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 Frequency¹ 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)
Optical Rise Time 177 nsec (1.0 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

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 Height² 2 mm 5 mm 2 mm 2 mm
Diffraction Efficiency 90 Percent 90 percent 90 Percent 85 Percent
Drive Power³ 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.