

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



0721

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.

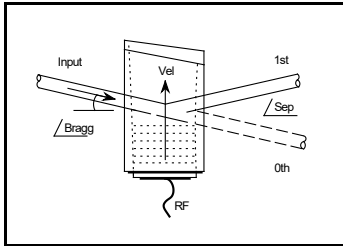
## Specifications

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 <sup>2</sup>		
<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**  
 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, 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

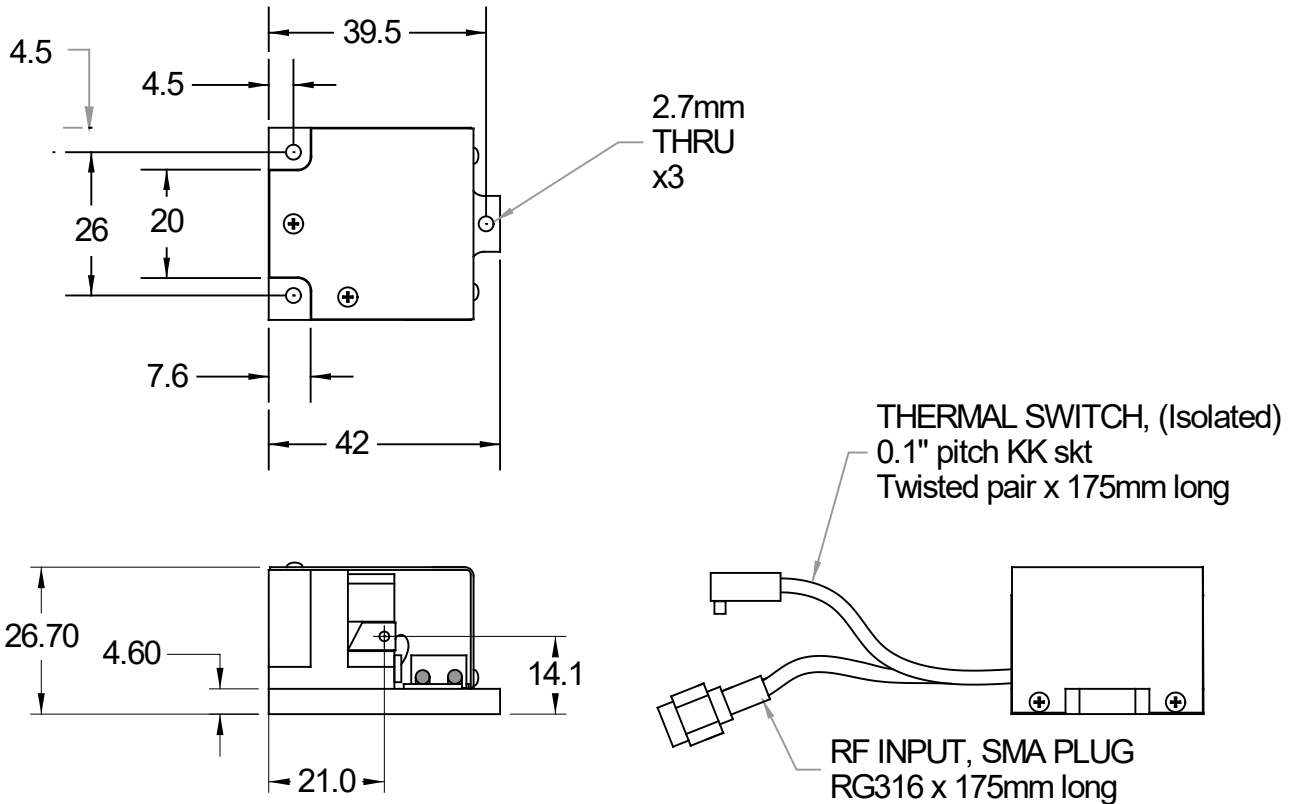


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## Outline Drawing



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: RFJ041-1-15 or -25

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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)

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