IntraAction Corp.
QUALITY PRODUCTS FOR LASER TECHNOLOGY

Polytec

MODULATOR

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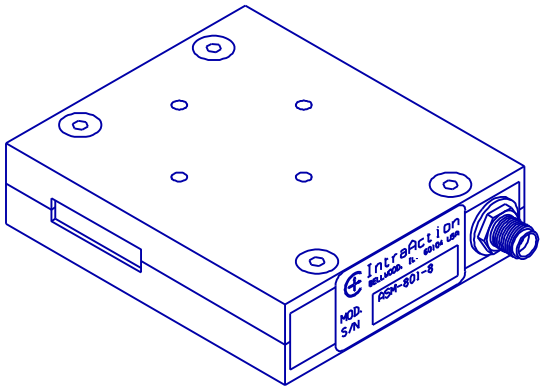
MODEL ASM-B SERIES
UV ACOUSTO-OPTIC MODULATOR / FREQUENCY SHIFTER

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



SPECIFICATIONS

Optical Wavelength Range[1]	300 to 400 nm
Acousto-optic Material	UV Grade Fused Silica
Acoustic Velocity	5.95 mm/µsec
Optical Insertation Loss	< 4 percent
Active Aperture Height[2]	2 mm
Optical Polarization	Vertical (perpendicular to mounting surface)
Optical Rise Time[3]	108 nsec / mm (optical beam diameter)
Input Impedance	50 ohms
RF Connector	SMA

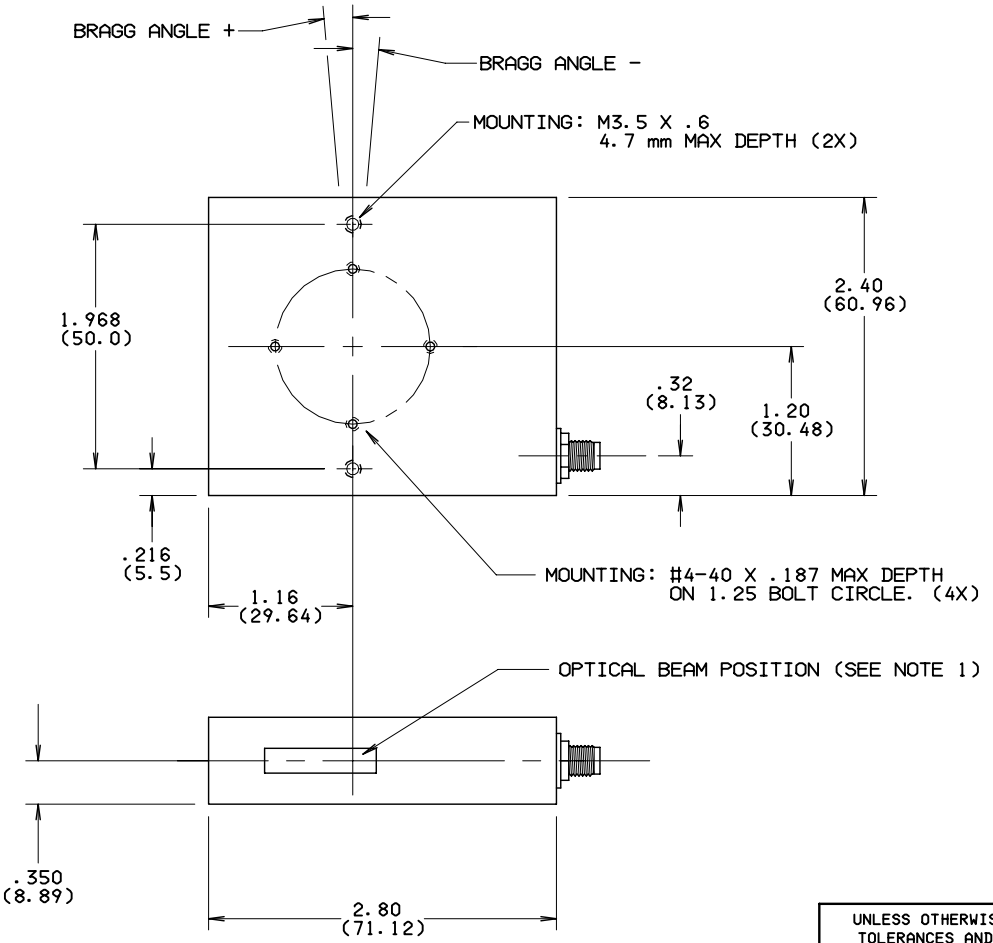
MODEL	ASM-702B8	ASM-1002B8	ASM-1502B8	ASM-200B8
Center Frequency[4]	70MHz	100 MHz	150 MHz	200 MHz
Beam Separation[5] (355 nm)	4.2 mrad	5.9 mrad	8.9 mrad	11.9 mrad
Frequency Shift Range (MHz)	+/- (55 to 85)	+/- (80 to 120)	+/- (120 to 180)	+/- (160 to 240)
Diffraction Efficiency	80 percent	80 percent	80 percent	80 percent
RF Drive Power[6,7] (355 nm)	2 watts	2 watts	2 watts	2 watts

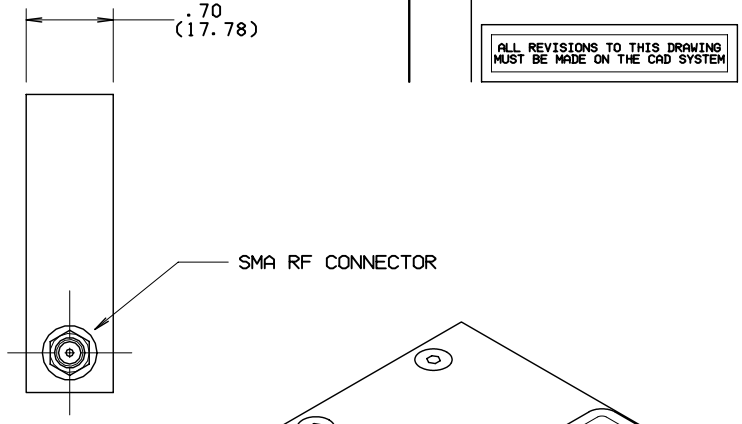
[1] Other optical wavelengths or wavelength ranges to 200 nm are available. 4 Other center frequencies available.
[2] Other active aperture heights are available. E.g., ASM-704B8 with 4 mm active aperture heights.
[3] Optical rise time and modulationfrequency capabilities vary with optical diameter and center frequency.
[5] Beam separation varies with optical wavelength. 6 RF drive power varies with optical wavelength. 7 other drivers available. (analog, digital, OEM)

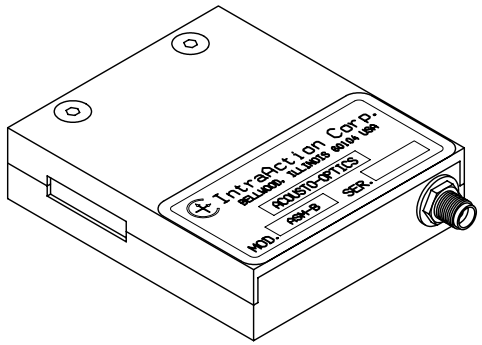
ENG210B

REVISIONS		
ISSUE	DESCRIPTION	APPD/DATE
	ORIGINAL MFI 01-16-03	JL 01-20-03

ALL REVISIONS TO THIS DRAWING MUST BE MADE ON THE CAD SYSTEM







NOTES:

1. FOR OPTIMUM DIFFRACTION EFFICIENCY, OPTICAL POLARIZATION IS VERTICAL OR PERPENDICULAR TO MOUNTING SURFACE.

UNLESS OTHERWISE SPECIFIED TOLERANCES AND DIMENSIONS ARE IN INCHES LINEAR : ±.010 (XX.X)=mm ANGULAR ± / DIAMETERS ±.010 LIMITS APPLY BEFORE FINISHING DO NOT SCALE THIS PRINT	APPROVED DATE JL 01-20-03 CHECKED DATE JL 01-20-03 DRAWN DATE MFI 01-16-03	IntraAction Corp. 3719 WARREN AVE. BELLWOOD, IL 60104 PHONE (708) 547-6644
MATERIAL FINISH		TITLE ASM-B SERIES MODULATOR
MFG. INSTR. Q.C. INSTR.		FSCM NO. / B SIZE / DWG. NO. ASM-B OUTLINE / ISSUE SCALE ——— / UNIT WEIGHT / SHEET 1 OF 1