

1206C-833

Acousto-Optic Modulator



1014

APPLICATIONS

- Modulator
- Low Resolution Deflector
- Frequency Shifter

FEATURES

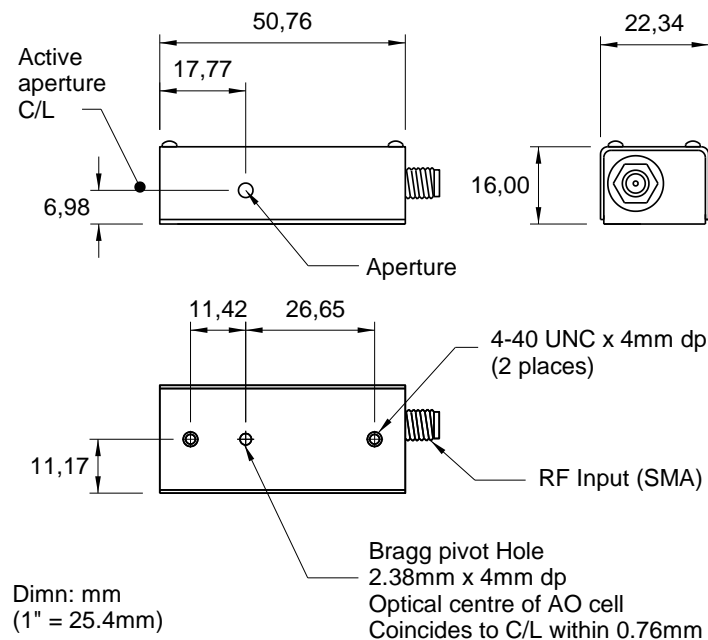
- Low Drive Power
- Small Size
- High Efficiency

DRIVERS

523C-L or -2 (DIGITAL MODULATION)
533C-L or -2 (ANALOG MODULATION)

620C-110 (VARIABLE FREQUENCY & DIGITAL MOD'N)
630C-110 (VARIABLE FREQUENCY & ANALOG MOD'N)

OUTLINE DRAWING



Option -M , metric mounting threads, M3

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

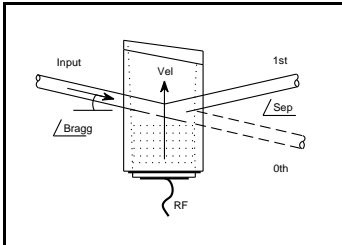
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Quality Assured.

**In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding**



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SPECIFICATIONS

Spectral Range:	0.36 > 1.5 μ m
Standard A/R Wavelengths:	360-420nm, 442-488nm, 488-633nm, 633-830nm
Interaction Medium:	Tellurium Dioxide (TeO ₂)
Input polarization:	Vertical preferred
Acoustic Velocity:	4.2mm/ μ s
Active Aperture:	1mm
Centre Frequency (CF):	110MHz
RF Bandwidth:	40MHz
Input Impedance:	50 Ω 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	830
RF Drive Power(W):	<0.2	<0.3	<0.4	<0.4	<0.6	<1.1
Bragg angle (mrad):	4.7	5.3	6.4	6.7	8.3	10.9
Beam Separation (mrad):	9.4	10.6	12.8	13.5	16.6	21.7
Static Insertion Loss (%):	<7	<5	<5	<3	<3	<3

PERFORMANCE vs. BEAM DIAMETER at 515nm

Beam Diameter (mm):	1.0	0.34	0.2	0.14
Rise Time (ns):	152	53	32	24
Modulation Bandwidth (MHz) @ MTF = 0.5:	2.0	7.0	11	15
Deflection Efficiency (minimum % @ CF):	85	85	80	75

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