

M1201-SF40-1.7

Acousto-Optic Modulator



0419

MODEL NUMBER

M1201E-SF40-1.7V
M1201E-SF40-1.7N

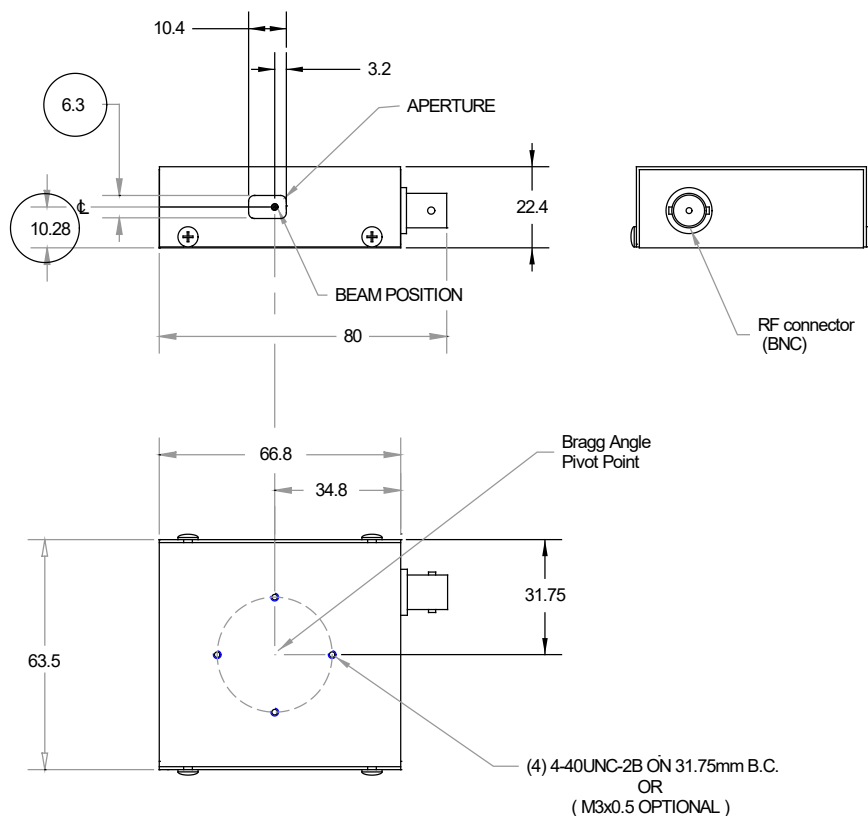
OPERATING WAVELENGTH

VIS / 400nm- 700nm
NIR / 1.06 μ m

APPLICATIONS

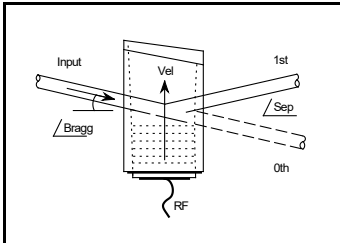
- Intensity Modulator
- Moderate Resolution Deflector
- Frequency Shifter

OUTLINE DRAWING



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.
 Tel: (703) 321 8301 Fax: (703) 321 8546
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Quality Assured.
 In-house: Crystal Growth,
 Optical Polishing,
 A/R coating, Vacuum Bonding



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SPECIFICATIONS

A/R Spectral Range:	400-700nm, or 1.06 μ m
Interaction Medium:	Dense Flint Glass
Acoustic Velocity:	3.509mm/ μ s
Active Aperture:	1.7mm
Centre Frequency (CF):	40MHz
RF Bandwidth:	10MHz
Input Impedance:	50 Ω
Input VSWR:	<1.5:1 @ 40MHz
DC Contrast Ratio:	>1000:1 min (2000:1 typical)

PERFORMANCE vs. WAVELENGTH

Wavelength (nm):	442	515	633	1060
Drive Power (W):	0.8	1.1	1.6	6.0
Bragg Angle (mr):	2.5	3.0	3.6	6.0
Beam Separation (mr)	5.0	5.9	7.2	12.0
Static Insertion Loss (%)*:	15	6	6	5

PERFORMANCE vs. BEAM DIAMETER

				(440-633nm only)
Beam Diameter (mm):	1.7	1.0	0.5	0.25
Rise Time*:	315	185	93	46
Video Bandwidth (MHz):	1.2	1.9	3.8	7
Deflection Efficiency (% @ C.F.):	90	90	90	70

RF DRIVE ELECTRONICS

	-1.7V	-1.7N
Digital modulation	521C-2	521C-6
Analog modulation	531C-2	531C-6
Dual modulation	551F-2	551F-6
Tuneable with modulation	630C-40, iSPA-SF1-w	630A-40 iSPA-SF1-a

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