

# Q1025-TxxL-H AO Q-SWITCH



0507

The Q1025-TxxL is a miniature TeO<sub>2</sub>, conduction cooled high efficiency acousto-optic Q-switch designed for use with DPSS Nd:YLF and Nd:YAG lasers.

## Specifications

Acoustic Frequency:	27.12, 80.0MHz
Interaction Material:	Tellurium Dioxide
Wavelength:	1047nm to 1064nm
A/R Coating:	< 0.25% / surface
Active Aperture, H:	1.0mm *
Clear Aperture:	2.0mm
Acoustic Mode:	Longitudinal
Rise/Fall time:	155nsec / mm beam waist
Polarization:	Insensitive
Transmission:	> 99.0% (single pass)
Cavity Insertion Loss:	10% max, <5% typical
Damage Threshold:	> 250MW/cm <sup>2</sup>
RF power	2.5W average (max)
RF power	<u>H=1.0mm</u> <u>H=1.5mm</u>
Diffraction Efficiency:	1.5W      2.1W
	>85%      >80%
Cooling:	Conduction
Input Impedance:	50 Ohms
VSWR:	< 1.3:1
Operating Temperature	-50°C - +70°C
Model Selection:	

	<u>Freq</u>		<u>Active Aperture</u>
Q1025 - T	<b>xx</b>	L -	<b>H</b>
27.12MHz	<b>27</b>		<b>1.0</b> 1.0mm
80.00MHz	<b>80</b>		<b>1.5</b> 1.5mm

**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

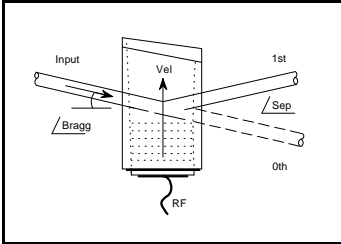
E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

**Quality Assured.**

**In-house: Crystal Growth,**

**Optical Polishing,**

**A/R coating, Vacuum Bonding**

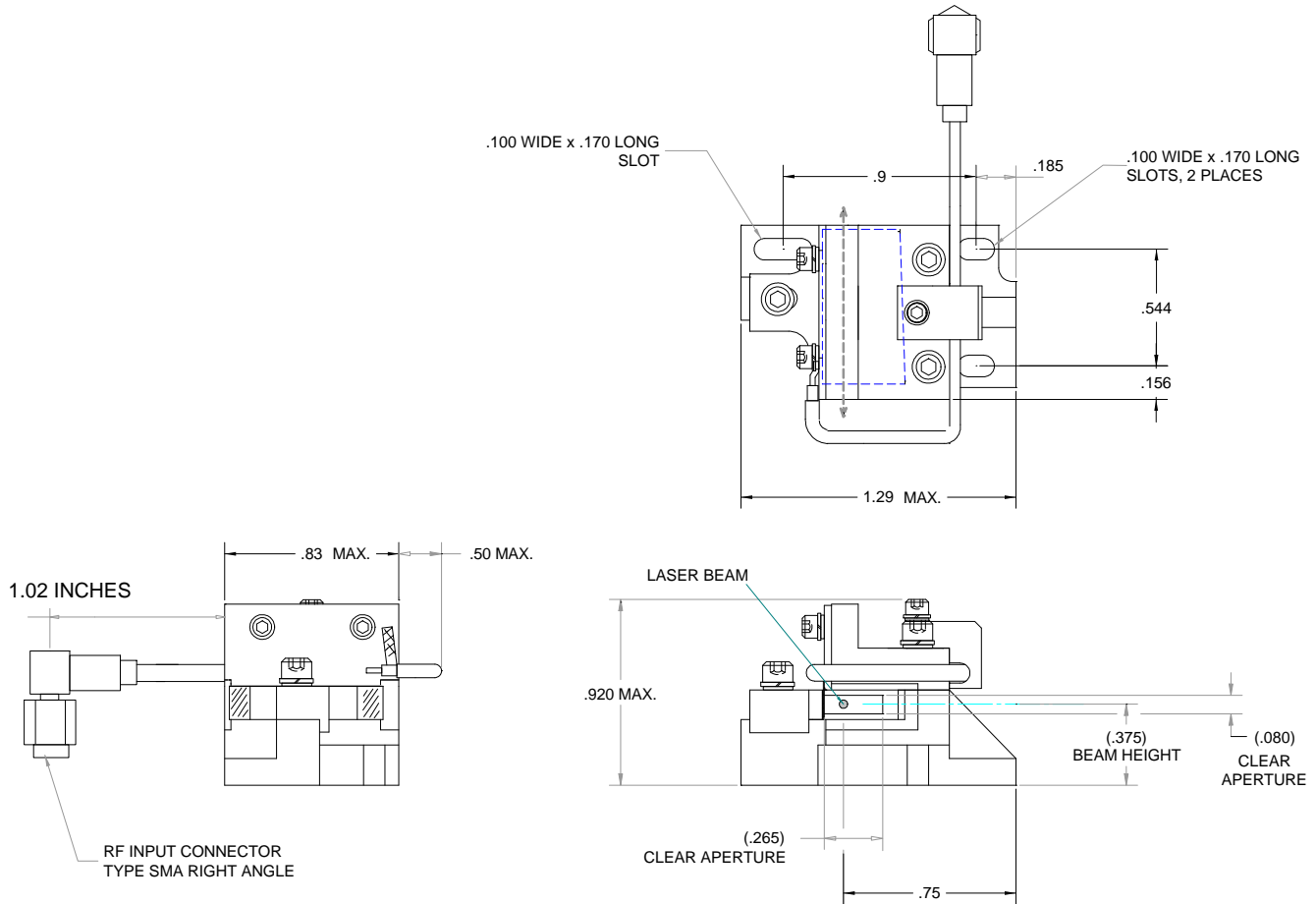


# Q1025-TxxL-H AO Q-SWITCH



0507

## Outline Drawing



Dimensions: inches

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-27 / 532C

\* 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](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

**Quality Assured.**

**In-house: Crystal Growth,**

**Optical Polishing,**

**A/R coating, Vacuum Bonding**