

# M1212-aQ200-0.8-(A/R)



## Acousto-Optic Modulator

for use with UV LASERS

1114

### SPECIFICATIONS

A/R Operating Wavelength*:	230nm, 248nm, 325-364nm
Material:	Quartz
Acoustic velocity:	5.7mm/usec
Center Frequency:	200 MHz
RF Bandwidth	60 MHz
Diffraction Efficiency:	> 85%
Input Impedance:	50Ω(Nominal)
Input VSWR:	< 1.5:1 @ 200MHz
Active Aperture:	0.8mm
Optical Insertion Loss:	< 8%
Reflectivity:	< 1.0%/Surface
DC Contrast Ratio:	>1000:1 min (2000:1 typical)
Laser Polarization:	Vertical, Perpendicular to Base
Outline Dimensions:	(See Reverse Side)

### Estimated PERFORMANCE vs. WAVELENGTH

Wavelength (nm):	230	248	355
RF Drive Power (Watts):	1.6	1.8	3.7 peak (2W avg limit)
Bragg Angle (mrad):	4.04	4.35	6.23
Separation Angle (mrad):	8.07	8.7	12.46

### Estimated PERFORMANCE vs. BEAM DIAMETER at 248nm

Beam Diameter (mm):	0.8	0.2	0.1
Risetime (nsec):	90	23	12
Video Bandwidth (MHz):	4	15	29
Diffraction efficiency (typ):	87%	84%	79%

(\* other UV wavelengths on request)

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

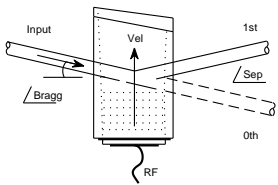
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**Quality Assured.**

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



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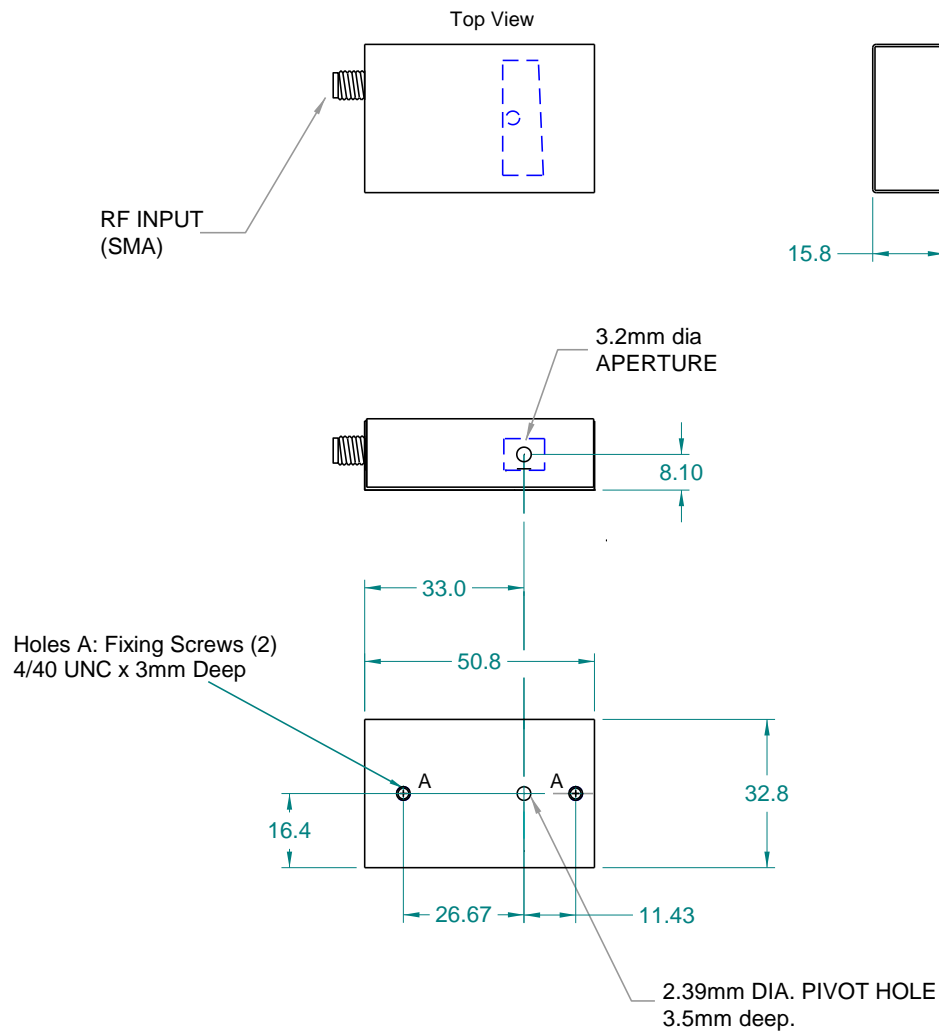


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### OUTLINE DRAWING



### Suggested RF Drive Electronics:

Digital modulation	525C-2
Analog modulation	535C-2
Tuneable with modulation	620C/630C-200, iSPA-SF1-e

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