

# Q1162-SFxxL-H AO Q-SWITCH



0419

The Q1162-SFxxL series are miniature conduction cooled, high efficiency acousto-optic Q-switches designed for use with DPSS Nd:YLF and Nd:YAG lasers. These devices exhibit 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:	Dense Flint
Wavelength:	1047nm to 1064nm
A/R Coating:	< 0.5% / surface
Active Aperture, H:	1.0 *
Clear Aperture:	2mm
Acoustic Mode:	Longitudinal (compressional)
Rise/Fall time:	180nsec / mm beam waist
Polarization:	Vertical, Linear preferred
Transmission:	> 99.5% (single pass)
Cavity Insertion Loss:	10% max, <5% typical
Damage Threshold:	> 250MW/cm <sup>2</sup>
RF power	Up to 5W
Diffraction Efficiency:	<u>H=1mm</u>
RF = 2W	>25%
RF = 4W	>45%
Cooling:	Conduction
Input Impedance:	50 Ohms
VSWR:	< 1.2:1

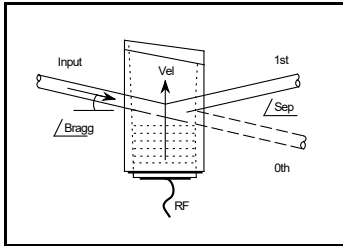
### Model Selection:

	<u>Freq</u>		<u>Active Aperture</u>	
Q1162 - SF	<b>xx</b>	L -	<b>H</b>	
40.68MHz	<b>40</b>		<b>1.0</b>	1.0mm
80.0MHz	<b>80</b>			

\* 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

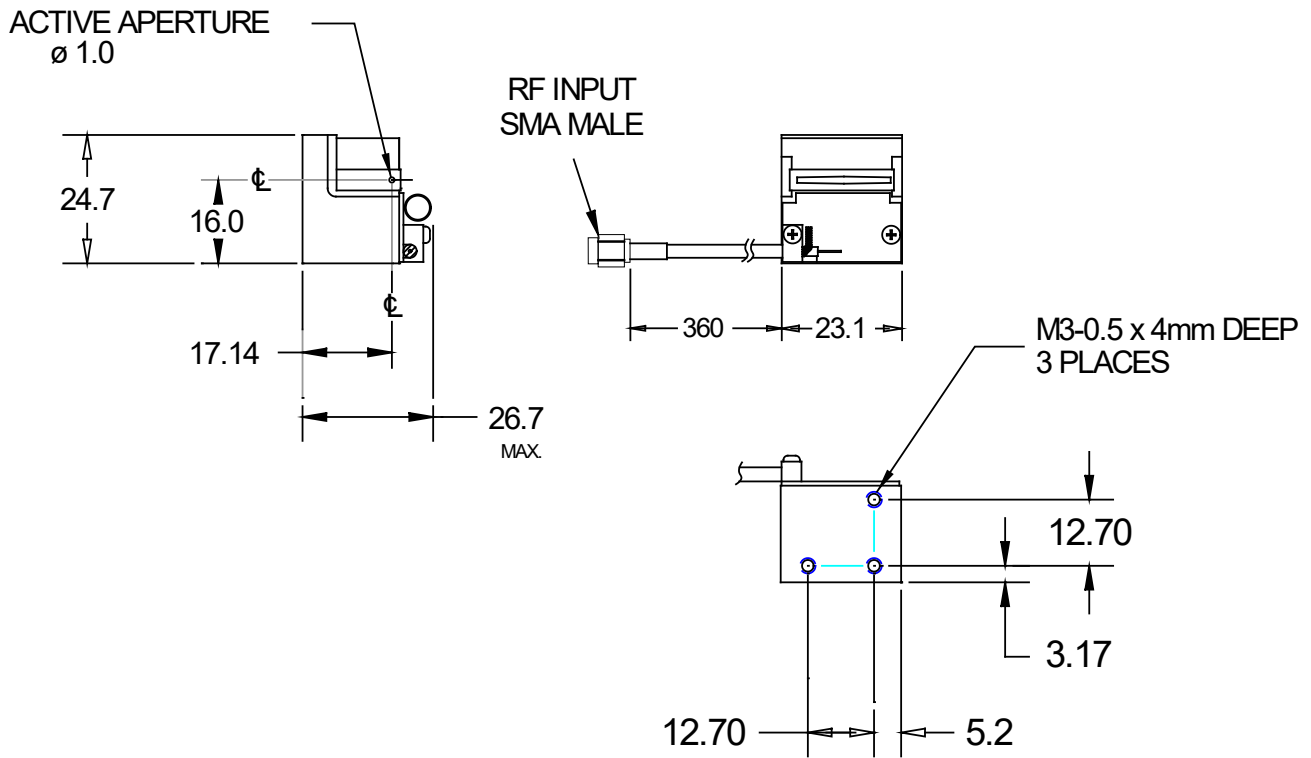


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## Outline Drawing



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

AQS1004-FC-x  
531C-4 / 532C-4

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