

M1205-T110L-1 (830-1064nm) Acousto-Optic Modulator



0421

APPLICATIONS

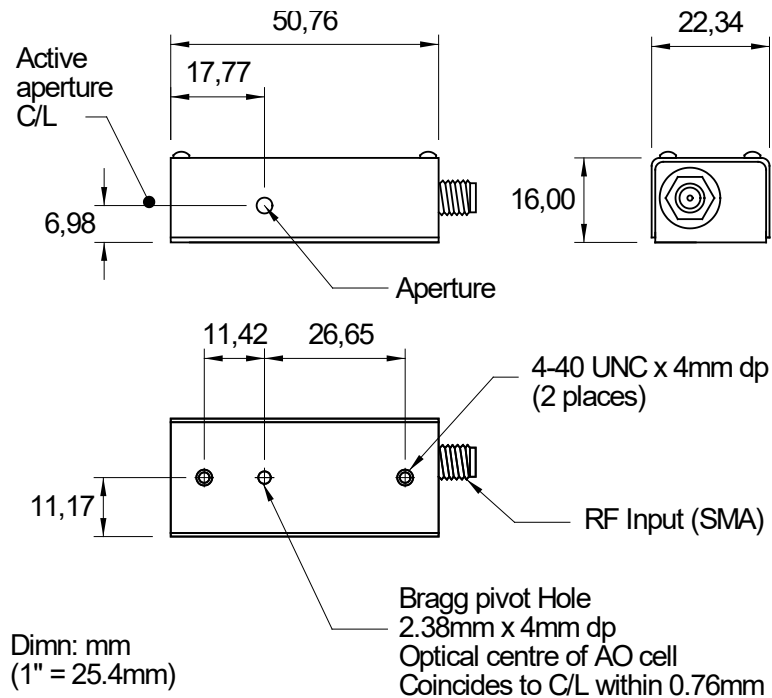
- Modulator
- Low Resolution Deflector
- Frequency Shifter

RF Drive Electronics

Fixed Frequency with modulation
Tuneable with modulation

523F-2 / 533F-2 / 553F-2
630C-110 / iSK3-100T-1-1

OUTLINE DRAWING



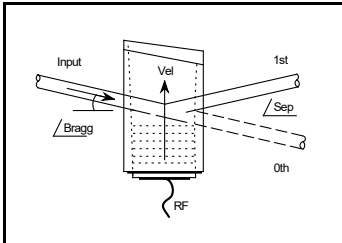
Option:

Metric fixing holes, M3-0.5 thread: add suffix -M

Mount device to heat conducting surface

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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Acousto-Optic Modulator



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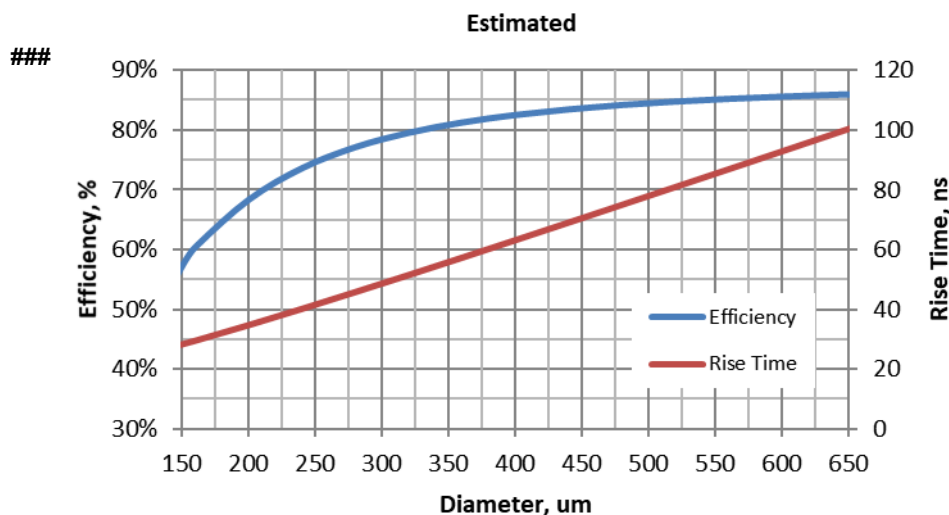
SPECIFICATIONS

A/R Operating Wavelengths:	830-1100nm
Interaction Medium:	Tellurium Dioxide (TeO ₂)
Acoustic Velocity:	4.2mm/μs
Active Aperture:	1.0mm
Centre Frequency (CF):	110MHz
RF Bandwidth (minimum):	40MHz (+/- 20MHz)
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ 110MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

PERFORMANCE vs. WAVELENGTH

Wavelength:	852nm	976 nm	1064nm
RF Drive Power:	1.0W	1.4W	1.7W
Bragg angle:	11.1mrad	12.8mrad	13.9mrad
Beam Separation:	22.3mrad	25.6mrad	27.9mrad
Static Insertion Loss:	< 3%	< 3%	< 3%

PERFORMANCE vs. BEAM DIAMETER at 976nm



Maximum RF drive power 1.8W

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