

M1250-T200L-0.5 (633-830nm) Acousto-Optic Modulator



1021

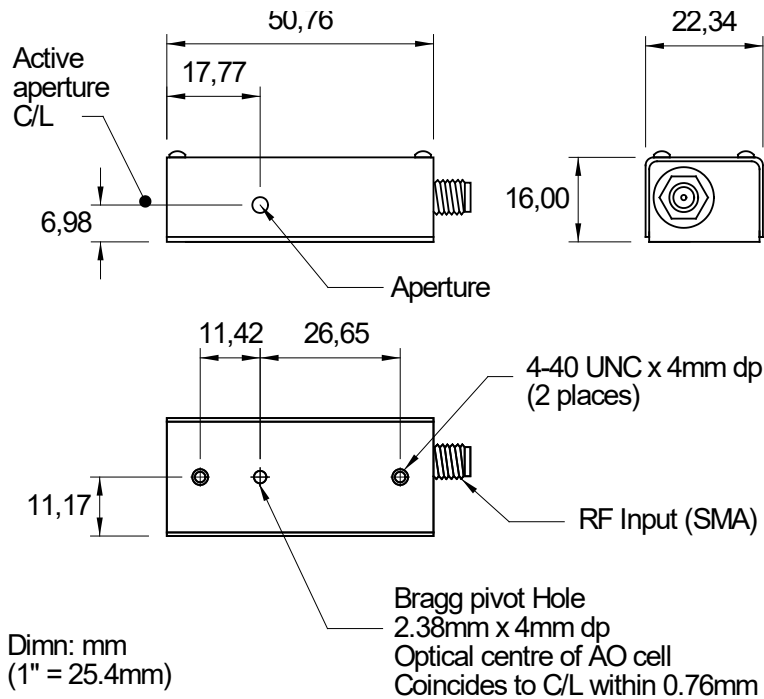
APPLICATIONS

- Modulator
- Low Resolution Deflector
- Frequency Shifter

RF DRIVERS

Digital modulation	525C-2
Analog modulation	535C-2
Dual modulation	555F-2
Tuneable with modulation	630C-200 / iSK3-200T-1

OUTLINE DRAWING



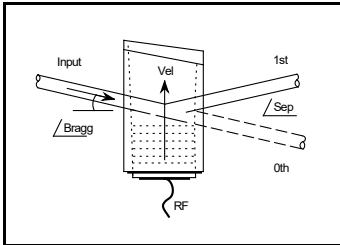
Option:

Metric fixing holes, M3-0.5 thread: add suffix -M, (M1250M-...)

Note: Mount device to heat conducting surface

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, 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



M1250-T200L-0.5 (633-830nm)

Acousto-Optic Modulator



1021

SPECIFICATIONS

A/R Operating Wavelengths:	633-830nm
Interaction Medium:	Tellurium Dioxide (TeO ₂)
Acoustic Velocity:	4.2mm/μs
Active Aperture:	0.5mm
Centre Frequency (CF):	200MHz
RF Bandwidth (minimum):	50MHz (+/- 25MHz)
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ 200MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

PERFORMANCE vs. WAVELENGTH

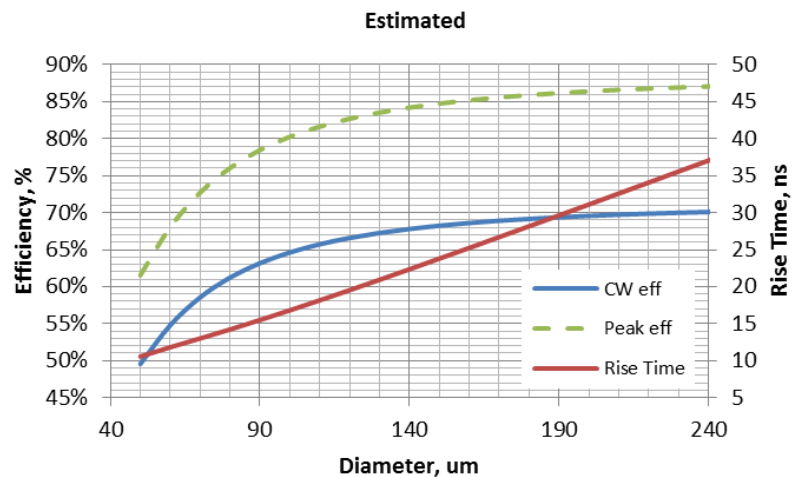
Wavelength:	633 nm	780 nm	830 nm
RF Drive Power, peak: (Maximum average or CW = 1.3W).	1.2W	1.9W	2.1W
Bragg angle:	15.1 mrad	18.6 mrad	19.8 mrad
Beam Separation:	30.1 mrad	37.1 mrad	39.5 mrad
Static Insertion Loss:	< 3%	< 3%	< 3%

PERFORMANCE vs. BEAM DIAMETER at 780nm

Peak efficiency applies to duty cycled operation,

Maximum average (or CW) RF power = 1.3W

For $1/e^2$ beam diameters >200μm,
rise time = 155nsec/mm



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, 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