

Q1137-SFxxL-H

AO Q-SWITCH

(PRELIMINARY DATA)



1106

The Q1137-SFxxL series are conduction cooled, high efficiency acousto-optic Q-switches designed for use with polarized 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, 1.5 mm *	
Clear Aperture:	3mm	
Acoustic Mode:	Longitudinal (compressional)	
Rise/Fall time:	191nsec / mm beam waist	
Polarization:	Linear	
Transmission:	> 99.5% (single pass)	
Cavity Insertion Loss:	10% max, <5% typical	
Damage Threshold:	> 300MW/cm ²	
RF power	Up to 6W	
Diffraction Efficiency:	<u>H=1mm</u>	<u>H=1.5mm</u>
RF = 3W	>70%	>55%
RF = 4W	>80%	>70%
RF = 5W	>85%	>75%
Cooling:	Conduction	
Input Impedance:	50 Ohms	
VSWR:	< 1.2:1	

Model Selection:

	<u>Freq</u>		<u>Active Aperture</u>	
Q1137 - SF	xx	L -	H	
40.68MHz	40		1.0	1.0mm
80.0MHz	80		1.5	1.5mm

* Please contact Isomet for alternative apertures.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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

Tel: (703) 321 8301 Fax: (703) 321 8546

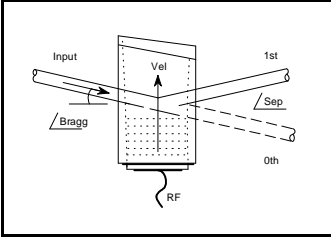
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding

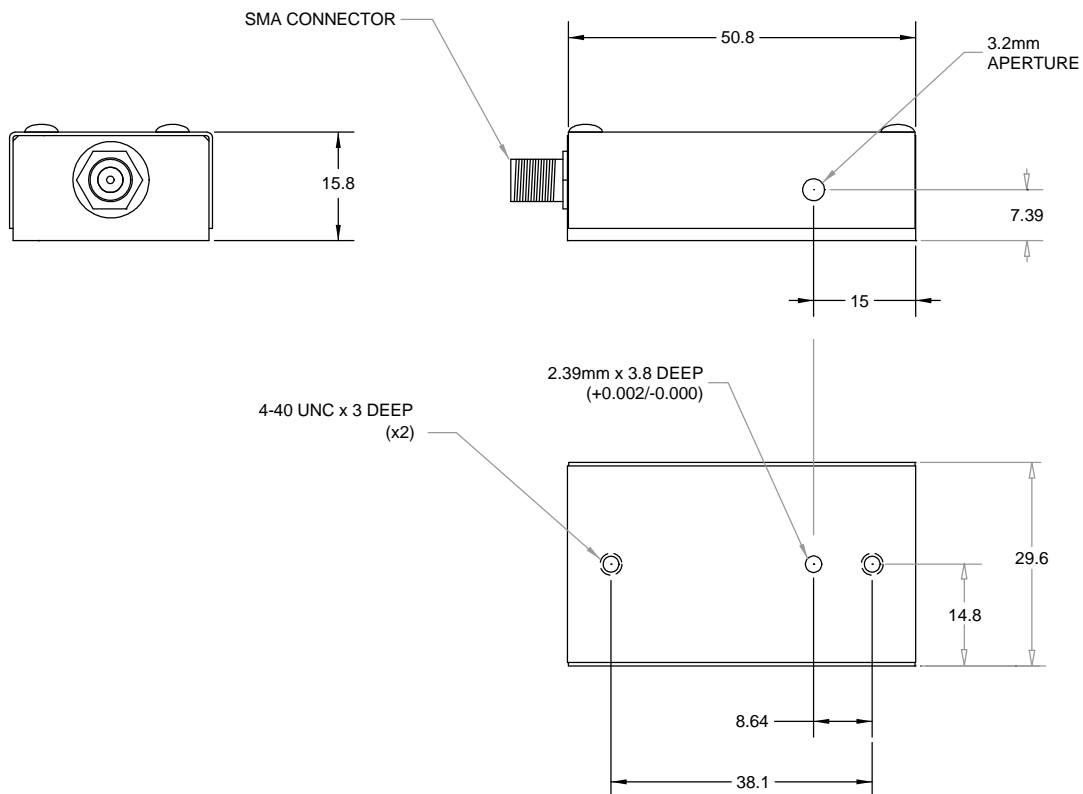


Q1137-SFxxL-H AO Q-SWITCH (PRELIMINARY DATA)



1106

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

AQS1010-FC-x
531C-6 / 532C-6

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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

Tel: (703) 321 8301 Fax: (703) 321 8546

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

Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding