

Q1083-FSxxS-H AO Q-SWITCH



0218

The Q1083-FSxxS series are shear mode acousto-optic Q-switches designed for use with high power unpolarized 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:

Wavelength:

A/R Coating:

Fused Silica

1047nm to 1064nm

< 0.2% / surface

Active Aperture, H: 2.0, 4.0, 5.0 and 6.0 mm *

Clear Aperture: 9.0mm Acoustic Mode: Shear

Rise/Fall time: 173nsec / mm beam waist

Polarization: Random

Transmission: > 99.5% (single pass)
Cavity Insertion Loss: 10% max, <5% typical

Damage Threshold: > 500MW/cm²

RF power Up to 80W (aperture dependent) Cooling: Water, 27+/-5 °C, >250ml/min

Input Impedance: 50 Ohms VSWR: < 1.2:1

Model Selection:

<u>Freq</u>			Active Aperture	
Q1083 - FS	XX	S-	Н	
24.0MHz 27.12MHz 40.68MHz			2 4 5 6	2mm 4mm 5mm 6mm

^{*} Please contact Isomet for alternative apertures.

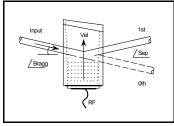
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Quality Assured. In-house: Crystal Growth, Optical Polishing, A/R coating, Vacuum Bonding



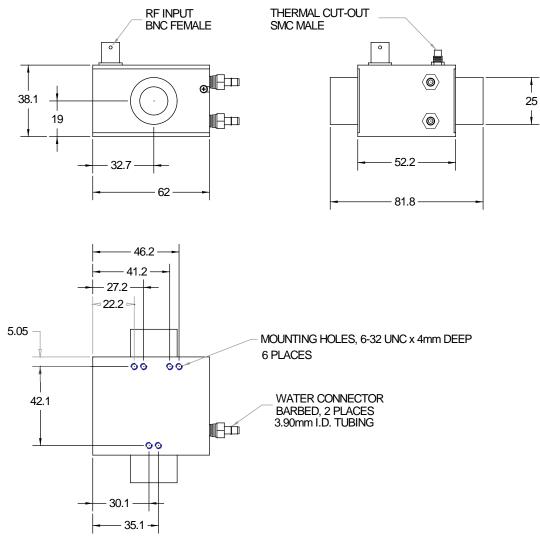
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Outline Drawing

Note: Coolant in contact with aluminium case parts



Recommended Drive Electronics

RF Driver with Modulation Control

AQS1080-FC-x

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