

# M1205-T110L-1

## Acousto-Optic Modulator



0921

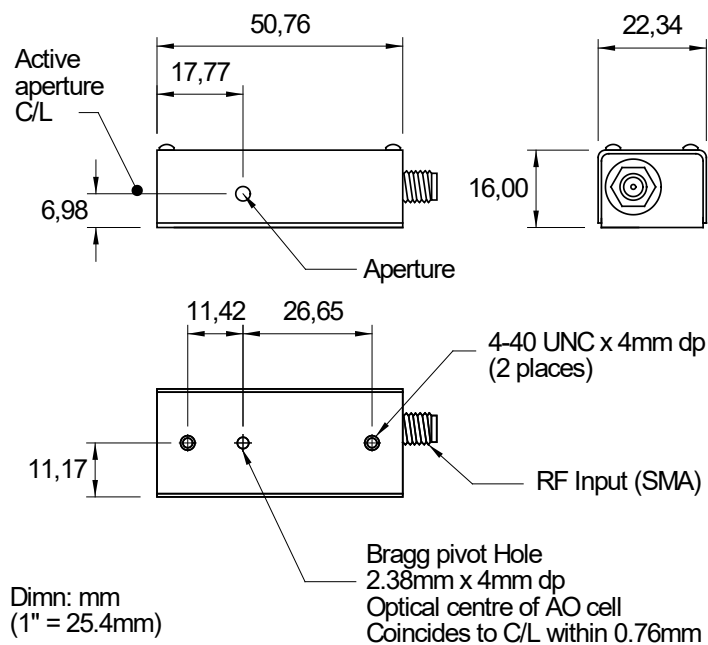
### APPLICATIONS

- Intensity Modulator
- Low resolution Deflector
- Frequency Shifter

### RF Drive Electronics

Digital modulation	523C-L / -2, 823C-L
Analog modulation	533C-L / -2, 833C-L
Dual modulation	553F-L / -2
Tuneable with modulation	630C-110, iSPA-SF1-w

### OUTLINE DRAWING

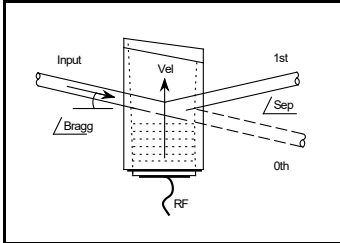


Option -M , metric mounting threads, M3

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

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE  
 ISOMET CORP, 10342, Battleview Parkway, VA 20109, USA.  
 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

## Acousto-Optic Modulator



0921

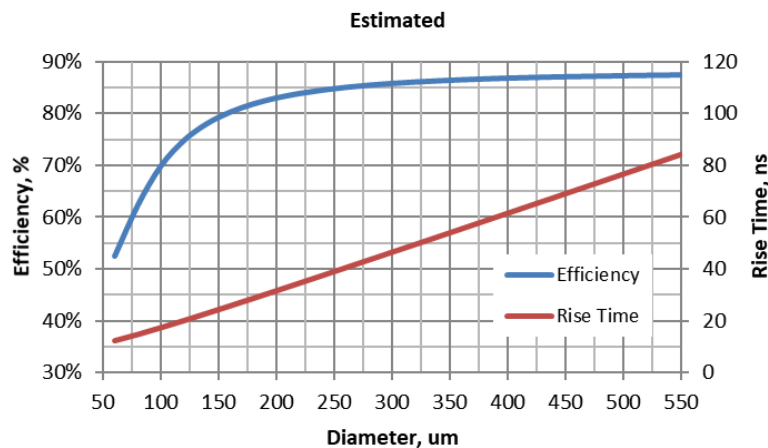
### SPECIFICATIONS

Spectral Range:	0.36 > 1.5 $\mu$ m
Standard A/R Wavelengths:	360-420nm, 442-488nm, 488-650nm
Interaction Medium:	Tellurium Dioxide (TeO <sub>2</sub> )
Input polarization:	Vertical preferred
Acoustic Velocity:	4.2mm/ $\mu$ s
Active Aperture:	1mm
Centre Frequency (CF):	110MHz
RF Bandwidth:	40MHz
Input Impedance:	50 $\Omega$ Nominal
VSWR:	<1.5:1 @ 110MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

### PERFORMANCE vs. WAVELENGTH

Wavelength (nm):	360	405	488	515	633
RF Drive Power(W):	<0.2	<0.3	<0.35	<0.4	<0.6
Bragg angle (mrad):	4.7	5.3	6.4	6.7	8.3
Beam Separation (mrad):	9.4	10.6	12.8	13.5	16.6
Static Insertion Loss (%):	<7	<5	<5	<3	<3

### PERFORMANCE vs. BEAM DIAMETER



**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

ISOMET CORP, 10342, Battleview Parkway, 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**