

Q1133-FSxxL-H AO Q-SWITCH



1106

The Q1133-FSxxL series are longitudinal (compressional) mode Fused Silica, conduction cooled acousto-optic Q-switches designed for use with 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.

Preliminary Specifications

Acoustic Frequency:	40.68 or 80.0MHz	
Interaction Material:	Fused Silica	
Wavelength:	1047nm to 1064nm	
A/R Coating:	< 0.2% / surface	
Active Aperture, H:	1.0, 1.5 mm *	
Clear Aperture:	4.5mm	
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 10W max	
	<u>H=1.0mm</u>	<u>H=1.5mm</u>
RF power	10W	10W
Diffraction Efficiency:	>75%	60%
Cooling:	Conduction	
Input Impedance:	50 Ohms	
VSWR:	< 1.2:1	

Model Selection:

	<u>Freq</u>	<u>Active Aperture</u>	
Q1133 - FS	xx	L -	H
40.68MHz	40	1.0	1.0mm
80.0MHz	80	1.5	1.5mm

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

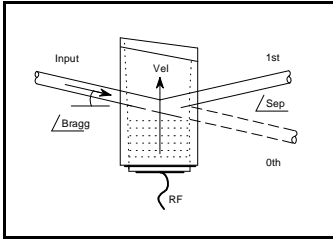
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Quality Assured.

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

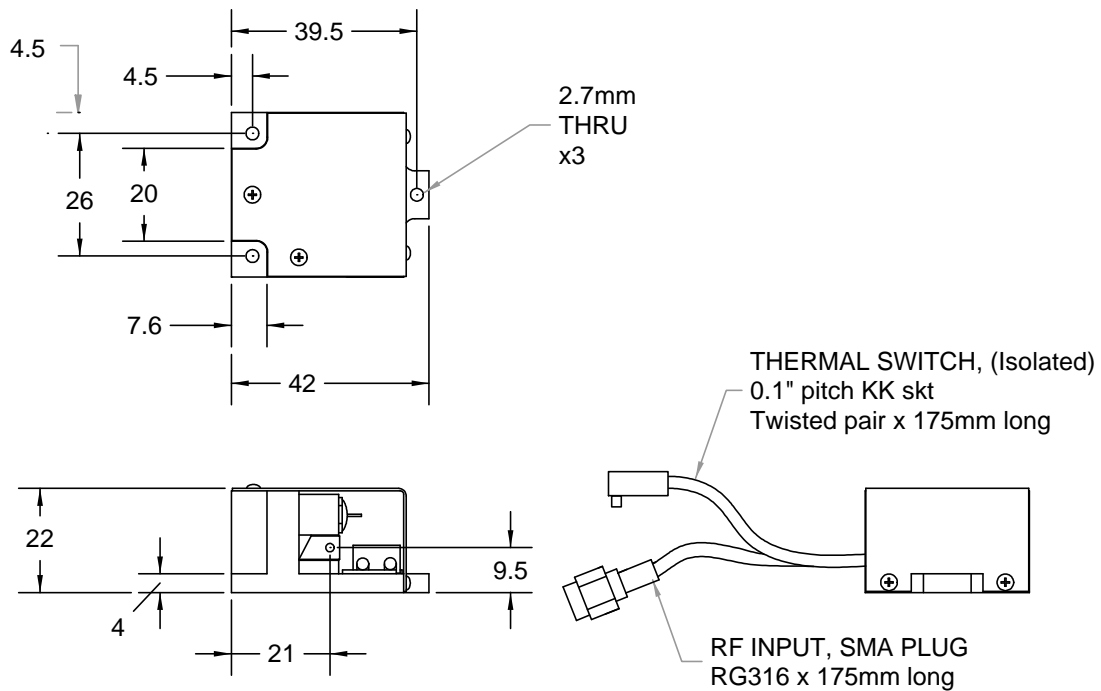


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Outline Drawing



Dimensions: mm

Ensure adequate heaksinking through mounting surface, especially at higher RF powers.

Recommended Drive Electronics

RF Driver with Waveform Generation
RF Driver with Basic Modulation control

AQS1010-FC-x
RFA910-FC-x

* Please contact Isomet for alternative apertures.

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