IntraAction Corp.
QUALITY PRODUCTS FOR LASER TECHNOLOGY

3719 Warren Avenue · Bellwood, IL 60104 · 708 547-6644 · Fax 708 547-0687 · iac@intraaction.com

MODULATOR

MODEL AOM-40AF SERIES
ACOUSTO-OPTIC MODULATOR/FREQUENCY SHIFTER

-INTENSITY MODULATION
-OPTICAL FREQUENCY SHIFTING
-LASER BEAM DEFLECTION
-HIGH OPTICAL POWER CAPABILITY
-HIGH RELIABILITY
-EXCELLENT TEMPERATURE STABILITY

SPECIFICATIONS

Acoustic Center Frequency[1]	40 MHz
Optical Frequency Shift Range	±(30 to 50) MHz
Acousto-optic Material	Dense Flint Glass
Acoustic Velocity	3630 m/sec
Modulation Bandwidth (-3db)	2.7 MHz (1.0 mm beam diameter) 1.8 MHz (1.5 mm beam diameter)
Optical Rise Time	177 nsec (1.0 mm beam diameter) 265 nsec (1.5 mm beam diameter)
Static Optical Insertion Loss	2 Percent (633nm)
Optical Polarization	Any
RF Input Impedance	50 Ohms (VSWR < 1.25:1 at CF)
RF Connector	BNC
Size (less connector)	0.88 H x 2.94 D x 2.46 W inches 22.4 H x 74.7 D x 62.5 W mm

MODEL	**AOM-402AF1**	**AOM-405AF1**	**AOM-402AF3**	**AOM-402AF4**
Optical Wavelength Range	440-700 nm	440-700 nm	700-1100 nm	1064 nm
Active Aperture Height[2]	2 mm	5 mm	2 mm	2 mm
Diffraction Efficiency	90 Percent	90 percent	90 Percent	85 Percent
Drive Power[3]	1.8 Watts (633 nm)	4.5 watts (633 nm)	3 Watts (780 nm)	5 Watts
Beam Separation	6.9 mrad (633 nm)	6.9 mrad (633 nm)	8.6 mrad (780 nm)	11.7 mrad

[1] Other center frequencies available.
[2] Other active aperture heights available.
[3] A complete line of analog, digital, dual frequency, OEM, and laboratory drive electronics are available.

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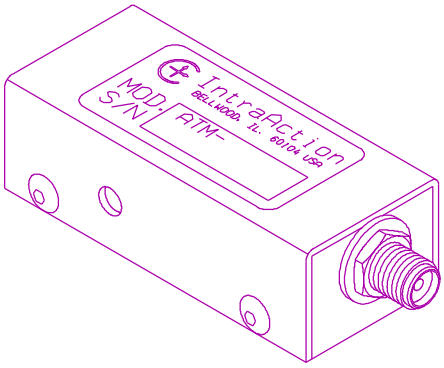
MODULATOR

MODEL ATM SERIES
ACOUSTO-OPTIC MODULATOR

- INTENSITY MODULATION
- FAST MODULATION CAPABILITY
- OPTICAL FREQUENCY SHIFTING
- BEAM DEFLECTION
- LOW DRIVE POWER
- HIGH RELIABILITY



SPECIFICATIONS

Optical Wavelength Range[1]	440 nm to 700 nm
Acousto-optic Material	Tellurium Dioxide (TeO_2)
Sound Velocity	4260 m/sec (longitudinal)
Input Impedance	50 ohms
Input VSWR	<1.3:1 at center frequency
Static Optical Insertion Loss	4 percent
Size (less SMA connector)	2.00 D X 0.63 H X 0.9 W inches 5.08 D X 1.60 H X 2.28 W cm

MODEL	**ATM-80A1**	**ATM-125B1**	**ATM-200C1**
Center Frequency	80 MHz	125 MHz	200 MHz
Active Aperture Height	1 mm	0.6 mm	0.3 mm
Beam Separation (633 nm)	11.9 mrad	18.6 mrad	29.7 mrad
Diffraction Efficiency	85 percent	80 percent	70 percent
RF Drive Power[2] (633 nm) (514 nm)	700 milliwatts 500 milliwatts	800 milliwatts 550 milliwatts	900 milliwatts 600 milliwatts
Optical Rise Time (beam diameter)	31 nsec (0.2 mm) 77 nsec (0.5 mm)	20 nsec (0.13 mm) 38 nsec (0.25 mm)	9.2 nsec (0.06 mm) 15.5 nsec (0.1 mm)
Modulation Frequency (-3 db)	15.8 MHz (0.2 mm) 6.3 MHz (0.5 mm)	24.5 MHz (0.13 mm) 12.8 MHz (0.25 mm)	50 MHz (0.06 mm) 30 MHz (0.1 mm)

[1] Specifications vary with optical wavelength.
[2] Drive electronics Model ME-801/ME-1251/ME-2001 analog input, ME-801T/ME-1251T/ME-2001T digital input. OEM drivers also available.

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