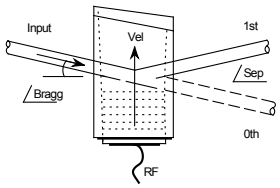

M1205-T80L-1, -2 (633-830nm)

Acousto-Optic Modulator

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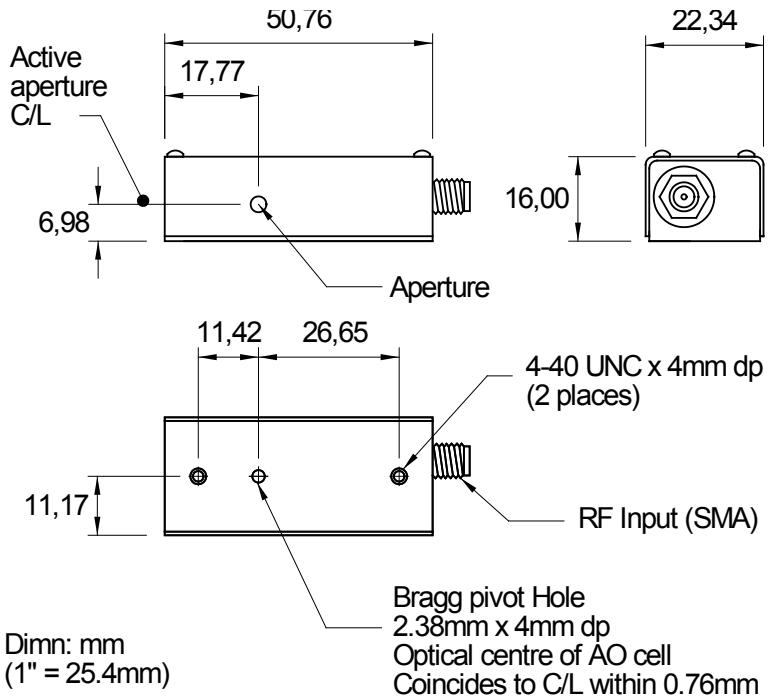
APPLICATIONS

- **Modulator**
- **Low Resolution Deflector**
- **Frequency Shifter**

RF DRIVERS

Digital modulation	**522C-2**
Analog modulation	**532C-2**
Dual modulation	**552F-2**
Tuneable with modulation	**630C-80 / iSPA-SF1-w**

OUTLINE DRAWING



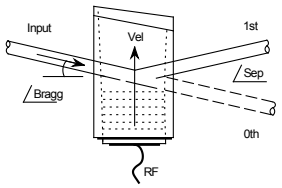
Option:

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 Battleview 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



M1205-T80L-1, -2 (633-830nm)

Acousto-Optic Modulator

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SPECIFICATIONS

A/R Operating Wavelengths:	633-830nm
Interaction Medium:	Tellurium Dioxide (TeO2)
Acoustic Velocity:	4.2mm/μs

Model:	**M1205-T80L-1**	**M1205-T80L-2**
Active Aperture:	1.0mm	2.0mm
RF Bandwidth (minimum):	30MHz (+/- 15MHz)	40MHz (+/- 20MHz)
Centre Frequency (CF):	80MHz	
Input Impedance:	50Ω Nominal	
VSWR:	<1.5:1 @ 80MHz	
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)	
Maximum CW or average RF drive power	2W	

PERFORMANCE vs. WAVELENGTH

Wavelength:		**633nm**	**780 nm**	**830nm**
RF Drive Power:	**M1205-T80L-1**	0.6W	1.0W	1.1W
	M1205-T80L-2	1.2W	2.0W	2.2W
Bragg angle:		6.0 mrad	7.4 mrad	7.9 mrad
Beam Separation:		12.1 mrad	14.9 mrad	15.8 mrad
Static Insertion Loss:		< 3%	< 3%	< 3%

PERFORMANCE vs. BEAM DIAMETER at 780nm

Beam Diameter:		**0.8mm**	**0.4mm**
Rise Time:		120ns	62ns
Modulation Bandwidth @ MTF of 0.5:		2.9 MHz	5.6 MHz
Typical Deflection Efficiency at CF	:	>85%	>83%

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