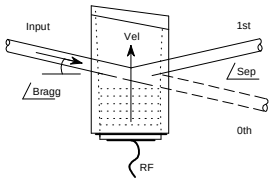


Q1083-FSxxL-H
AO Q-SWITCH

ISOMET

1106

The Q1083-FSxxL series are longitudinal (compressional) mode acousto-optic Q-switches designed for use with high power polarized DPSS Nd:YLF and Nd:YAG lasers. These devices exhibit very low insertion loss and high damage threshold. All Isomet AO Q-switches benefit from the company's unparalleled experience in OEM manufacturing, with all key processes maintained in-house. These include optical fabrication, A/R coating and proven high power transducer bonding technology.

Specifications

Acoustic Frequency:	24.0MHz, 27.12MHz or 40.68MHz
Interaction Material:	Fused Silica
Wavelength:	1047nm to 1064nm
A/R Coating:	< 0.2% / surface
Active Aperture, H:	1.5, 2.0, 3.0, and 5.5 mm *
Clear Aperture:	9.0mm
Acoustic Mode:	Longitudinal (compressional)
Rise/Fall time:	109nsec / mm beam waist
Polarization:	Linear
Transmission:	> 99.5% (single pass)
Cavity Insertion Loss:	10% max, <5% typical
Damage Threshold:	> 500MW/cm^2
RF power	Up to 80W (aperture dependent)
Cooling:	Water, 27+/-5 ºC, 250ml/min
Input Impedance:	50 Ohms
VSWR:	< 1.2:1

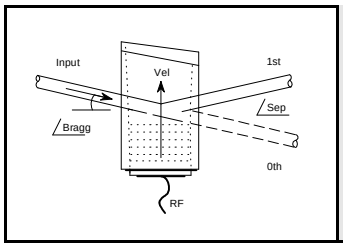
Model Selection:

		Freq		Active Aperture	
Q1083 -	FS	**xx**	L -	**H**	
24.0MHz		**24**		**1.5**	1.5mm
27.12MHz		**27**		**2**	2mm
40,68MHz		**40**		**3**	3mm
				5.5	5.5mm

* Please contact Isomet for alternative apertures.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.
Tel: (703) 321 8301 Fax: (703) 321 8546
E-mail: ISOMET@ ISOMET.COM ***Web Page: WWW.ISOMET.COM***

Quality Assured.
In-house: Crystal Growth, Optical Polishing, A/R coating, Vacuum Bonding



Q1083-FSxxL-H
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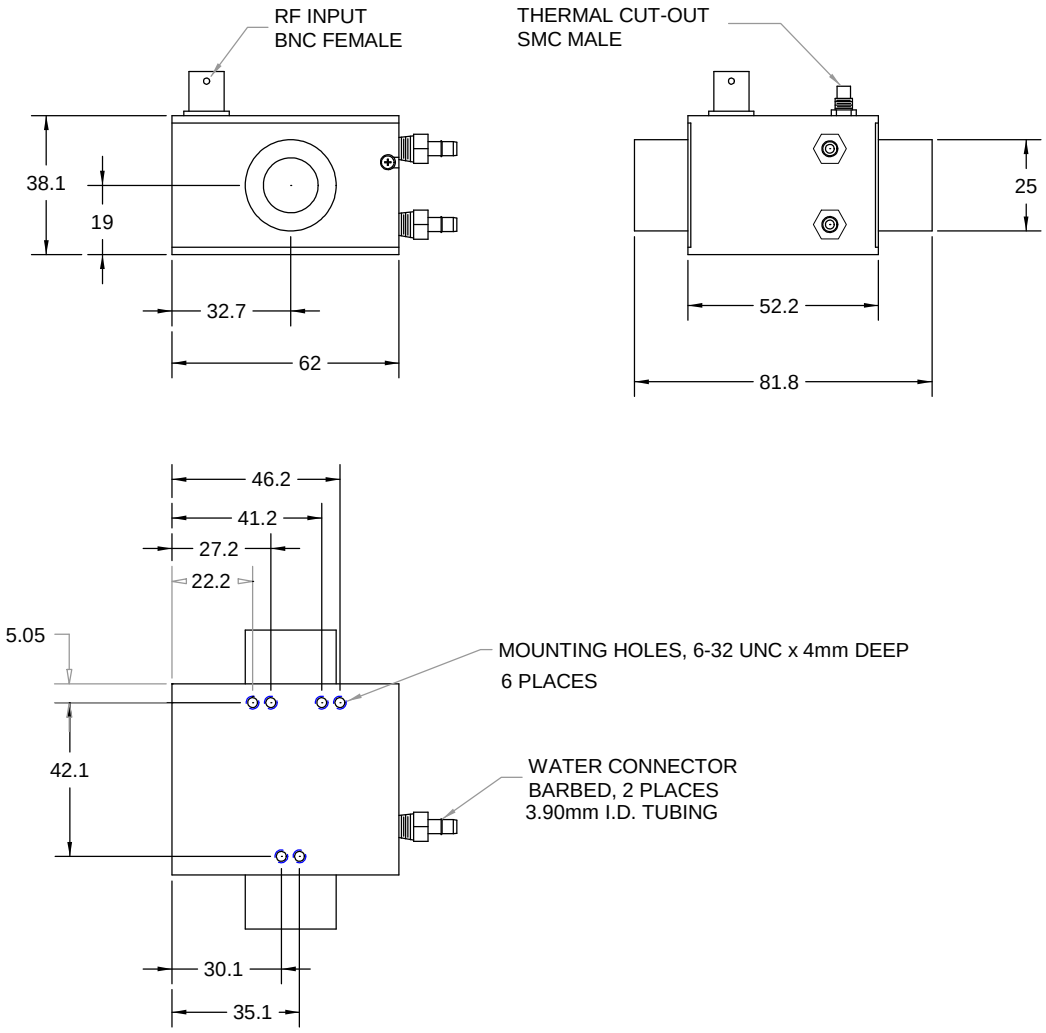
Outline Drawing



Recommended Drive Electronics

RF Driver with Waveform Generation	AQS1080-FC-x
RF Driver with Basic Modulation control	RFA960-FC-x

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