled base plate

RF DRIVE ELECTRONICS

Digital modulation: 521C-7

Analog modulation: 531C-7

Dual modulation: 551F-7

*** Notes:**

- PLEASE SPECIFY OPERATING WAVELENGTH.
- For higher powers please contact Isomet.
- Approximately 10% efficiency decrease for h-pol input under same RF drive power.
- Estimated efficiency applies to single mode input.

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