

# M1134-FS80L-3

## UV Acousto-Optic Modulator



1106

The M1134-FS80L is optimised for operation with UV lasers in the 330-360nm wavelength range. This model features a 3.0mm active aperture, exhibits high efficiency, and is convection cooled.

### SPECIFICATIONS

Interaction Medium:	Fused Silica
Acoustic Velocity:	5.960mm/μs
Operating Wavelength:	325-364 nm (singly or combined)
Center Frequency, $f_c$ :	80 MHz
RF Bandwidth, $\Delta f$ :	> 20 MHz
Diffraction Efficiency:	> 80%
Input Impedance:	50Ω(Nominal)
Input VSWR:	<1.5:1 @ 80MHz
Active Aperture:	3.0mm
Optical Insertion Loss:	<3%
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):	3.0	3.5	3.8
Bragg Angle (mrad):	2.18	2.38	2.44
Separation Angle at $f_c$ (mrad):	4.36	4.77	4.89

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

Beam Diameter (mm):	3.0	1.0	0.5
Risetime (nsec):	320	108	55
Video Bandwidth (MHz):	1	3	6
Diffraction efficiency (Typical):	86%	85%	83%

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

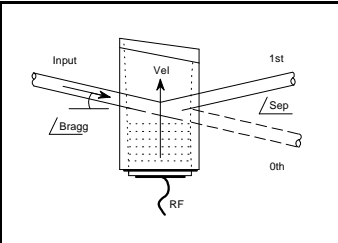
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**Quality Assured.**

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



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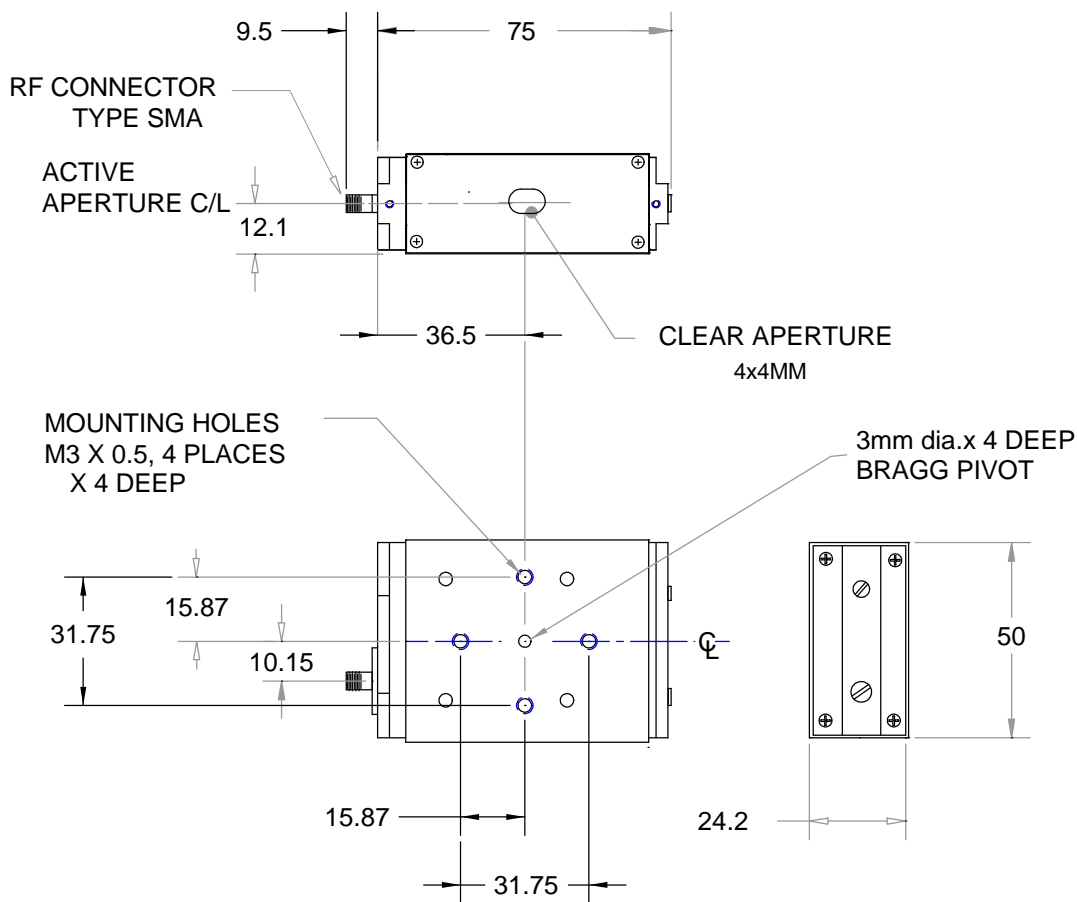
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### DRIVERS

Digital Modulation: 522C-4  
 Analog Modulation: 532C-4

### OUTLINE DRAWING

Dim'n : mm



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