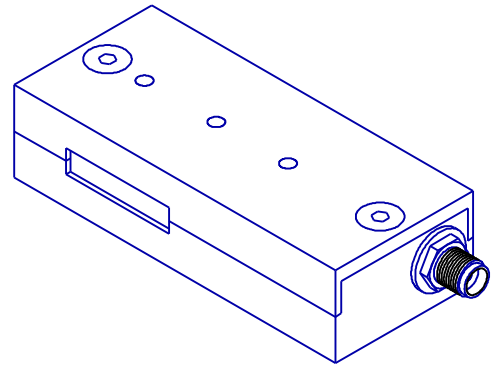


MODEL ACM SERIES ACOUSTO-OPTIC MODULATOR / FREQUENCY SHIFTER

- NEAR IR WAVELENGTH RANGE
- INTENSITY MODULATION
- OPTICAL FREQUENCY SHIFTING
- OPTICAL ISOLATION
- LOW RF DRIVE POWER
- HIGH RELIABILITY
- HIGH OPTICAL POWER CAPABILITY



SPECIFICATIONS

Acousto-optic Material	AMTIR-1 Chalcogenide Glass
Optical Wavelength ¹	1.2 to 1.6 :m
Optical Power Capability	50 Kwatts / cm ²
Active Aperture Height ²	2 mm
Diffraction Efficiency	90 percent
RF Drive Power ³	600 milliwatts (1.55 :m)
RF Input Impedance	50 ohms
Modulation Bandwidth (-3db)	1.25 MHz (1.5 mm diameter)
Optical Rise Time	255 nsec / mm beam diameter
Static Optical Insertion Loss	5 percent (1.55 μm)
Optical Polarization	any
RF Connector	SMA
Size (less connector)	2.80 L x 1.25 W x 0.70 H inches 71.2 L x 31.8 W x 17.8 H mm

MODEL	<u>ACM-402AA1</u>	<u>ACM-502AA1</u>	<u>ACM-802AA1</u>	<u>ACM-1002AA1</u>
Center Frequency ⁴	40 MHz	50 MHz	80 MHz	100 MHz
Optical Frequency Shift	"30 to 50 MHz	"40 to 60 MHz	"65 to 95 MHz	"80 to 120 MHz
Beam Separation (1.55 μm)	24.6 mrad	30.8 mrad	49.2 mrad	61.5 mrad

¹ Wavelengths available in the range of 1.2 to 2.5 μm with appropriate antireflection coating. Specifications vary with optical wavelength.

² Other active aperture heights available with modified specifications.

³ Fixed frequency, synthesized variable frequency, or OEM drivers are available.

⁴ Any RF frequency from 40 to 250 MHz is available. Specifications vary with RF frequency.