

M1136B-FS80L-1, -2, -3

UV Acousto-Optic Modulator



0325

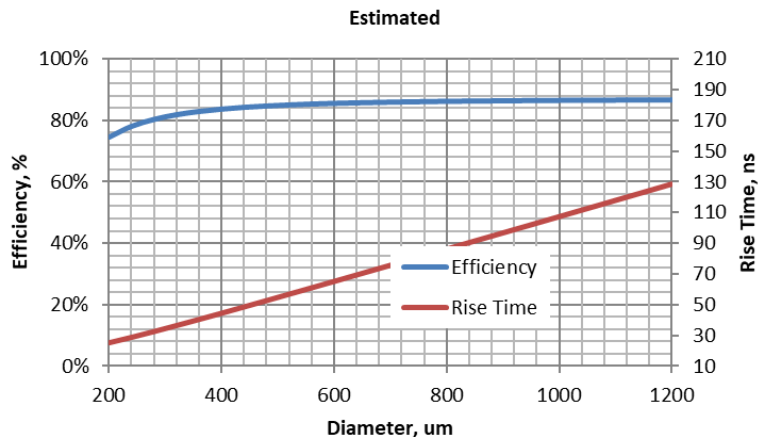
The M1136B-FS80L is optimised for operation with UV lasers in the 325-405nm wavelength range. This model is available with 1.0, 2.0mm or 3.0mm active aperture heights, exhibits high efficiency and is convection cooled.

SPECIFICATIONS

Interaction Medium:	Fused Silica
Acoustic Velocity:	5.960mm/ μ s
Operating Wavelength:	325-405nm (as specified by A/R)
Center Frequency, f_c :	80MHz
RF Bandwidth, Δf :	>10 MHz
Diffraction Efficiency:	>85%
Input Impedance:	50 Ω (Nominal)
Input VSWR:	<1.5:1 @ 80MHz
Clear aperture:	6mm
Active Aperture H:	Specify H=1 for 1.0mm, H=2 for 2.0mm, H=3 for 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 ²
Cooling:	Conduction Case temperature must not exceed 50degC

PERFORMANCE vs. WAVELENGTH

Wavelength (nm):	325	355	363	399	405
RF Drive Power (Watts) **::	3.3	4.0	4.2	5.0	5.2
Bragg Angle (mrad):	2.18	2.38	2.44	2.48	2.72
Separation Angle at f_c (mrad):	4.36	4.77	4.87	5.36	5.44



** RF power listed for 3mm active aperture. For the 2mm version, scale by 2/3 For the 1mm version, scale by 1/3

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

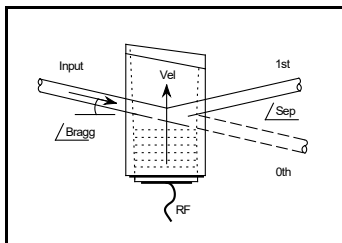
ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.

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



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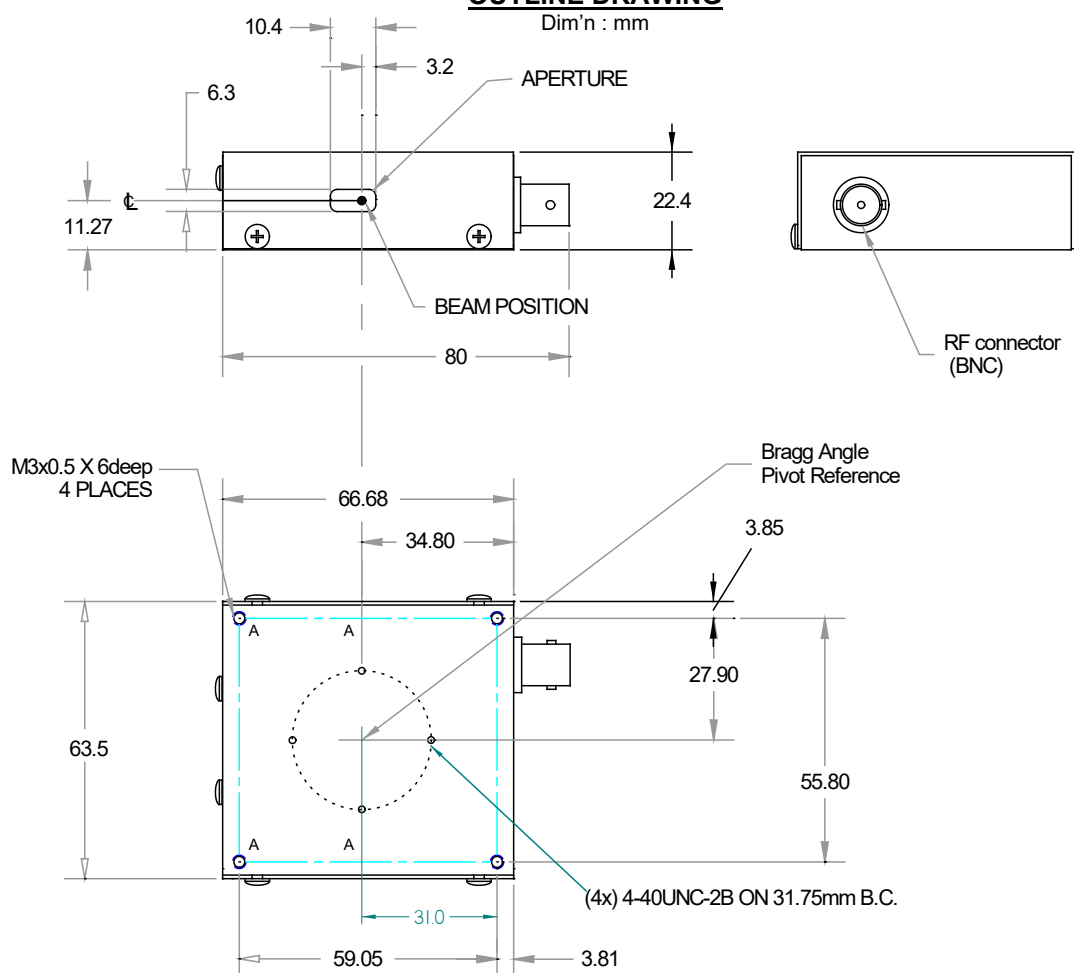
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Suggested Drive Electronics

	Digital (<u>On:Off</u>)	Analog (<u>Proportional</u>)	Dual
Fixed frequency	522F-4 522F-7	532F-2 532F-7	552F-4 552F-7
VCO, tuneable	RF2-80T-4	RF3-80T-4	RF5-80T-4
Programmable Synthesizer		iCSA-80T-1-7	

OUTLINE DRAWING

Dim'n : mm



Both metric and UNC mounting holes
MOUNT TO HEAT CONDUCTIONG SURFACE

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