

M1250-T150L-0.5 (830-1064nm)



Acousto-Optic Modulator

0420

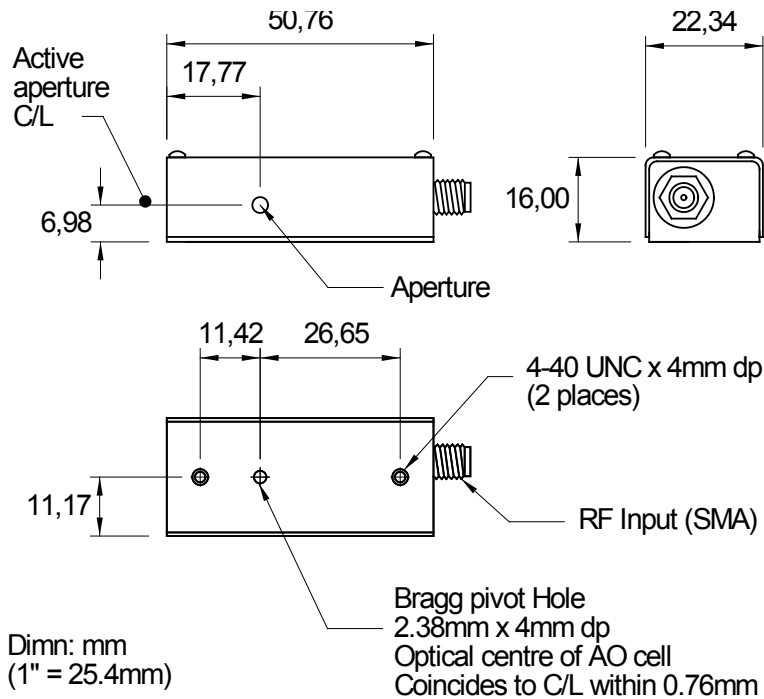
APPLICATIONS

- Modulator
- Low Resolution Deflector
- Frequency Shifter

RF DRIVERS

Digital modulation	524C-2
Analog modulation	534C-2
Dual modulation	554F-2
Tuneable with modulation	630C-150 / iSPA-SF1-w

OUTLINE DRAWING



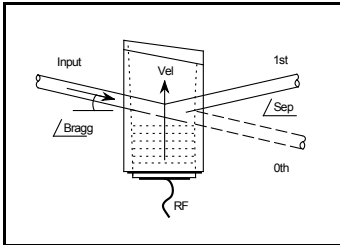
Option:

Metric fixing holes, M3-0.5 thread: add suffix -M

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-T150L-0.5 (830-1064nm)

Acousto-Optic Modulator



0420

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):	150MHz
RF Bandwidth (minimum):	50MHz (+/- 25MHz)
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ 150MHz
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

PERFORMANCE vs. WAVELENGTH

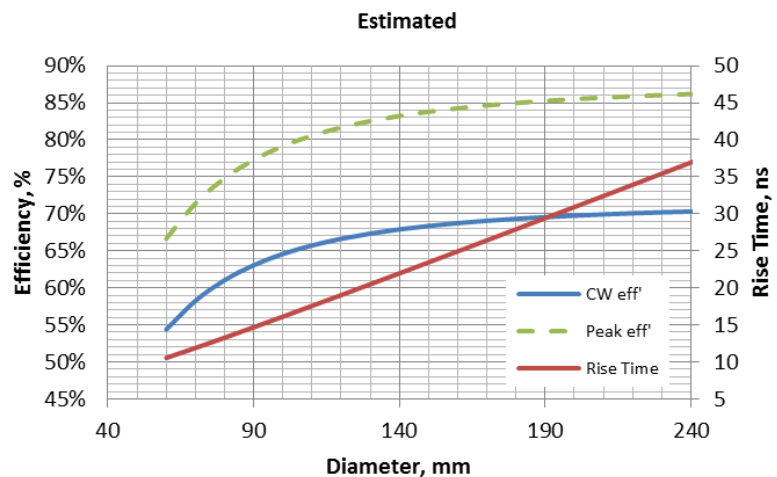
Wavelength:	830 nm	900 nm	1064 nm
Peak RF Drive Power: (Maximum average or CW = 1.3W).	2.4W	2.8W	4.0W
Bragg angle:	14.8 mrad	16.1 mrad	19.0 mrad
Beam Separation:	29.6 mrad	32.1 mrad	38.0 mrad
Static Insertion Loss:	< 3%	< 3%	< 3%

PERFORMANCE vs. BEAM DIAMETER at 1064nm

Peak efficiency applies to duty cycled operation,

Maximum average (or CW) RF power = 2.0W

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