

## Q1087-aQ80L-1

### AO Q-SWITCH



1106

The Q1087-aQ80L is a longitudinal (compressional) mode Quartz, conduction cooled acousto-optic Q-switches designed for use with short cavity polarized DPSS Nd:YLF and Nd:YAG lasers.

#### Specifications

|                         |                              |
|-------------------------|------------------------------|
| Acoustic Frequency:     | 80MHz                        |
| Interaction Material:   | Quartz                       |
| Wavelength:             | 1047nm to 1064nm             |
| A/R Coating:            | < 0.3% / surface             |
| Active Aperture:        | 1.0mm                        |
| Clear Aperture:         | 3.0mm                        |
| Acoustic Mode:          | Longitudinal                 |
| Rise/Fall time:         | 114nsec / mm beam waist      |
| Polarization:           | Linear, vertical w.r.t. base |
| Transmission:           | > 99.5% (single pass)        |
| Cavity Insertion Loss:  | 10% max, <5% typical         |
| Damage Threshold:       | >500MW/cm <sup>2</sup>       |
| RF power                | Up to 6W (max)               |
| Diffraction Efficiency: | <u>H=1.0mm</u>               |
| RF = 3W                 | >45%                         |
| RF = 5W                 | >65%                         |
| RF = 6W                 | >70%                         |
| VSWR:                   | <1.2                         |
| Input Impedance:        | 50 Ohms                      |
| Cooling:                | Conduction                   |

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

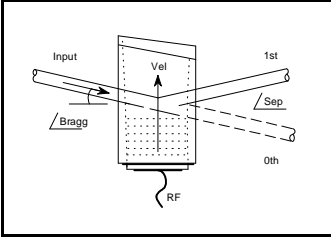
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#### Quality Assured.

In-house: Crystal Growth,  
Optical Polishing,  
A/R coating, Vacuum Bonding



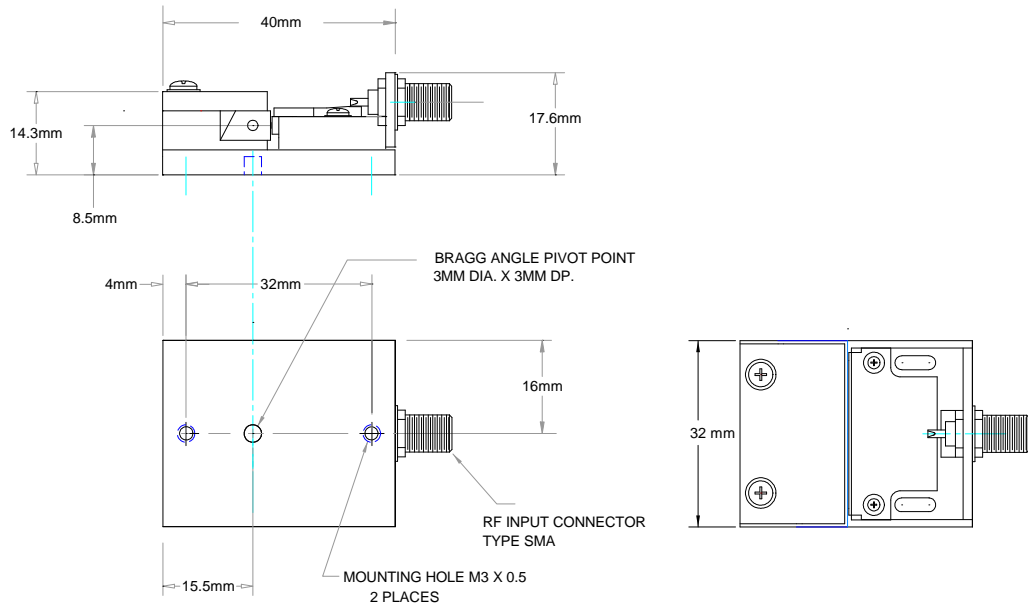
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### Outline Drawing



### Recommended Drive Electronics

RF Driver with Waveform Generation  
RF Driver with Basic Modulation control

AQS1010-FC-x  
532C-6-x

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