

M1206-P110L-1 (633-830nm)

Acousto-Optic Modulator



0419

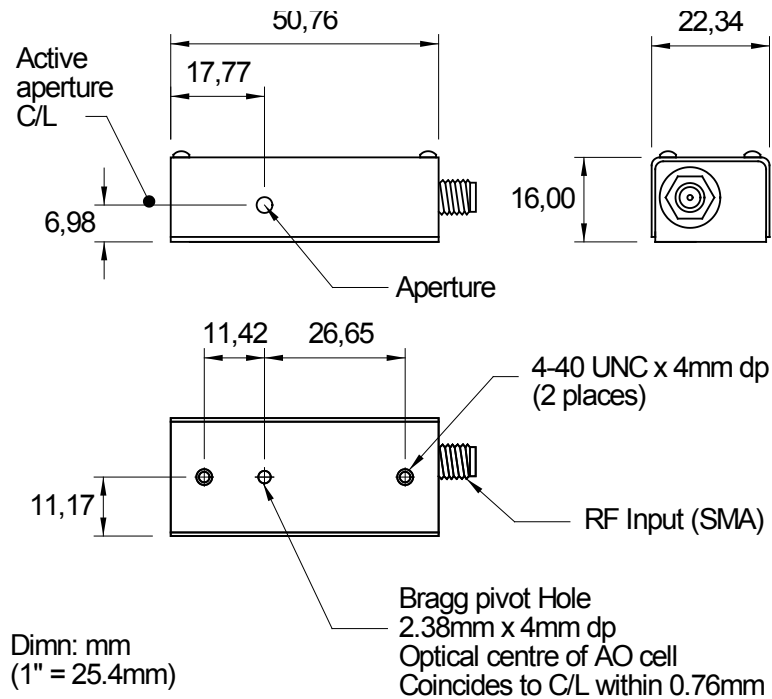
APPLICATIONS

- Modulator
- Low Resolution Deflector
- Frequency Shifter

RF DRIVERS

Digital modulation	523C-2
Analog modulation	533C-2
Dual modulation	553F-2
Tuneable with modulation	630C-110 / iSPA-SF1-w

OUTLINE DRAWING



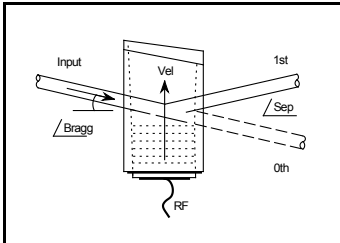
Option:

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

Note: 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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SPECIFICATIONS

A/R Operating Wavelengths:	633-830nm
Interaction Medium:	Lead Molybdate (PbMoO ₄)
Acoustic Velocity:	3.63mm/μs
Active Aperture:	1.0mm
Centre Frequency (CF):	110MHz
RF Bandwidth (minimum):	50MHz (+/- 25MHz)
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ 110MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

PERFORMANCE vs. WAVELENGTH

Wavelength:	633nm	780 nm	830nm
RF Drive Power:	0.8W	1.3W	1.5W
Bragg angle:	9.6mrad	11.8 mrad	12.6mrad
Beam Separation:	19.2mrad	23.6 mrad	25.2mrad
Static Insertion Loss:	< 3%	< 3%	< 3%

PERFORMANCE vs. BEAM DIAMETER at 780nm

Beam Diameter:	0.75mm	0.25mm
Rise Time:	133ns	46ns
Modulation Bandwidth @ MTF of 0.5:	2.6 MHz	7.5 MHz
Typical Deflection Efficiency at CF,	1.0W RF drive: >80%	>78%
	1.3W RF drive: >85%	>83%

Maximum RF drive power 1.8W

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