

Q1119-aQxxL-H AO Q-SWITCH



1106

The Q1119-aQxxL series are longitudinal (compressional) mode Quartz, 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.

Specifications

Acoustic Frequency:	40.68 or 80.0MHz
Interaction Material:	Quartz
Wavelength:	1047nm to 1064nm
A/R Coating:	< 0.3% / surface
Active Aperture, H:	1.0, 1.5 mm *
Clear Aperture:	4.5mm
Acoustic Mode:	Longitudinal (compressional)
Rise/Fall time:	114nsec / 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 7W (max)
Diffraction Efficiency:	<u>H=1mm</u> <u>H=1.5mm</u>
RF = 3W	>55% >45%
RF = 5W	>75% >65%
RF = 7W	>80% >75%
Cooling:	Conduction
Input Impedance:	50 Ohms
VSWR:	< 1.2:1
Model Selection:	

	<u>Freq</u>		<u>Active Aperture</u>
Q1119 - aQ	xx	L -	H
24.0MHz	24		1.0 1.0mm
27.12MHz	27		1.5 1.5mm
40.68MHz	40		
80.0MHz	80		

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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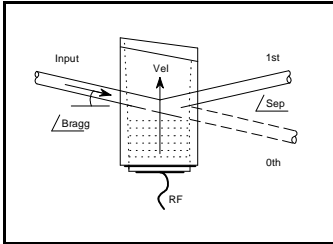
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding

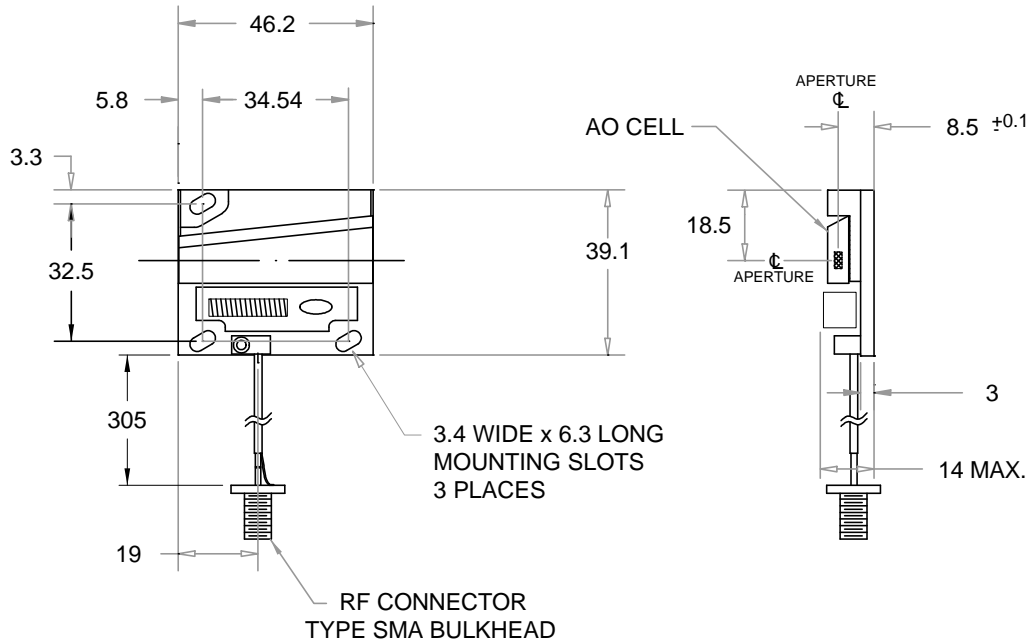


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Outline Drawing



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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