

M1067-T200L



OEM Mini Acousto-Optic Modulator

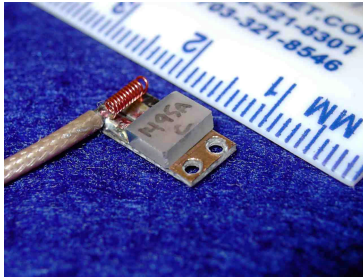
(Preliminary Data)

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APPLICATION

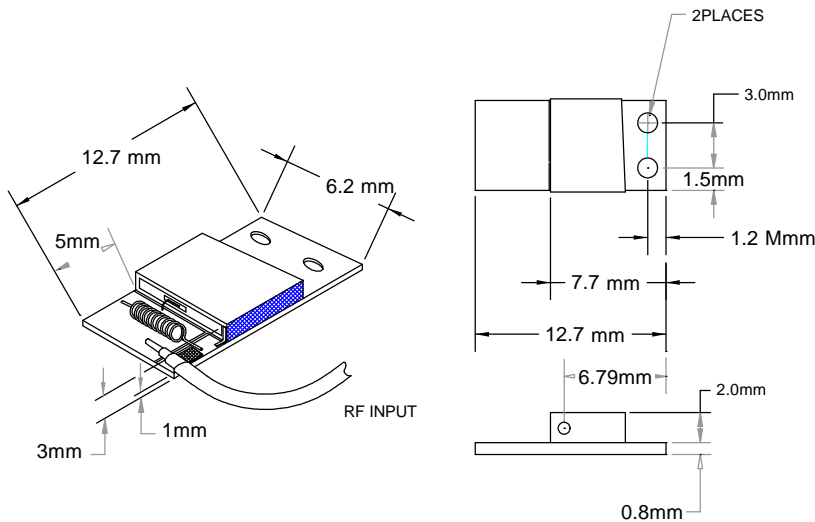
- Wideband Miniature AOM Modulator for use in Laser Projection Systems

SPECIFICATIONS



Spectral Range:	0.442-> 1.5 μ m
Standard A/R Wavelengths:	532nm
Interaction Medium:	Tellurium Dioxide (TeO ₂)
Acoustic Velocity:	4.2mm/ μ s
Active Aperture:	0.2mm
Centre Frequency:	200MHz
RF Bandwidth:	100MHz
RF Input Impedance:	50 Ω Nominal
DC Contrast Ratio:	>1000:1 min (2000:1 typical)

OUTLINE



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

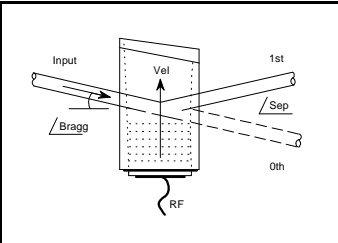
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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Quality Assured.

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



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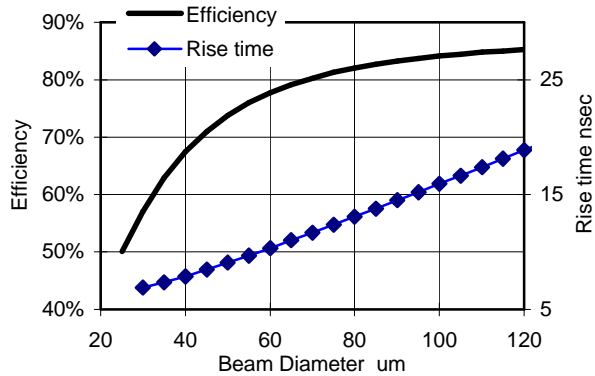
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Typical Data

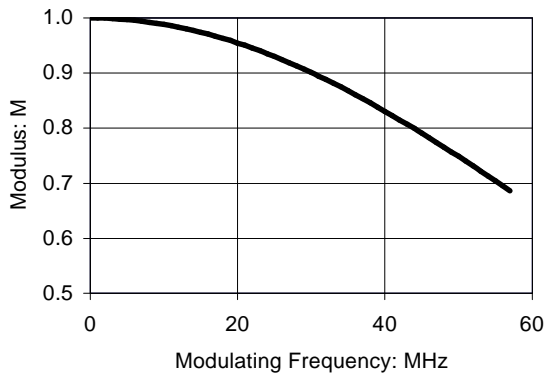
PERFORMANCE vs. BEAM DIA. at 532nm



PERFORMANCE vs. WAVELENGTH

Operating Wavelength (nm)	532
RF Drive Power (W):	<0.3
Input Bragg Angle (mrad):	12.7
0 th -1 st Order Beam Separation (mrad):	25.3
Static Insertion Loss (%)	<3

MTF (31µm)



DYNAMIC CONTRAST RATIO

Maximum modulation bandwidth (50MHz) dynamic contrast ratio (CR) is obtained with a focussed beam diameter of 31µm. The typical MTF (depth of modulation) curve for the M1067 is shown at left. For larger beam diameters, the abscissa scales linearly. The value of M from the curve may be used to determine the sine wave contrast ratio at a particular modulating frequency according to the relation:

$$CR = 1 + M/1 - M$$

For digital, on-off modulation, the CR will be greater than the value calculated from the above equation.

Recommended Driver

535C-L

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