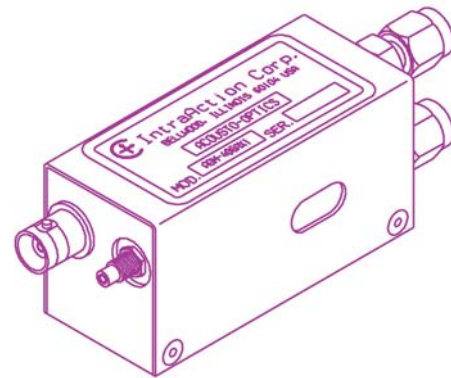


MODEL AGM-40 SERIES IR ACOUSTO-OPTIC MODULATOR/FREQUENCY SHIFTER

- INTENSITY MODULATION
- OPTICAL FREQUENCY SHIFTING
- LASER BEAM DEFLECTION
- HIGH RELIABILITY



SPECIFICATIONS				
Acousto-optic Material	Optical Single Crystal Geranium			
Acoustic Velocity	5.5 mm / μ s			
RF Center Frequency ¹	40 MHz			
Optical Frequency Shift Range	\pm (30 to 50) MHz			
RF Input Impedance	50 ohms			
Optical Insertion Loss	<7%			
Optical Power Capability	25 Watts full aperture			
Laser Polarization	Parallel to Base			
Water Cooling	250 ml / min, 20° C			
RF Connector	BNC			
Size (less connectors)	2.95 L x 1.2 H x 1.3 W inches			
	7.50 L x 3.1 H x 3.3 W cm			
MODEL	AGM-402A1	AGM-406A1	AGM-402A3	AGM-406A3
Optical Wavelength ²	10.6 μ m	10.6 μ m	3.39 μ m	3.39 μ m
Active Aperture Height	2 mm	6 mm	2 mm	6 mm
Optical Rise Time (diameter)	116 ns (1 mm)	582 ns (5 mm)	116 ns (1 mm)	582 ns (5 mm)
Modulation -3 dB Bandwidth	4.1 MHz (1 mm)	825 kHz (5 mm)	4.1 MHz (1 mm)	825 kHz (5 mm)
Beam Separation	77 mrad	77 mrad	24.7 mrad	24.7 mrad
Bragg Angle	38.5 mrad	38.5 mrad	12.3 mrad	12.3 mrad
Diffraction Efficiency	70%	50%	70%	70%
RF Drive Power ³	20 Watts	25 Watts	2 Watts	6 Watts

¹ Other frequencies available

² Narrow and broadband A/R coatings in the range of 2.2 μ m to 12 μ m are available.

³ Laboratory and OEM drive electronics available.

NOTE: Operating specifications change with optical wavelength.