

M1099-T80L-3(M)

Acousto-Optic Modulator



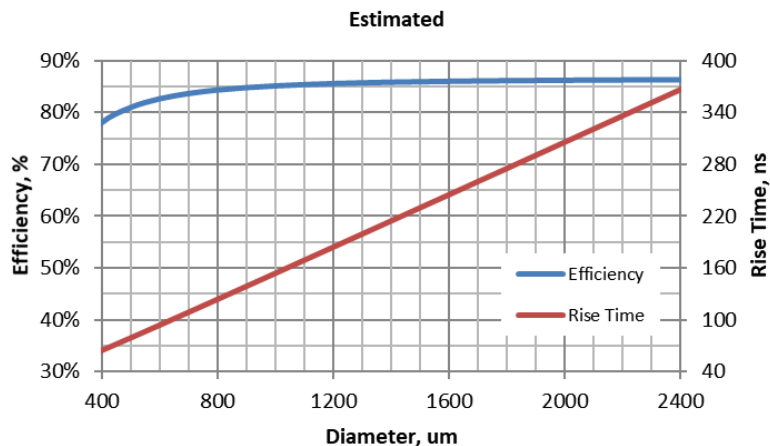
0425

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

SPECIFICATIONS

Spectral Range:	0.36 > 1.5 μ m
Standard A/R Wavelengths:	0.7-0.9 μ m or 1.064 μ m *
Optical Power:	100 Watts CW *
Interaction Medium:	Tellurium Dioxide (TeO ₂)
Acoustic Velocity:	4.2mm/ μ s
Centre Frequency (Fc):	80MHz
RF Bandwidth:	30MHz
Input Impedance:	50 Ω Nominal
VSWR:	<1.5:1 @ Fc
Clear Aperture:	6.5mm
Active Aperture Height:	3mm
Static Insertion Loss	<3% at 1.1 μ m
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Any / vertical preferred *
Static Contrast Ratio:	>1000:1 min (>2000:1 typical)

TYPICAL PERFORMANCE at 1.1 μ m *



	780nm	840nm	1064nm
RF Power (nominal):	1.9 W	2.2 W	3.5 W
Bragg Angle:	7.4 mrad	8.0 mrad	10.5 mrad
Separation Angle:	14.9 mrad	16.0 mrad	21.0 mrad

* see foot notes

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

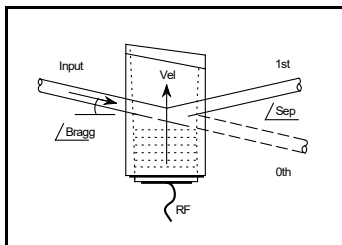
ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.

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

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Quality Assured.

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



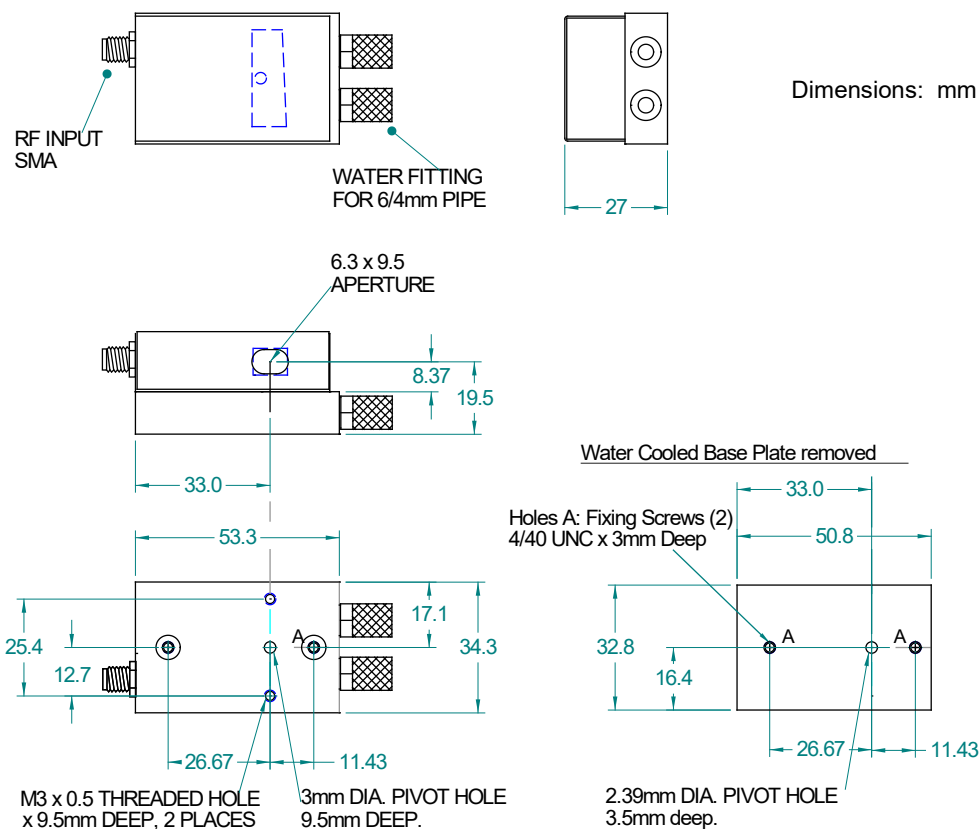
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OUTLINE DRAWING



Suffix -M: M3 metric fixing threads standard.

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

RF DRIVE ELECTRONICS

Digital modulation: 522F-4

Analog modulation: 532F-4

Dual modulation: 552F-4

Tuneable with modulation RF5-80T-4(VCO),

iCSA100-1-4 (DDS)

* Notes:

- PLEASE SPECIFY OPERATING WAVELENGTH.
- For higher powers please contact Isomet.
- Approximately 5% efficiency difference between v-pol and h-pol for the same RF drive power.
- Estimated efficiency applies to single mode input.

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