The Q1162-SFxxL series are miniature conduction cooled, high efficiency acousto-optic Q-switches designed for use with 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 80.0 MHz
- **Interaction Material:** Dense Flint
- **Wavelength:** 1047 nm to 1064 nm
- **A/R Coating:** < 0.5% / surface
- **Active Aperture, H:** 1.0 *
- **Clear Aperture:** 2 mm
- **Acoustic Mode:** Longitudinal (compressional)
- **Rise/Fall time:** 180 nsec / mm beam waist
- **Polarization:** Vertical, Linear preferred
- **Transmission:** > 99.5% (single pass)
- **Cavity Insertion Loss:** 10% max, <5% typical
- **Damage Threshold:** > 250 MW/cm²
- **Cooling:** Conduction
- **Input Impedance:** 50 Ohms
- **VSWR:** < 1.2:1
- **RF power**
  - RF = 4 W: >70%
  - RF = 6 W: >80%

**Model Selection:**

<table>
<thead>
<tr>
<th>Freq</th>
<th>Active Aperture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1162 - SF xx L - H</td>
<td>40,68MHz 80.0MHz</td>
</tr>
<tr>
<td>40 80</td>
<td>1.0 1.0mm</td>
</tr>
</tbody>
</table>

* Please contact Isomet for alternative apertures.
Ensure adequate heaksinking 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-7 / 532C-7