

# M1250-P200L-0.75 (830-1064nm) **ISOMET**

## Acousto-Optic Modulator

2421

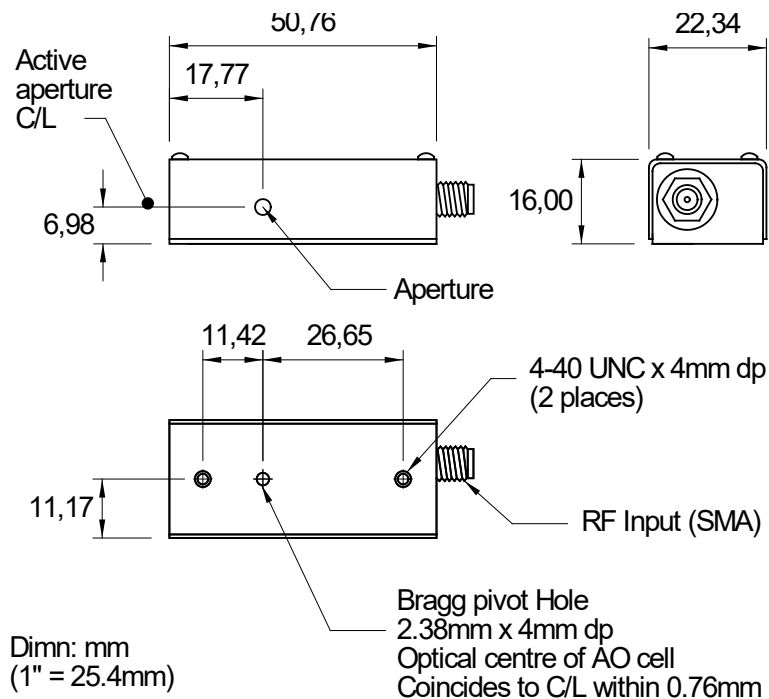
### APPLICATIONS

- Modulator
- Low Resolution Deflector
- Frequency Shifter

### RF DRIVERS

Digital modulation	525C-2
Analog modulation	535C-2
Dual modulation	555F-2
Tuneable with modulation	630C-200 / iSPA-SF1-w

### OUTLINE DRAWING



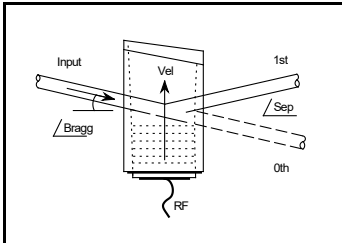
Option:

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.  
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**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:	830-1064nm
Interaction Medium:	Lead Molybdate (PbMoO <sub>4</sub> )
Acoustic Velocity:	3.63mm/μs
Active Aperture:	0.7mm
Polarization:	Any
Centre Frequency (CF):	200MHz
RF Bandwidth (minimum):	100MHz (+/- 50MHz)
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ 200MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

### PERFORMANCE vs. WAVELENGTH

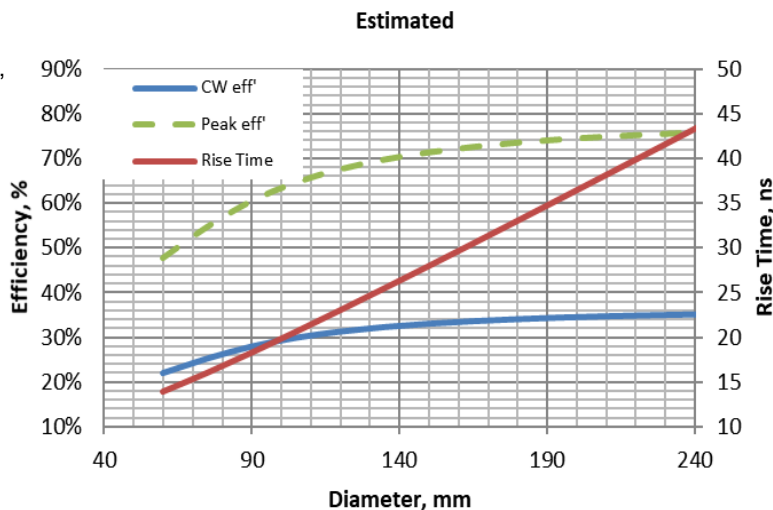
Wavelength:	830 nm	900 nm	1064 nm
RF Drive Power, <b>peak:</b> (Maximum average or CW = 1.3W).	4W	4.8W	6.7W
Bragg angle:	22.9 mrad	24.8 mrad	29.3 mrad
Beam Separation:	45.7 mrad	49.6 mrad	58.6 mrad
Static Insertion Loss:	< 3%	< 3%	< 3%

### PERFORMANCE vs. BEAM DIAMETER at 1064nm

Peak efficiency applies to duty cycled operation,

Maximum average (or CW) RF power = 1.3W

For  $1/e^2$  beam diameters >200μm,  
rise time = 180nsec/mm



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