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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 Insertion 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
Size (less connector)	2.80 L x 2.40 W x 0.70 H inches 71.2 L x 61.0 W x 17.8 H mm

MODEL	<u>ASM-802B8</u>	<u>ASM-1002B8</u>	<u>ASM-1502B8</u>	<u>ASM-200B8</u>
Center Frequency ⁴	80 MHz	100 MHz	150 MHz	200 MHz
Beam Separation ⁵ (355 nm)	4.8 mrad	5.9 mrad	8.9 mrad	11.9 mrad
Frequency Shift Range (MHz)	±(65 to 95)	±(80 to 120)	±(120 to 180)	±(160 to 240)
Diffraction Efficiency	85 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.

² Other active aperture heights are available. e.g., ASM-804B8 with 4 mm active aperture height.

³ Optical rise time and modulation frequency capabilities vary with optical beam diameter and center frequency.

⁴ Other center frequencies available.

⁵ Beam separation varies with optical wavelength.

⁶ RF drive power varies with optical wavelength.

⁷ Drivers available. e.g., ME-802 (analog), ME-802T (digital). See ME product sheet for other options. OEM drivers also available.

POLYTEC GMBH

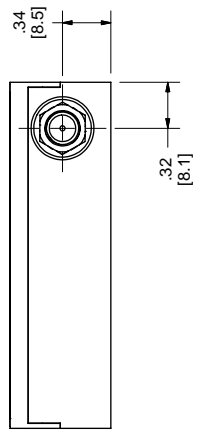
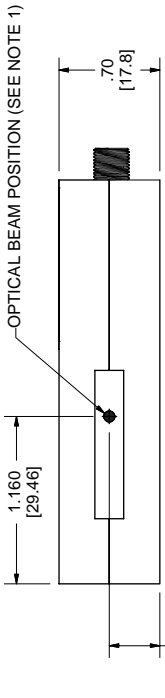
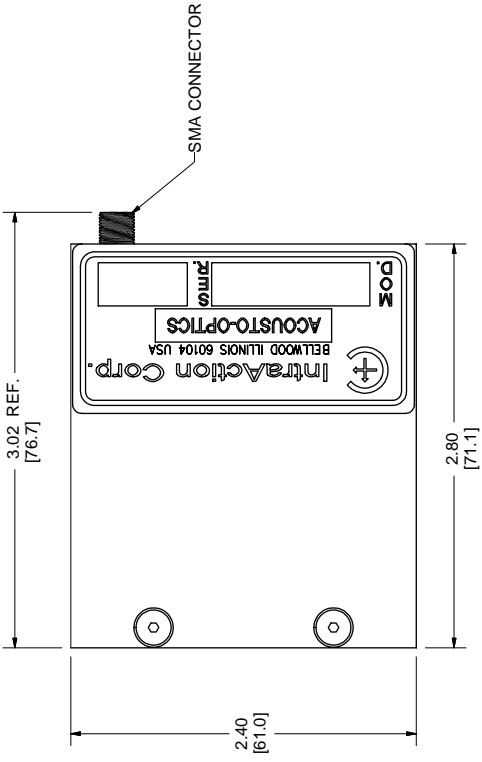
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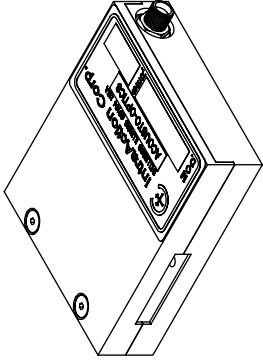
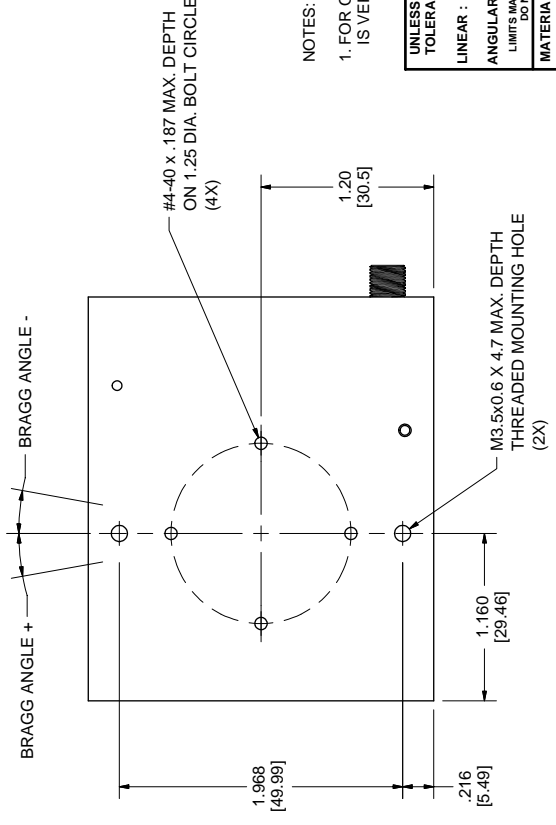
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REVISIONS		ISSUE	DATE	APPD/DATE
		ORIGINAL	TAL 02-02-05	

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



.350 ± .005
[8.89 ± .13]



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

		IntraAction Corp. 3718 WARREN AVE. BELLWOOD, IL 60104 PHONE (708) 547-6644	
UNLESS OTHERWISE SPECIFIED TOLERANCES AND DIMENSIONS ARE IN INCHES LINEAR : .XX ± .XXX ± ANGULAR ± DIAMETERS ± LIMITS MAY APPLY BEFORE FINISHING DO NOT SCALE THIS PRINT		APPROVED	DATE
MATERIAL		CHECKED	DATE
IMFG. INSTR.		DRAWN	DATE
G. C. INSTR.		TAL	02-02-05
SCALE 1.5 : 1		FINISH	
SHEET 1 OF 1		FCSM NO.	ISSUE
UNIT WEIGHT		SIZE	ASM-B SERIES

ASM-B SERIES OUTLINE