

Q1058C-SFxxL-H

AO Q-SWITCH

(PRELIMINARY DATA)



1106

The Q1058C-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:	24.00 or 27.12MHz
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:	190nsec / 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 5W
Diffraction Efficiency:	<u>H=1mm</u> <u>H=1.5mm</u>
RF = 3W	>70% >60%
RF = 4W	>80% >75%
RF = 5W	>85% >80%
Cooling:	Conduction
Input Impedance:	50 Ohms
VSWR:	< 1.2:1

Model Selection:

	<u>Freq</u>		<u>Active Aperture</u>	
Q1058C - SF	xx	L -	H	
24.0MHz	24		1.0	1.0mm
27.12MHz	27		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

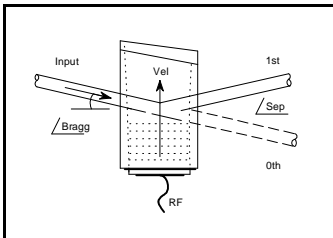
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding



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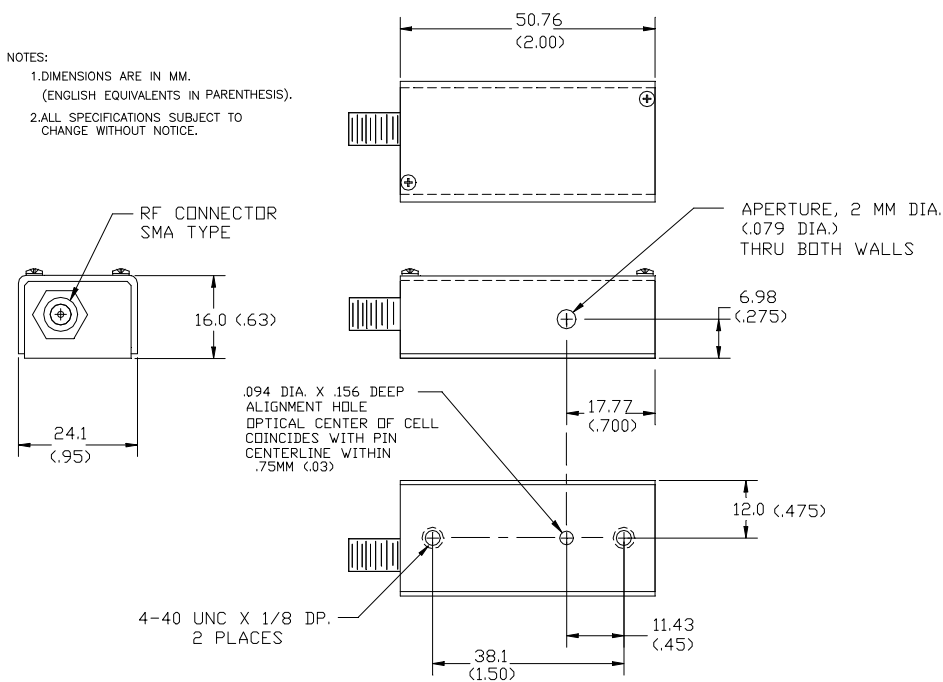
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Outline Drawing



Ensure adequate heatsinking 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-6-27

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