

M1377-aQ41L-1, -1.5, -2 High Power AO Modulator



0718

The M1377-aQ41L- series are longitudinal mode, conduction cooled acousto-optic modulator / Q-switch designed for use with polarized DPSS Nd:YLF and Nd:YAG SHG lasers. These devices exhibit very low insertion loss and high damage threshold.

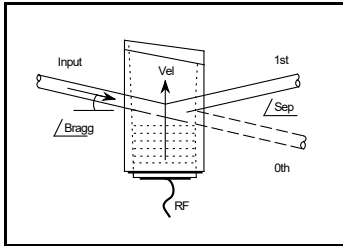
Specifications

| | | | |
|---|-------------------------|--------------|------------|
| Acoustic Frequency fc: | 40.68MHz | | |
| RF bandwidth: | 10.0MHz | | |
| Interaction Material: | Quartz | | |
| A/R Coating: | 1064nm | | |
| Reflectivity: | < 0.5% / surface | | |
| Active Aperture (-H) : | 1.0, 1.5, 2.0mm * | | |
| Clear Aperture: | 4.5mm | | |
| Acoustic Mode: | Longitudinal | | |
| Rise/Fall time: | 114nsec / mm beam waist | | |
| Polarization: | Linear, vertical | | |
| Transmission: | > 99.5% | | |
| Damage Threshold: | > 500MW/cm ² | | |
| <u>Performance at:</u> | <u>1064nm</u> | | |
| Bragg Angle (mrad): | 3.8 | | |
| Separation Angle (mrad): | 7.6 | | |
| Aperture -H | <u>1mm</u> | <u>1.5mm</u> | <u>2mm</u> |
| RF power for max DE: | 10W | 15W | 20W |
| First Order Diffraction Efficiency, 15W maximum CW RF drive, | >80% | >80% | >75% |
| <u>Beam Diameter (mm):</u> | <u>0.8</u> | <u>1.6</u> | |
| Rise Time (ns): | 90 | 180 | |
| Cooling: | Conduction | | |
| Input Impedance: | 50 Ohms | | |
| VSWR: | < 1.2:1 | | |

* Please contact Isomet for alternative apertures.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
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Quality Assured.
 In-house: Crystal Growth,
 Optical Polishing,
 A/R coating, Vacuum Bonding

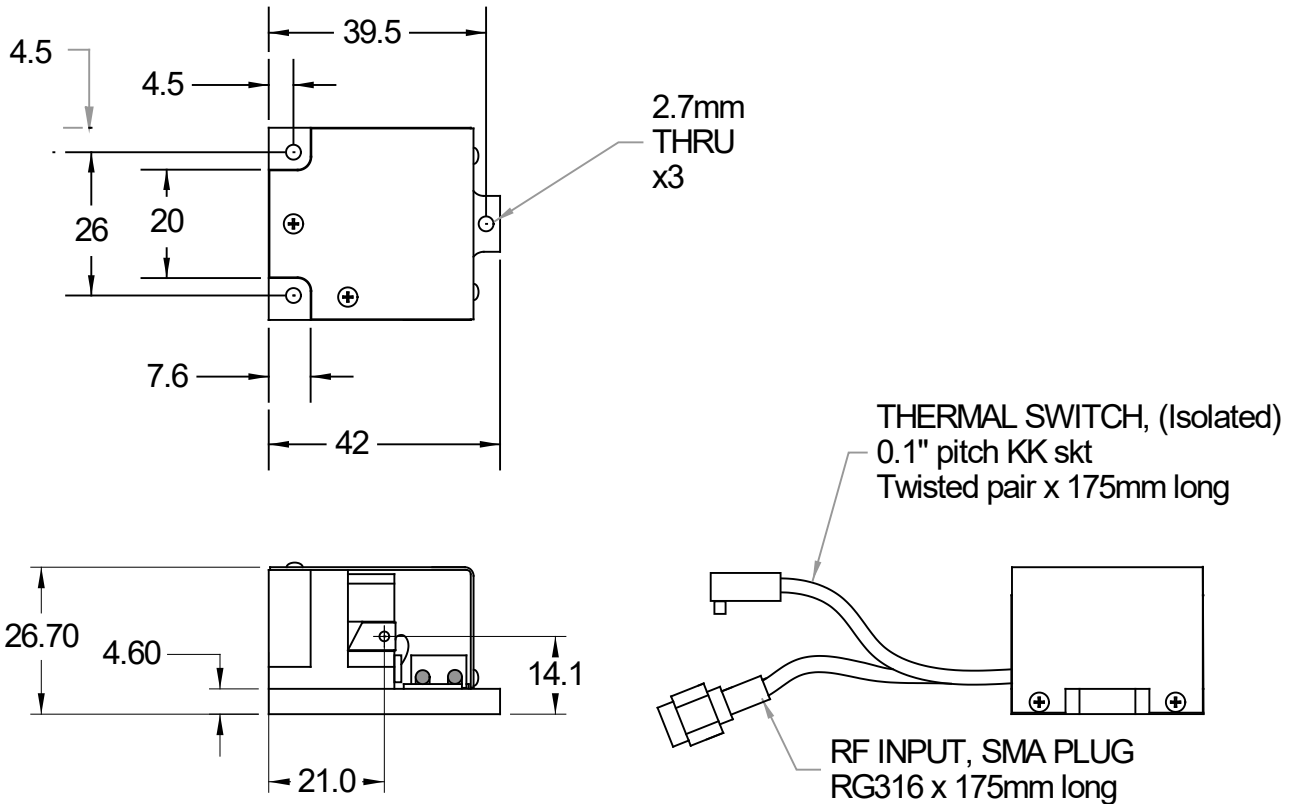


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Outline Drawing



Dimensions: mm

Ensure adequate heaksinking through mounting surface, especially at higher RF powers.
Must not exceed 40degC
Thermal Interlock switch opens at 50degC

Recommended Drive Electronics

Digital & Analog Modulation: RFA910-41

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