

# M1205-P80L-0.6,-1,-2 (1550nm)



## Acousto-Optic Modulator

0419

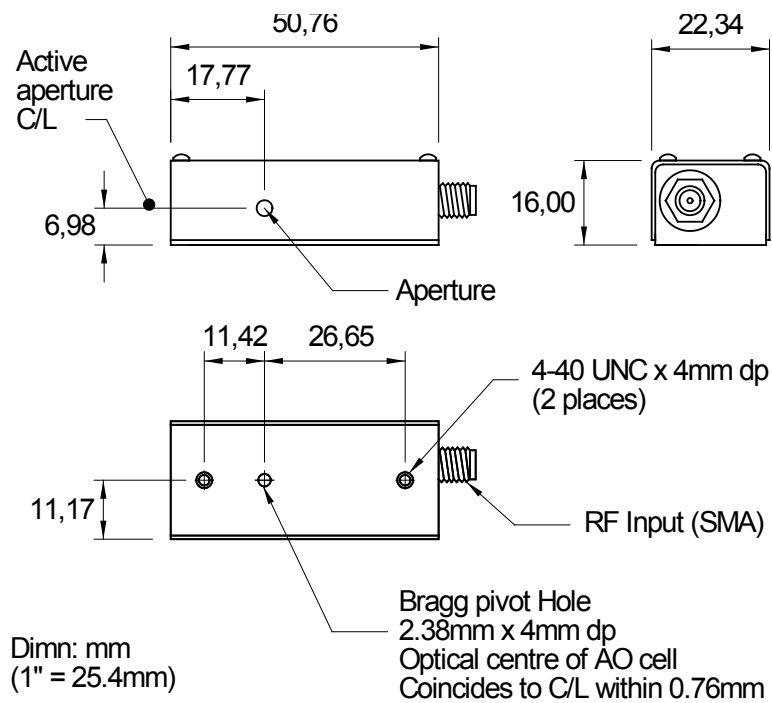
### APPLICATIONS

- 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



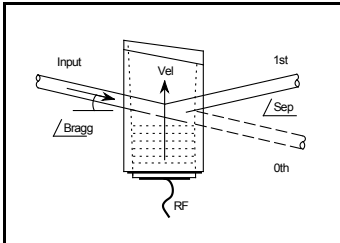
Option:

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

**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](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://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:	1550nm
Interaction Medium:	Lead Molybdate (PbMoO <sub>4</sub> )
Acoustic Velocity:	3.63mm/μs
<b>Model:</b>	<b>M1205-P80L -0.6                      -1                      -2</b>
Active Aperture:	0.6mm                      1.0mm                      2.0mm
Centre Frequency (CF):	80MHz
RF Bandwidth (minimum):	30MHz (+/- 15MHz)
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ 80MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)
Maximum average or CW power:	2W

### PERFORMANCE at 1550nm

Bragg angle:	17.1 mrad
Beam Separation:	34.2 mrad
Static Insertion Loss:	< 3%
Beam Diameter:	<b>0.5mm                      1.0mm</b>
Rise Time:	92ns                      178ns
Modulation Bandwidth @ MTF of 0.5:	3.7 MHz                      1.9 MHz
<b>Model:</b>	<b>M1205-P80L -0.6                      -1                      -2</b>
<b>Peak</b> RF Drive Power *:	2.6W                      5.0W                      9.0W

Typical Deflection Efficiency at:	
25% of peak RF power:	>40%
50% of peak RF power:	>65%
75% of peak RF power:	>80%
100% of peak RF drive:	>85%

\* Duty cycled operation applies. Maximum average or CW power = 2.0W.

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