

# M1205-T110L-1 (633-830nm) Acousto-Optic Modulator



0421

## APPLICATIONS

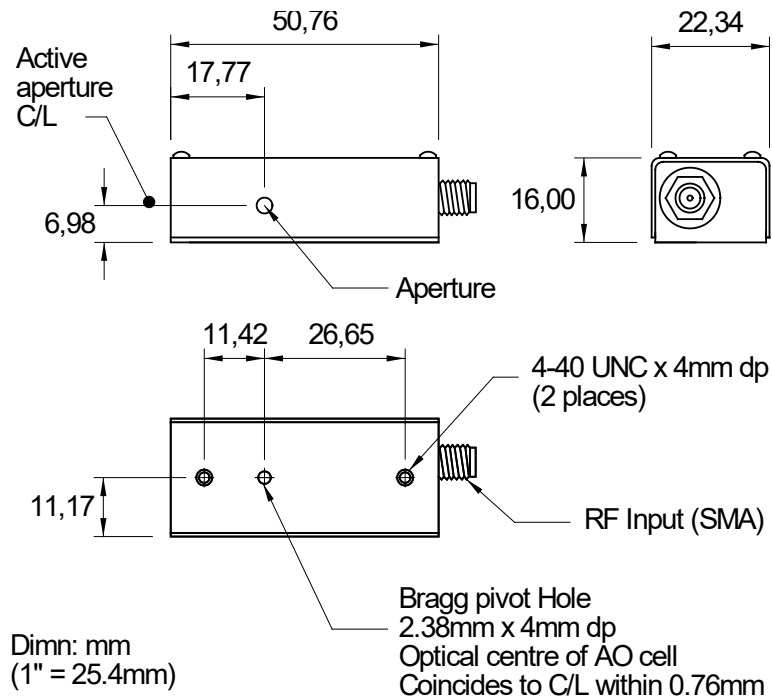
- Modulator
- Low Resolution Deflector
- Frequency Shifter

## RF DRIVERS

Fixed Frequency with modulation  
Tuneable with modulation

523F-2 / 533F-2 / 553F-2  
630C-110 / iSK3-100T-1-1

## OUTLINE DRAWING



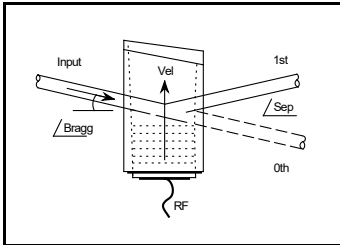
Option:

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



# M1205-T110L-1 (633-830nm)

## Acousto-Optic Modulator



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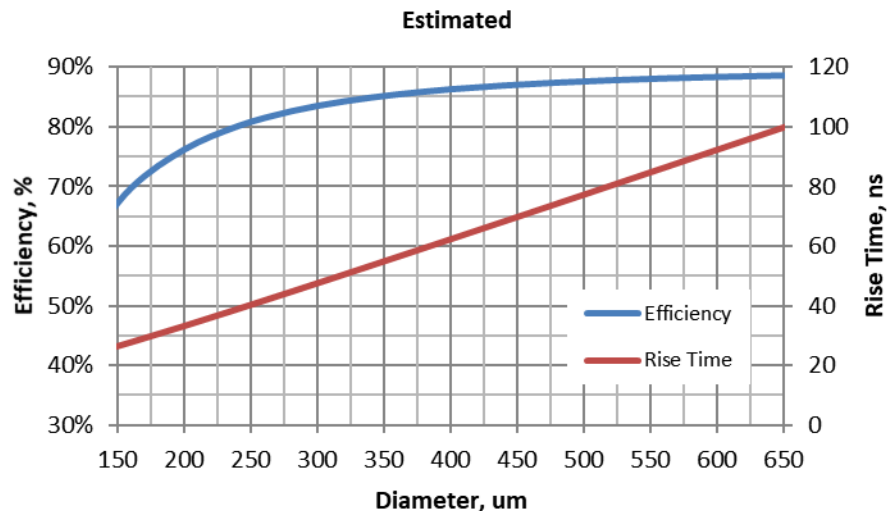
### SPECIFICATIONS

A/R Operating Wavelengths:	633-830nm
Interaction Medium:	Tellurium Dioxide (TeO <sub>2</sub> )
Acoustic Velocity:	4.2mm/μs
Active Aperture:	1.0mm
Centre Frequency (CF):	110MHz
RF Bandwidth (minimum):	40MHz (+/- 20MHz)
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 (nominal):	0.6W	0.9W	1.1W
Bragg Angle:	8.3mrad	10.2mrad	10.9mrad
Beam Separation:	16.6mrad	20.4mrad	21.7mrad
Static Insertion Loss:	< 3%	< 3%	< 3%

### PERFORMANCE vs. BEAM DIAMETER at 780nm



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