

M1377-aQ80L-1, -2 (NIR) High Power AO Modulator



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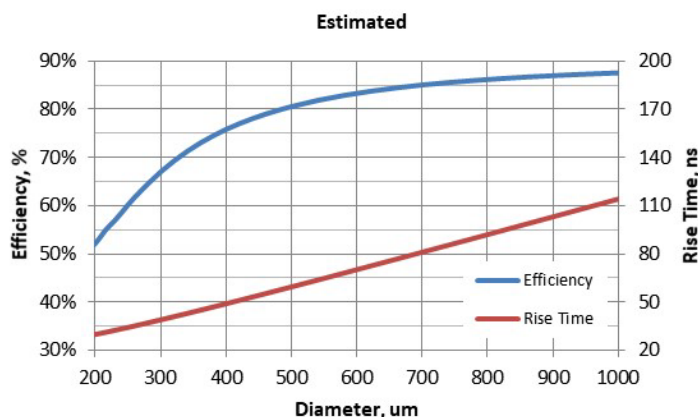
The M1377-aQ80L series are longitudinal mode, conduction cooled acousto-optic modulators designed for use with polarized DPSS Nd:YLF and Nd:YAG SHG lasers. These devices exhibit very low insertion loss and high damage threshold.

Specifications

Acoustic Frequency f_c :	80.0MHz
RF bandwidth:	10.0MHz
Interaction Material:	Quartz
Acoustic Velocity :	5700 m/s
Std A/R Coating Options:	700-900nm, 1064nm
Reflectivity:	< 0.5% / surface
Polarization:	Linear, vertical
Transmission:	> 99.5%
Damage Threshold:	> 500MW/cm ²
Active Aperture, (H):	for -1 1.0mm
	for -2 2.0mm
Clear Aperture:	4.5mm
Acoustic Mode:	Longitudinal
Maximum average (or CW) RF power:	15W.
Input Impedance / VSWR:	50 Ohms / < 1.2:1

Wavelength	700nm		800nm		1064nm	
Bragg Angle	4.9 mrad		5.6 mrad		7.5 mrad	
Separation Angle	9.8 mrad		11.2 mrad		14.9 mrad	
Active Aperture, H	1mm	2mm	1mm	2mm	1mm	2mm
RF power	5W	10W	6W	12W	11W	22W
Diffraction Efficiency	>85%	>85%	>85%	>85%	>85%	>75% *

* For pulsed applications, peak efficiency >85% (90% typical) provided the RF drive power is duty cycled.



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.

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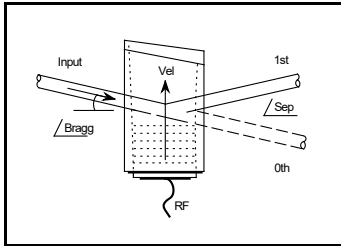
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding

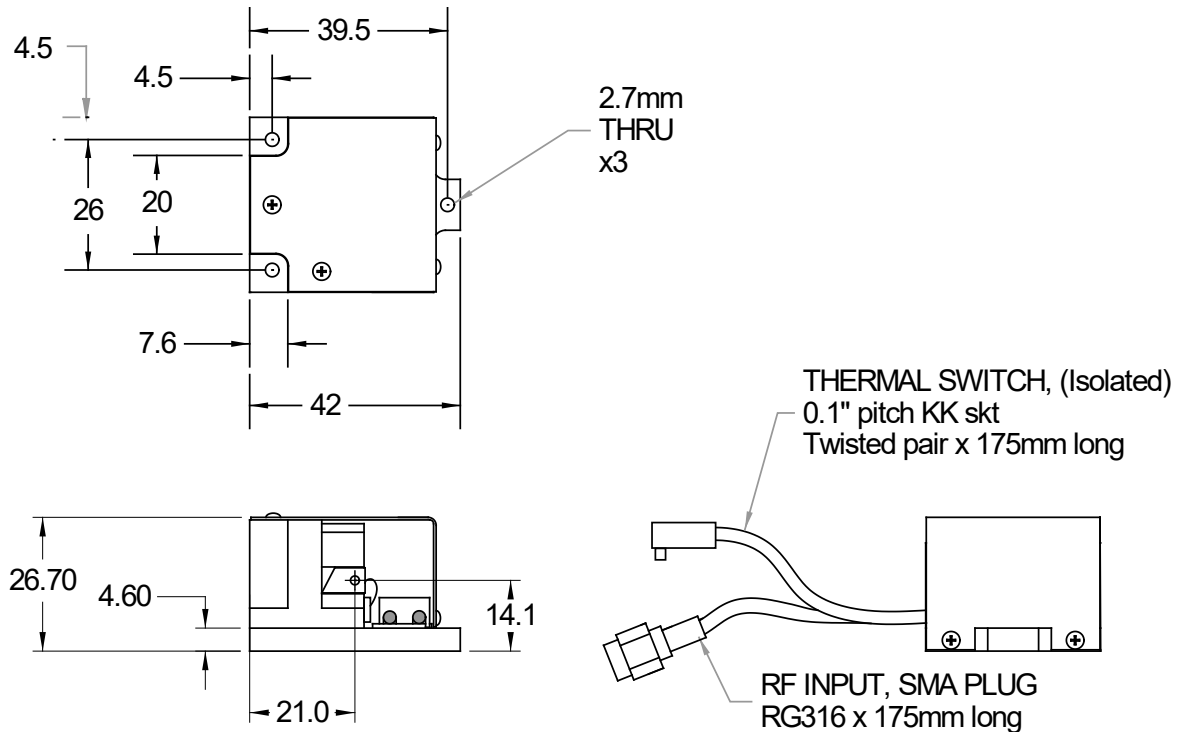


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Outline Drawing



Conduction Cooled

Dimensions: mm

Ensure adequate heatsinking through mounting surface

Must not exceed 40degC

Optional Thermal Interlock switch shown. Opens at 50degC. No connection required with 552F- drivers.

Recommended Drive Electronics

Dual Modulation, 7W: 552F-7
Dual Modulation, 15W: RFJ080-1-15 (RFJ080-1-25*)

* For pulsed, duty cycled applications, where peak RF power exceeds CW rating of AO device.

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