

# M1250-T200L-0.5

## Acousto-Optic Modulator



0419

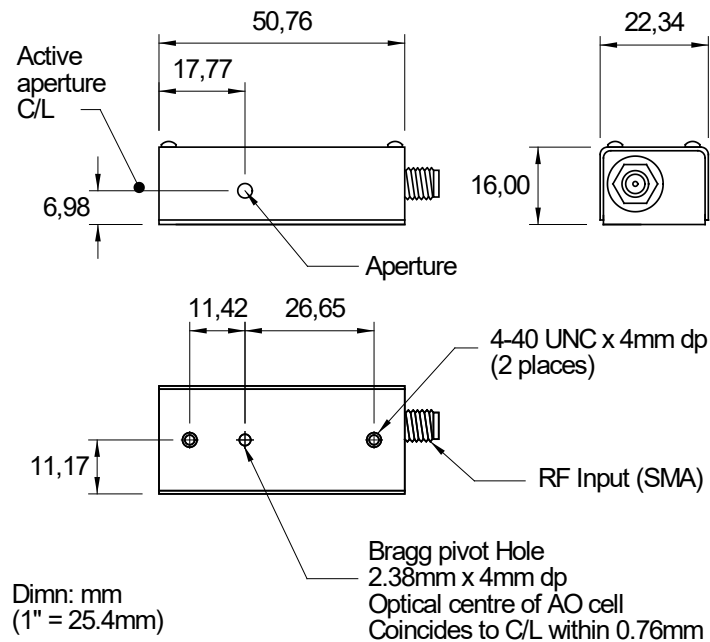
### APPLICATIONS

- Intensity Modulator
- Low resolution Deflector
- Frequency Shifter

### RF Drive Electronics

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

### OUTLINE DRAWING

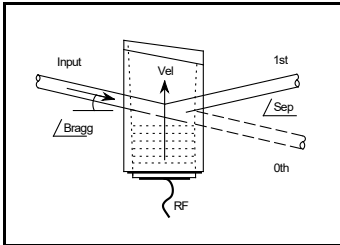


Option -M , metric mounting threads, M3

**Note: Mount device to heat conducting surface**

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**  
 ISOMET CORP, 10342, Battleview Parkway, VA 20109, USA.  
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**Quality Assured.**  
**In-house: Crystal Growth,**  
**Optical Polishing,**  
**A/R coating, Vacuum Bonding**



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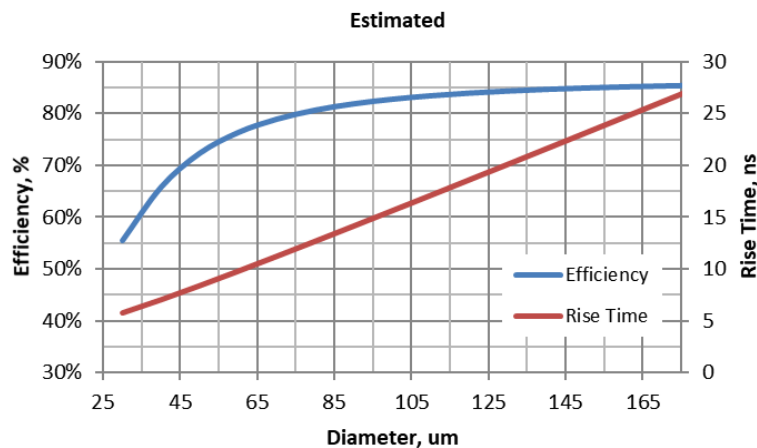
### SPECIFICATIONS

|                           |                                       |
|---------------------------|---------------------------------------|
| Spectral Range:           | 0.36 > 1.5 $\mu$ m                    |
| Standard A/R Wavelengths: | 360-420nm, 442-488nm, 488-633nm       |
| Interaction Medium:       | Tellurium Dioxide (TeO <sub>2</sub> ) |
| Input polarization:       | Vertical preferred                    |
| Acoustic Velocity:        | 4.2mm/ $\mu$ s                        |
| Active Aperture:          | 0.5mm                                 |
| Centre Frequency (CF):    | 200MHz                                |
| RF Bandwidth:             | 100MHz                                |
| Input Impedance:          | 50 $\Omega$ nominal                   |
| VSWR:                     | <1.5:1 @ 200MHz                       |
| DC Contrast Ratio:        | >1000:1 min (>2000:1 typical)         |

### PERFORMANCE vs. WAVELENGTH

|                            |      |      |      |      |      |
|----------------------------|------|------|------|------|------|
| Wavelength (nm):           | 360  | 405  | 488  | 532  | 633  |
| RF Drive Power(W):         | <0.4 | <0.5 | <0.7 | <0.9 | <1.1 |
| Bragg angle (mrad):        | 8.6  | 9.6  | 11.6 | 12.7 | 15.1 |
| Beam Separation (mrad):    | 17.1 | 19.2 | 22.2 | 25.3 | 30.1 |
| Static Insertion Loss (%): | <5   | <5   | <3   | <3   | <3   |

### PERFORMANCE vs. BEAM DIAMETER at 532nm



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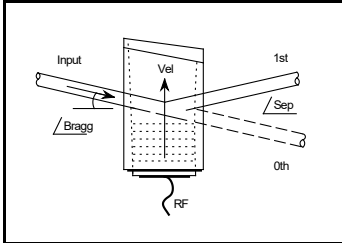
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