



**Polytec GmbH**

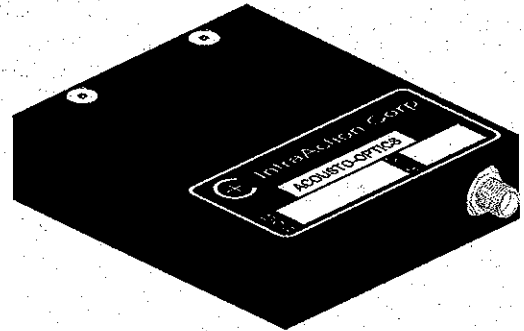
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**MODEL ASM-B3 SERIES  
UV ACOUSTO-OPTIC MODULATOR / FREQUENCY SHIFTER**

- INTENSITY MODULATION
- OPTICAL FREQUENCY SHIFTING
- LASER BEAM DEFLECTION
- HIGHEST QUALITY FUSED SILICA
- HIGH RELIABILITY
- EXCELLENT TEMPERATURE STABILITY



**SPECIFICATIONS**

Optical Wavelength Range	230 to 280 nm
Acousto-optic Material	UV Grade Fused Silica
Optical Insertion Loss	<4 percent
Optical Polarization	Vertical
Weight	175 grams
RF Connector	SMA
Size (less connector)	2.80 D x 2.40 W x 0.70 H inches 71.2 D x 61.0 W x 17.8 H mm
Input Impedance	50 ohms

**MODEL**

	<u><b>ASM-1002B3</b></u>	<u><b>ASM-2002B3</b></u>
Center Frequency <sup>1</sup>	100 MHz	200 MHz
Beam Separation <sup>2</sup> (266 nm)	4.47 mrad	8.94 mrad
Frequency Shift Range	±(80 to 120) MHz	±(160 to 240) MHz
Active Aperture Height	2 mm	2 mm
Diffraction Efficiency	85 percent	85 percent
RF Drive Power <sup>3,4</sup>	2 watts (266 nm)	2 watts (266 nm)
Modulation Bandwidth(-3db)	8.9 MHz (0.5mm dia.)	5.9 MHz (0.75mm dia.)
Optical Rise Time	55 nsec (0.5mm dia.)	85 nsec (0.75 mm dia.)

<sup>1</sup> Other frequencies available upon request

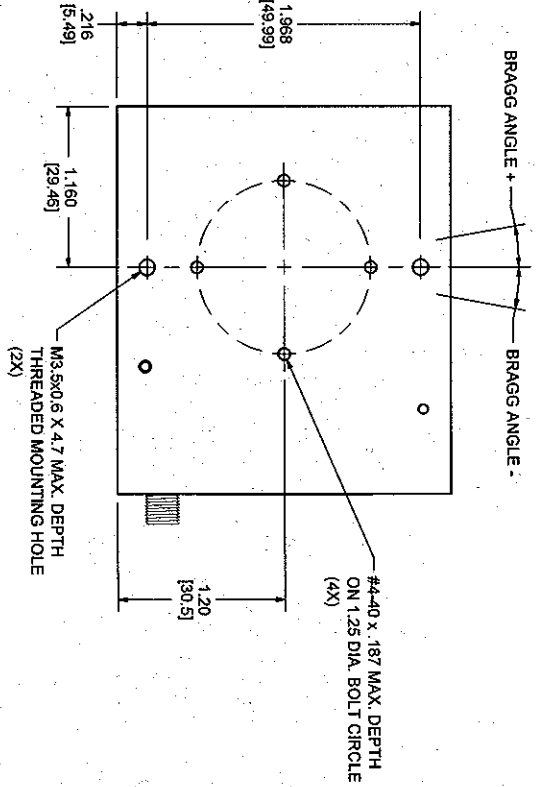
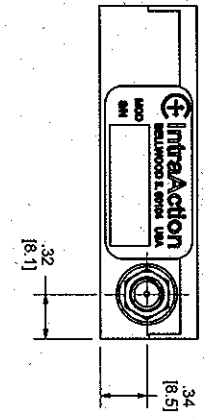
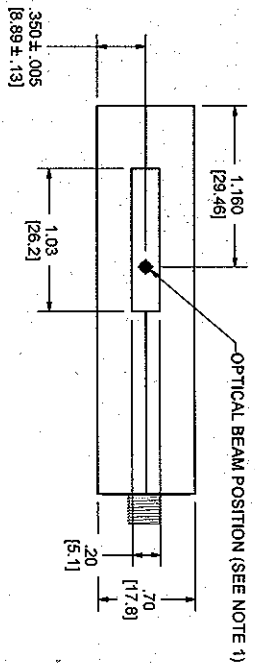
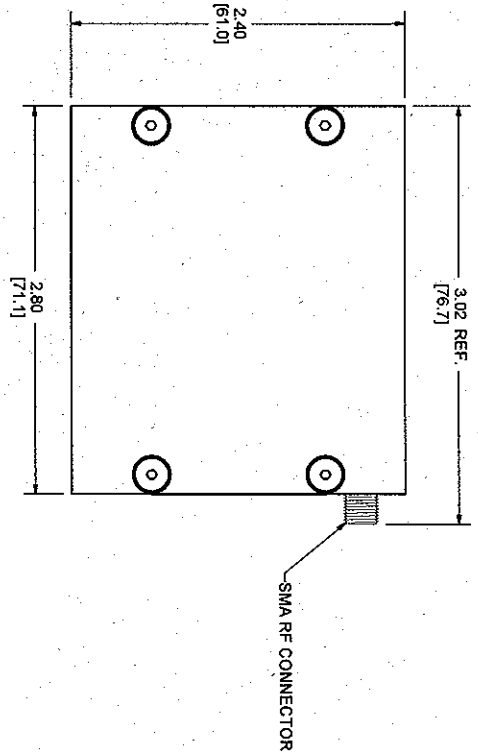
<sup>2</sup> Beam separation varies with optical wavelength

<sup>3</sup> RF drive power varies with optical wavelength

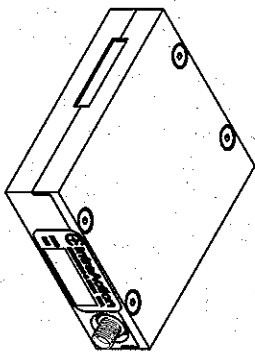
<sup>4</sup> Drive electronics available.

ISSUE	REVISIONS	APP'D/DATE
ORIGINAL	DESCRIPTION: TAL 02-02-05	

ALL REVISIONS TO THIS DRAWING  
MUST BE MADE ON THE AUTODESK 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	APPROVED DATE	<p><b>IntraAction Corp.</b> 3718 WARREN AVE. BELLWOOD, IL 60714 PHONE (708) 547-6544</p>
LINEAR: .XX ± ANGULAR: .XX ± LIMITS MAY APPLY BEFORE FINISHING MATERIAL	CHECKED DATE	
DRAWN DATE	TAL	<p><b>ASM-B SERIES OUTLINE</b></p>
FINISH	DATE	
INFO. INSTR.	DWG. NO.	FCSM NO.
D. C. INSTR.	UNIT WEIGHT	ISSUE
	SCALE 1.5 : 1	SIZE C
		ASM-B SERIES
		SHEET 1 OF 1

DWG NO. ASM-B SERIES 1