

# M1212-aQ150-2 (-M)



## Acousto-Optic Modulator/Frequency Shifter

for use with UV LASERS

0419

### SPECIFICATIONS

Operating Wavelength:	257nm, 355nm (other AR coatings available)
Material:	Quartz
Acoustic velocity:	5.7mm/usec
Center Frequency:	150 MHz
RF Bandwidth	40 MHz
Diffraction Efficiency:	> 85%
Input Impedance:	50Ω(Nominal)
Input VSWR:	< 1.5:1 @ 150MHz
Active Aperture:	2.0mm
Optical Insertion Loss:	< 5%
Reflectivity:	< 0.5%/Surface
DC Contrast Ratio:	>1000:1 min (2000:1 typical)
Laser Polarization:	Vertical, Perpendicular to Base
Outline Dimensions:	(See Reverse Side)

### PERFORMANCE vs. WAVELENGTH

Wavelength (nm):	257	355	374
RF Drive Power (Watts):	2.6	5	5.5
Bragg Angle (mrad):	3.38	4.67	4.92
Separation Angle (mrad):	6.76	9.34	9.84

### PERFORMANCE vs. BEAM DIAMETER

Beam Diameter (mm):	1.0	0.25
Risetime (nsec):	112	30
Video Bandwidth (MHz):	3	12
Diffraction efficiency (min %):	85	80

### Suggested RF Drive Electronics:

Dual modulation	554F-4 or 554F-7
Tuneable with modulation	620A/630A-150

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

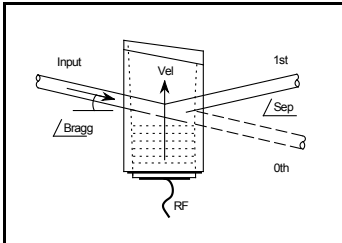
E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

**Quality Assured.**

**In-house: Crystal Growth,**

**Optical Polishing,**

**A/R coating, Vacuum Bonding**



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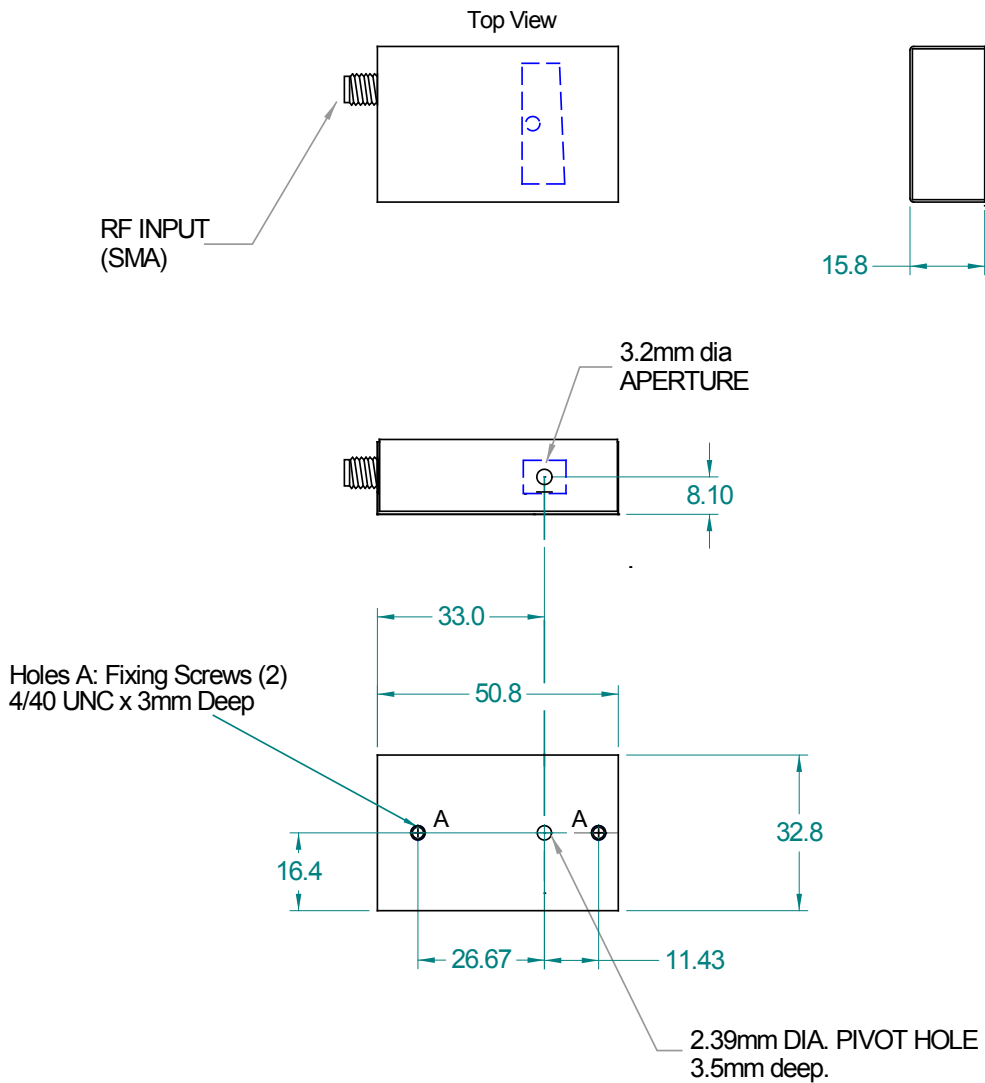


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### OUTLINE DRAWING



Metric version, -M option: M3 metric fixing threads and 3.05mm dia. pivot hole.

**Caution: Mount on heat conducting surface**

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