

M1404-T200L-0.15 (1064nm) Acousto-Optic Modulator



0622

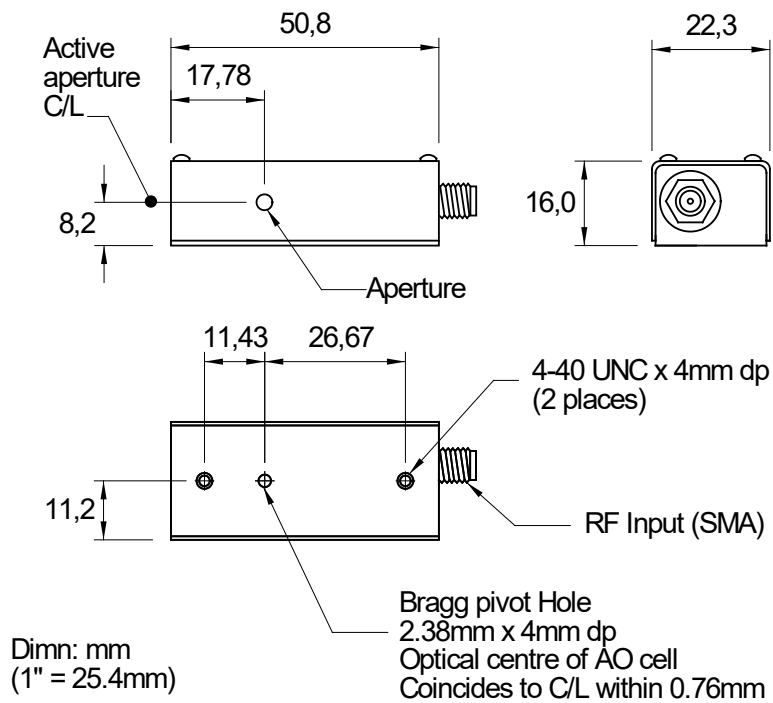
APPLICATIONS

- Modulator
- Pulse picker
- Frequency Shifter

RF Drive Electronics

Digital modulation	525F-2
Analog modulation	535F-2
Dual modulation	555F-2

OUTLINE DRAWING

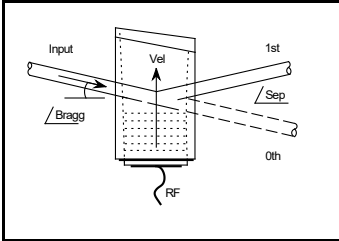


Option -M, metric mounting threads, M3

Note: Mount device to heat conducting surface

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



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Acousto-Optic Modulator



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SPECIFICATIONS

A/R Operating Wavelengths:	1064nm
Interaction Medium:	Tellurium Dioxide (TeO ₂)
Acoustic Velocity:	4.2mm/μs
Active Aperture:	0.15mm
Centre Frequency (CF):	200MHz
RF Bandwidth (minimum):	80MHz (+/- 40MHz)
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ 200MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

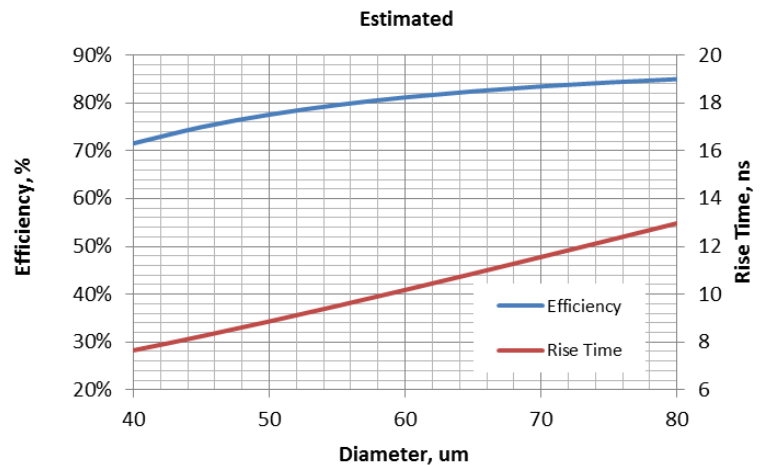
PERFORMANCE vs. WAVELENGTH

Wavelength:	1064nm
RF Drive Power, peak : (Maximum average or CW = 1.5W).	2.7W
Bragg angle:	25.3 mrad
Beam Separation:	50.7 mrad
Static Insertion Loss:	< 3%

PERFORMANCE vs. BEAM DIAMETER at 1064nm

Peak efficiency shown for max duty cycle of 50%
(Avg RF power 1.5W)

For 1/e² beam diameters >100μm,
rise time ~180nsec/mm



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