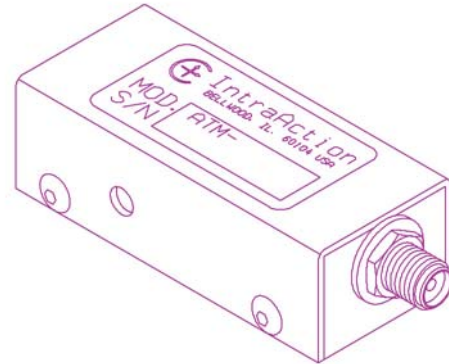


# MODEL ATM SERIES ACOUSTO-OPTIC MODULATOR

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



SPECIFICATIONS			
Optical Wavelength Range <sup>1</sup>	440 nm to 700 nm		
Acousto-optic Material	Tellurium Dioxide (TeO <sub>2</sub> )		
Sound Velocity	4260 m/sec (longitudinal)		
Input Impedance	50 ohms		
Input VSWR	<1.3:1 at center frequency		
Static Optical Insertion Loss	4%		
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-80A I	ATM-125B I	ATM-200C I
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%	80%	70%
RF Drive Power <sup>2</sup> (633 nm)	700 mW	800 mW	900 mW
RF Drive Power <sup>2</sup> (514 nm)	500 mW	550 mW	600 mW
Optical Rise Time (beam diameter)	31 ns (0.2 mm)	20 ns (0.13 mm)	9.2 ns (0.06 mm)
	77 ns (0.5 mm)	38 ns (0.25 mm)	15.5 ns (0.1 mm)
Modulation Frequency (-3 db)	15.8 MHz (0.2 mm)	24.5 MHz (0.13 mm)	50 MHz (0.06 mm)
	6.3 MHz (0.5 mm)	12.8 MHz (0.25 mm)	30 MHz (0.1 mm)

<sup>1</sup> Specifications vary with optical wavelength.

<sup>2</sup> Drive electronics Model ME-80I/ME-125I/ME-200I analog input, ME-80IT/ME-125IT/ME-200IT digital input. OEM drivers also available.