The Q1080-TxxL series are TeO$_2$, conduction cooled high efficiency acousto-optic Q-switches designed for use with short cavity polarized DPSS Nd:YLF and Nd:YAG lasers.

### Specifications

- **Acoustic Frequency**: 40.68, 68 or 80.0MHz
- **Interaction Material**: Tellurium Dioxide
- **Wavelength**: 1047nm to 1064nm
- **A/R Coating**: < 0.5% / surface
- **Active Aperture, H**: 1.5mm *
- **Clear Aperture**: 3.0mm
- **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$^2$
- **RF power**: Up to 4W (max)
- **Diffraction Efficiency**: >85%
- **Cooling**: Conduction
- **Input Impedance**: 50 Ohms
- **VSWR**: < 1.2:1

### Model Selection:

<table>
<thead>
<tr>
<th>Freq</th>
<th>Active Aperture</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.68MHz</td>
<td>H=1.5mm</td>
</tr>
<tr>
<td>68.0MHz</td>
<td>H=1.5mm</td>
</tr>
<tr>
<td>80.0MHz</td>
<td>H=1.5mm</td>
</tr>
</tbody>
</table>

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ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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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
Ensure adequate heatsinking through mounting surface, especially at higher RF powers.

Recommended Drive Electronics

RF Driver with Waveform Generation  AQS1004-FC-x
RF Driver with Basic Modulation control  531C-4-x / 532C-4-x

* Please contact Isomet for alternative apertures.