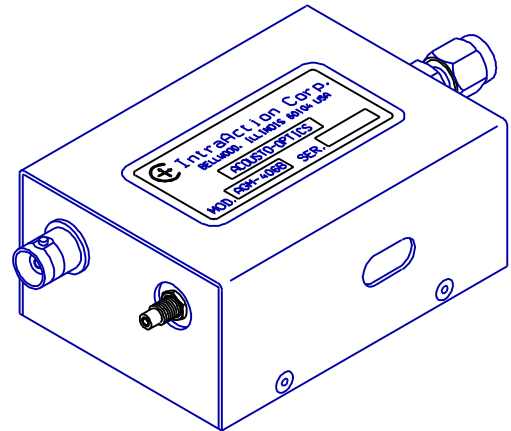


MODEL AGM-406B1
IR ACOUSTO-OPTIC MODULATOR / FREQUENCY SHIFTER

- INTENSITY MODULATION
- OPTICAL FREQUENCY SHIFTING
- OPTICAL ISOLATION
- LASER BEAM DEFLECTION
- HIGH RELIABILITY
- HIGH OPTICAL POWER CAPABILITY



SPECIFICATIONS

Optical Wavelength ¹	10.6 μm
Acousto-optic Material	Optical Single Crystal Germanium
Acoustic Velocity	5.5 mm/ μsec
Center RF Frequency ²	40 MHz
RF Bandwidth	20 MHz
Optical Frequency Shift Range	\pm (30 MHz to 50 MHz)
Beam Separation	77 mrad (40 MHz)
Bragg Angle	38.5 mrad (40 MHz)
Diffraction Efficiency	85 percent
RF Drive Power ³	30 watts
Active Aperture Height	6 mm
Modulation Bandwidth (-3db)	750 KHz (5.5 mm diameter)
Optical Rise Time	117 nsec / mm beam diameter
RF Input Impedance	50 ohms
Optical Insertion Loss	<12 percent
Optical Power Capability	100 watts full aperture
Optical Polarization	Parallel to mounting surface
Water Cooling	500 ml / min at 20 ^o C
Thermal Interlock Switch	NC opens at 45 ^o C
Size (less connectors)	2.97 D x 1.50 H x 2.42 W inches 75.4 D x 38.1 H x 61.5 W mm

¹ Other wavelengths and ranges from 2.5-11.5 μm available. Note: Specifications change with optical wavelength.

² Other frequencies available.

³ A complete line of drive electronics are available. Model GE-4030 analog input, GE-4030T digital input. OEM drivers are available.