

# Q1083A-FSxxL-H AO Q-SWITCH



0318

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: 2.0, 3.0, 4.0 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<sup>2</sup>

RF power Up to 70W (aperture dependent) Cooling: Water, 22+/-5 °C, 380ml/min

Input Impedance: 50 Ohms VSWR: < 1.2:1

### Model Selection:

<u>Freq</u>			Active Aperture		
Q1083 -	FS	XX	L-	Н	
24.0MHz 27.12MHz 40.68MHz				2 3 4 5.5	2mm 3mm 4mm 5.5mm

<sup>\*</sup> Please contact Isomet for alternative apertures.

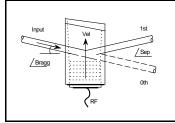
#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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

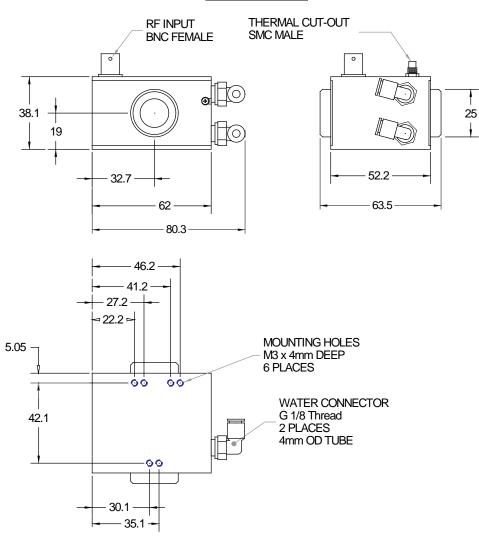


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## **Outline Drawing**



Note: Coolant in contact with aluminium case parts.
Alternate coolant tube fittings available

### **Recommended Drive Electronics**

RF Driver with Modulation Control

AQS1080-FC-x

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