

M1440-T200L-1.5



Acousto-Optic Modulator / Frequency Shifter

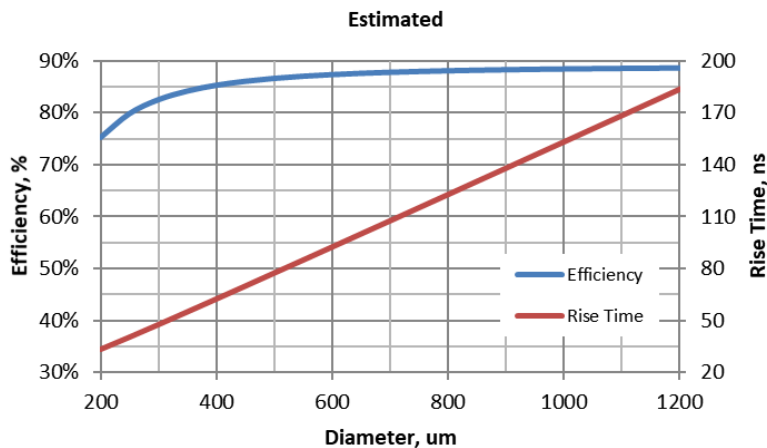
(PRELIMINARY)

0325

SPECIFICATIONS

Spectral Range:	0.36 > 1.5μm
Standard A/R Wavelengths:	0.4-0.7μm, 0.6-1.0μm *
Optical Power:	10 Watts *
Interaction Medium:	Tellurium Dioxide (TeO ₂)
Acoustic Velocity:	4.2mm/μs
Centre Frequency (fc):	200MHz
RF Bandwidth:	>40MHz
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ fc
Max RF power:	2.2W
Clear Aperture:	3.5mm
Active Aperture:	1.5mm
Static Insertion Loss	< 3%
Reflectivity:	< 1.0% / surface
Laser Polarization:	Any / vertical preferred *
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

TYPICAL PERFORMANCE *



	532nm	633nm	780nm
Drive Power (theoretical):	1.2 W	1.7 W	2.7 W
CW diffraction efficiency, at 2W max RF:	>85%	>85%	>80%
Bragg Angle:	12.7 mrad	15.1 mrad	18.6 mrad
Separation Angle:	25.3 mrad	30.1 mrad	37.1 mrad

* see foot notes.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

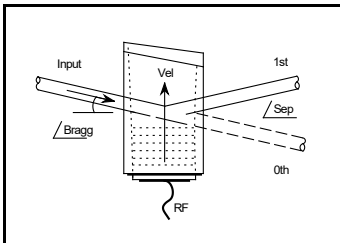
ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.

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Quality Assured.

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



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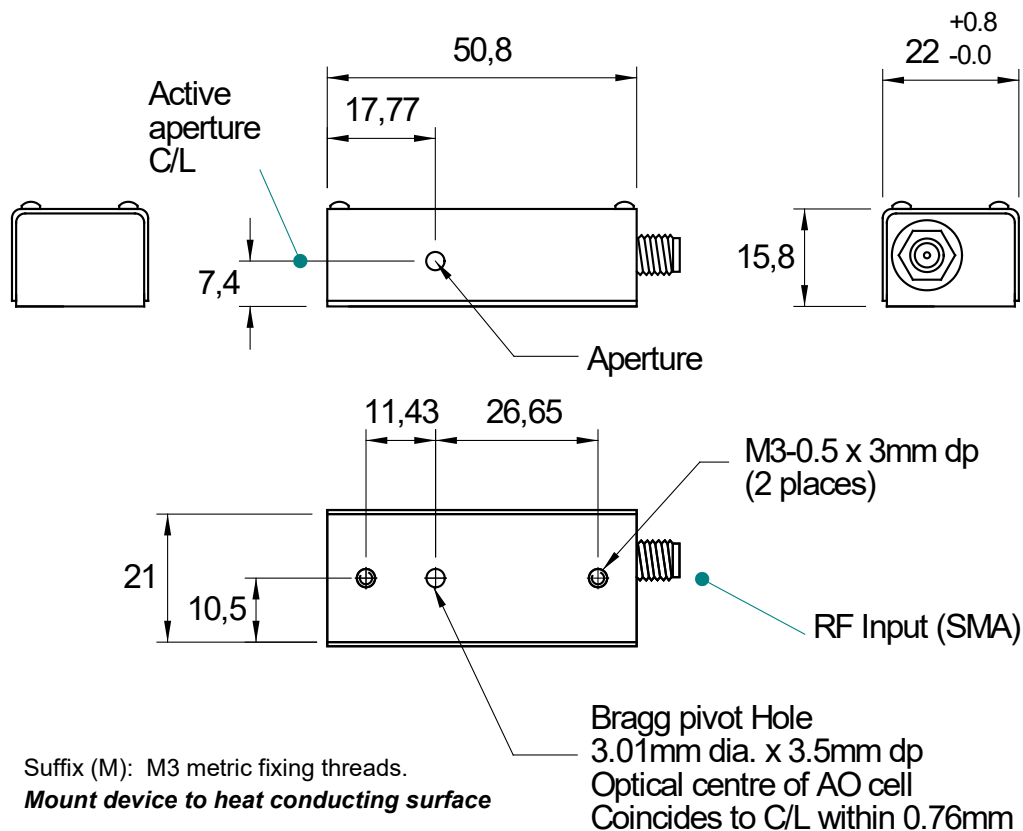


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OUTLINE DRAWING



RF DRIVE ELECTRONICS

Digital modulation: 525F-2, -4

Analog modulation: 532F-2, -4

Dual modulation: 555F-2, -4

* 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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