

# M1088-FS110L-3

## UV Acousto-Optic Modulator



0419

The M1088-FS110L is optimised for operation with UV lasers in the 330-360nm wavelength range. This model features a 3.5 mm active aperture, exhibits high efficiency and is convection cooled.

### SPECIFICATIONS

Interaction Medium:	Fused Silica
Acoustic Velocity:	5.960mm/ $\mu$ s
Operating Wavelength:	325-364 nm (singly or combined)
Center Frequency, $f_c$ :	110 MHz
RF Bandwidth, $\Delta f$ :	> 20 MHz
Diffraction Efficiency:	> 80%
Input Impedance:	50 $\Omega$ (Nominal)
Input VSWR:	<1.5:1 @ 110MHz
Active Aperture:	3.0mm
Optical Insertion Loss:	<5%
Reflectivity:	<0.5%/Surface
DC Contrast Ratio:	>1000:1 (>2000:1 Typical)
Laser Polarization:	Vertical, Perpendicular to Base
Peak Optical Power Density:	250MW/cm <sup>2</sup>
Outline Dimensions:	(See Reverse Side)

### PERFORMANCE vs. WAVELENGTH

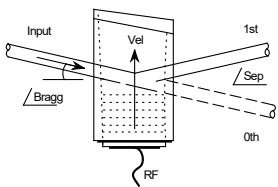
Wavelength (nm):	325	355	363
RF Drive Power (Watts):	5.0	6.0	6.5
Bragg Angle (mrad):	3.0	3.3	3.4
Separation Angle at $f_c$ (mrad):	6.0	6.6	6.7

### ESTIMATED PERFORMANCE vs. BEAM DIAMETER at 355nm

Beam Diameter (mm):	3.0	1.7	0.5
Risetime (nsec):	320	182	55
Video Bandwidth (MHz):	1	2	6
Diffraction efficiency (typ):	85%	83%	80%

**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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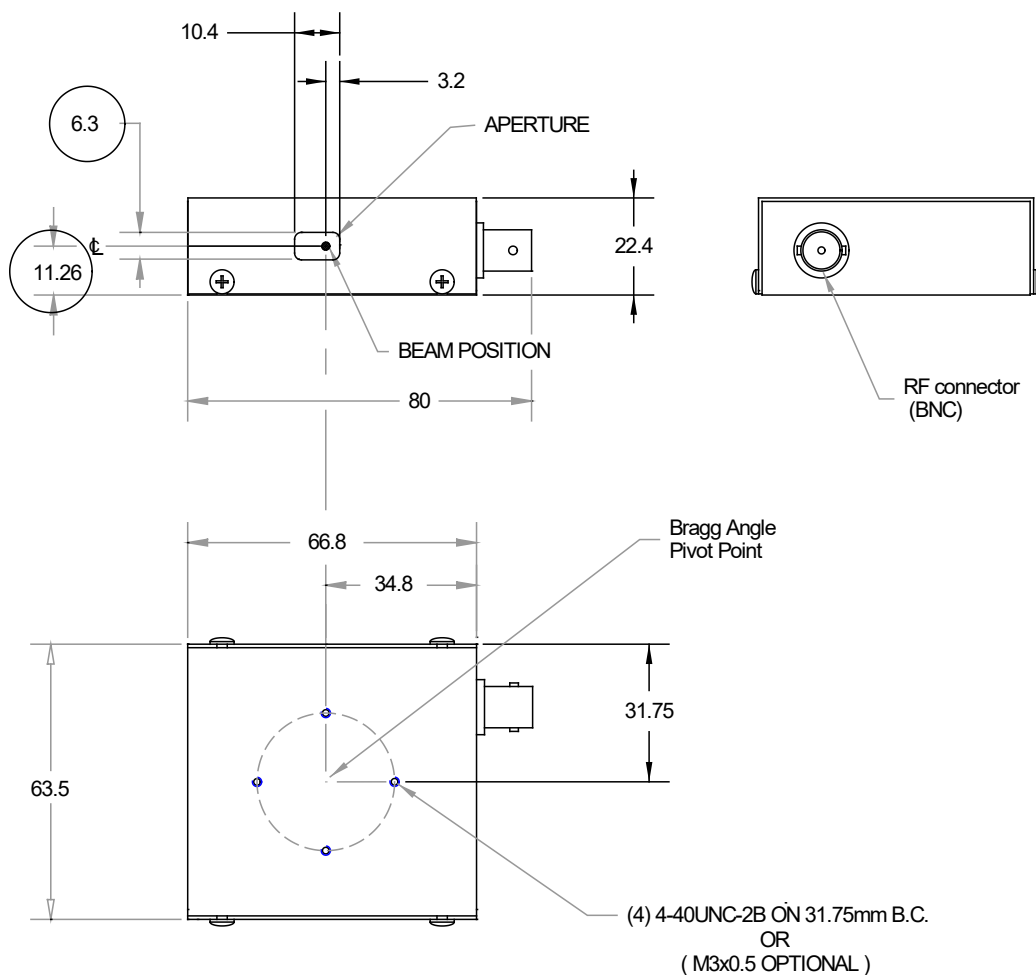
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### DRIVERS

Digital Modulation:	523C-6
Analog Modulation:	533C-6
Dual Modulation:	553F-6

### OUTLINE DRAWING

Dim'n : mm



Include the suffix (M) to the model number for M3 metric mounting holes

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