

1205c-1-869

Modulator / Frequency Shifter



209

APPLICATIONS

AO Modulator designed for Frequency Shifting with reduced acoustic echo.

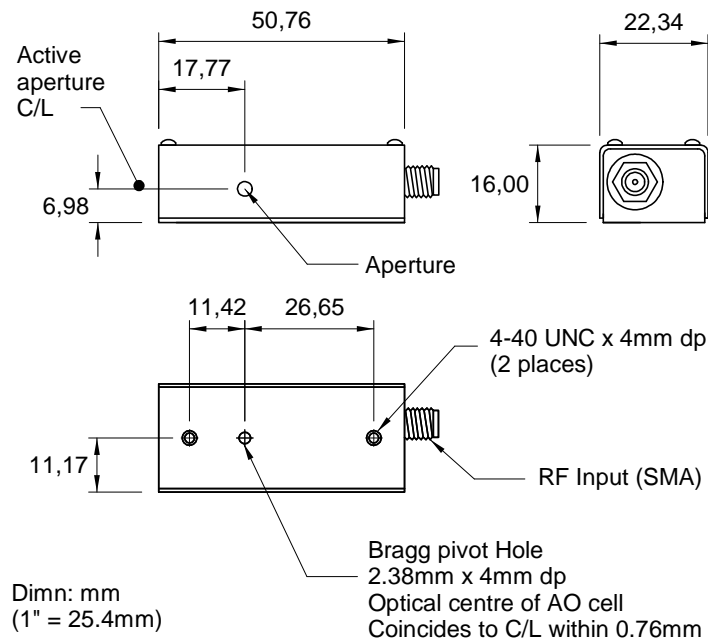
DRIVERS

Fixed Frequency 522C-L (Digital Modulation)

Fixed Frequency 532C-L (Analog Modulation)

Variable Frequency iDDS-1/-2 and DA104-B

OUTLINE DRAWING



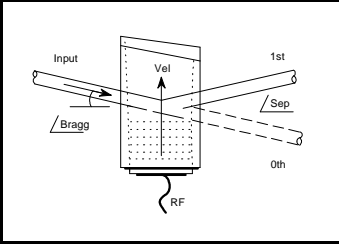
ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding



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SPECIFICATIONS

Standard Operating Wavelengths:	Visible. NIR on request
Interaction Medium:	Lead Molybdate (PbMoO ₄)
Acoustic Velocity:	3.63mm/μs
Active Aperture:	0.75mm
Centre Frequency (CF):	80MHz
RF Bandwidth:	30MHz
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ 35MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

PERFORMANCE vs. WAVELENGTH

Wavelength (nm):	633
RF Drive Power, 1205C-1:	0.3W maximum
Bragg angle (mrad):	6.98
Beam Separation (mrad):	13.95
Static Insertion Loss:	< 3% at 633nm

TYPICAL PERFORMANCE vs. BEAM DIAMETER

Beam Diameter (mm):	0.2	0.5
Rise Time (ns):	40	90
Deflection Efficiency (% at CF)	80	87
Acoustic echo diffraction	< 26dBc	

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