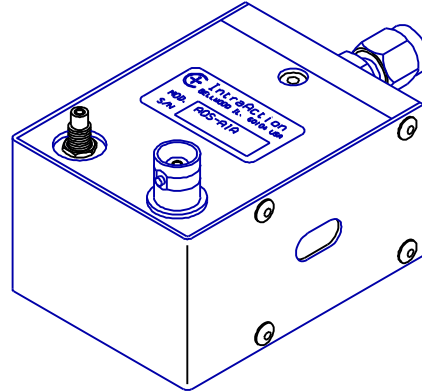


# Q-SWITCH

**POLYTEC GmbH** Büro Berlin Schwarzschildstraße 1 D - 12489 Berlin GERMANY  
Tel: +49 (30) 63 92 51 40 Fax: +49 (30) 63 92 51 41 wl@polytec.de www.polytec.de

## MODEL AQS-A1 SERIES ACOUSTO-OPTIC Q-SWITCH

- Cavity Loss Modulation
- High Optical Power Capability
- High Reliability
- Excellent Temp. Stability



### SPECIFICATIONS

Optical Wavelength <sup>1</sup>	1.06 $\mu\text{m}$
Anti-reflection Coating	Reflectance < 0.05 percent
Optical Power Capability	500 Mwatts/cm <sup>2</sup>
Optical Rise Time	110 nsec/mm optical beam diameter
Static Optical Insertion Loss	0.3 percent
Optimum Polarization <sup>4</sup>	Perpendicular to mounting surface
Input Impedance / VSWR	50 ohms/1.25
RF Connector	BNC
Heat Exchange	Water cooled 250 ml/min.
Size (less connectors)	2.73 D x 1.50 H x 2.16 W inches 6.94 D x 3.81 H x 5.49 W cm

MODEL	<b>AQS-242A1A</b> <b>AQS-272A1A</b>	<b>AQS-244A1A</b> <b>AQS-274A1A</b>	<b>AQS-245A1A</b> <b>AQS-275A1A</b>	<b>AQS-504A1A</b>
Center Frequency <sup>2</sup>	24 MHz 27.12 MHz	24 MHz 27.12 MHz	24 MHz 27.12 MHz	50 MHz
Beam Separation	4.3 mrad 4.8 mrad	4.3 mrad 4.8 mrad	4.3 mrad 4.8 mrad	8.9 mrad
Active Aperture <sup>3</sup>	2 x 12 mm	4 x 12 mm	5 x 12 mm	4 x 12 mm
Loss Efficiency	40 percent	40 percent	40 percent	40 percent
RF Drive Power	5 watts <sup>4</sup> 20 watts <sup>5</sup>	10 watts <sup>4</sup> 40 watts <sup>5</sup>	12 watts <sup>4</sup> 50 watts <sup>5</sup>	15 watts <sup>4</sup>

<sup>1</sup> Other wavelengths are available.

<sup>2</sup> Other frequencies are available.

<sup>3</sup> Active aperture heights to 10 mm are available.

<sup>4</sup> Vertical polarization

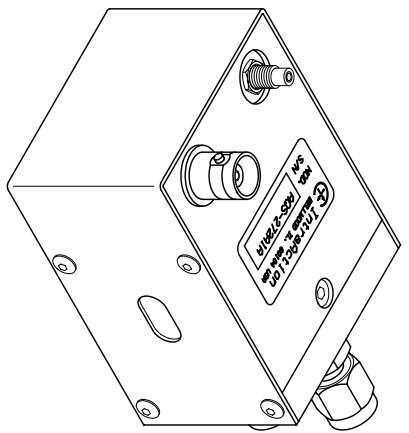
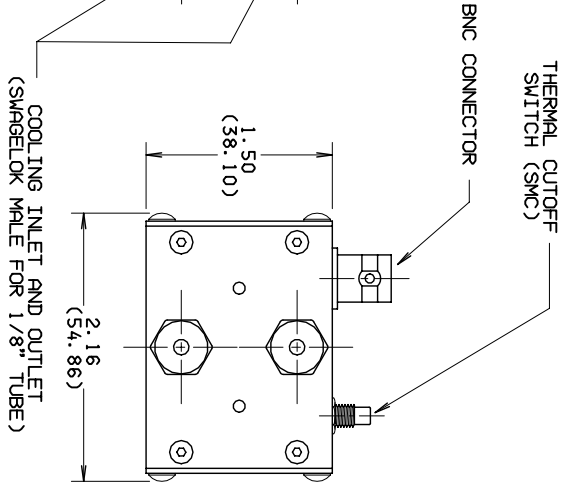
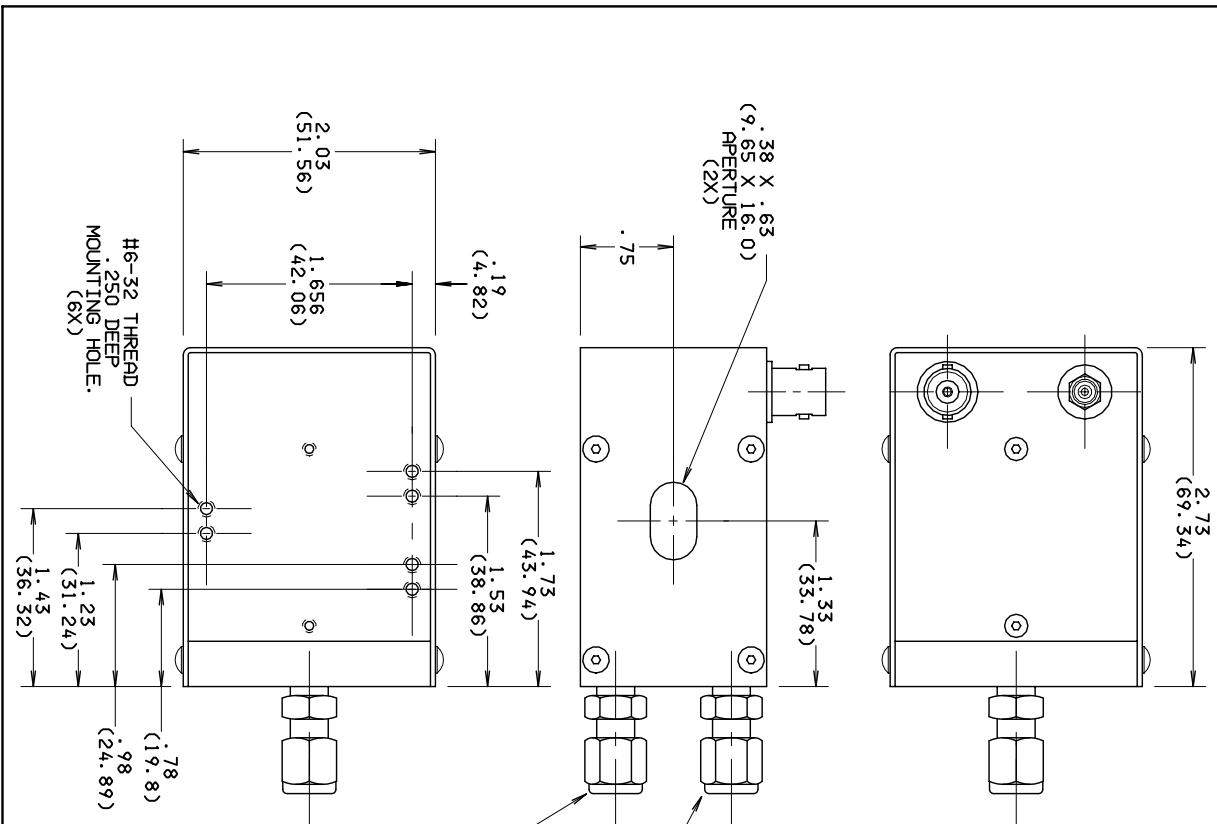
<sup>5</sup> Random polarization


ENG210B

REVISIONS

ISSUE	DESCRIPTION	APPD./DATE
ORIGINAL	RM 05-20-99	JL

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



UNLESS OTHERWISE SPECIFIED TOLERANCES AND DIMENSIONS ARE IN INCHES		APPROVED DATE	 <p>IntraAction Corp. 3719 WARREN AVE. BELLWOOD, IL 60104 PHONE (708) 547-6644</p>
LINEAR : .XX ±.010 .XXX±.005 ANGULAR ± / DIAMETERS ± / LIMITS APPLY BEFORE FINISHING DO NOT SCALE THIS PRINT		CHECKED DATE	
MATERIAL		DATE	TITLE
FINISH		RM 05-20-99	QAS-A1 SERIES Q-SWITCH
FIG. INSTR.			FSCM NO.
D. C. INSTR.			B
			DWG. NO.
			QAS-A1 OUTLINE
			ISSUE
			SCALE FULL
			UNIT WEIGHT
			SHEET 1 OF 1