

Q1405-aQ80L-0.7 (NIR) AO Modulator / Q-Switch



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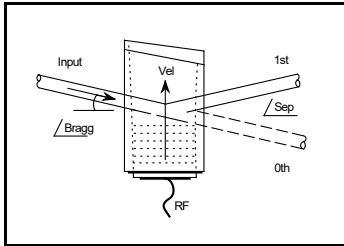
The Q1405-aQ80L series are longitudinal mode, conduction cooled acousto-optic modulators/Q-switches designed for use with polarized DPSS lasers. These devices exhibit very low insertion loss and high damage threshold.

Specifications

Acoustic Frequency f_c :	80.0MHz	
RF bandwidth:	10.0MHz	
Interaction Material:	Quartz	
A/R Coating Options:	1064nm	
Reflectivity:	< 0.5% / surface	
Active Aperture:	0.7mm	
Clear Aperture:	4.5mm	
Acoustic Mode:	Longitudinal	
Rise/Fall time:	114nsec / mm beam waist	
Maximum average (or CW) RF power:	15W.	
Polarization:	Linear, vertical	
Transmission:	> 99.5%	
Damage Threshold:	> 500MW/cm ²	
<u>Performance at:</u>	<u>1064nm</u>	
Bragg Angle (mrad):	7.5	
Separation Angle (mrad):	14.9	
<u>RF power</u>	<u>10W</u>	<u>15W</u>
Diffraction Efficiency, >0.5mm beam	>75%	>80%
<u>Beam Diameter:</u>	<u>0.25mm</u>	<u>0.5mm</u>
Rise Time:	36ns	57ns
Deflection Efficiency, ~12W drive	70%	80%
Cooling:	Conduction	
Input Impedance:	50 Ohms	
VSWR:	< 1.2:1	

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 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.
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Quality Assured.
 In-house: Crystal Growth,
 Optical Polishing,
 A/R coating, Vacuum Bonding

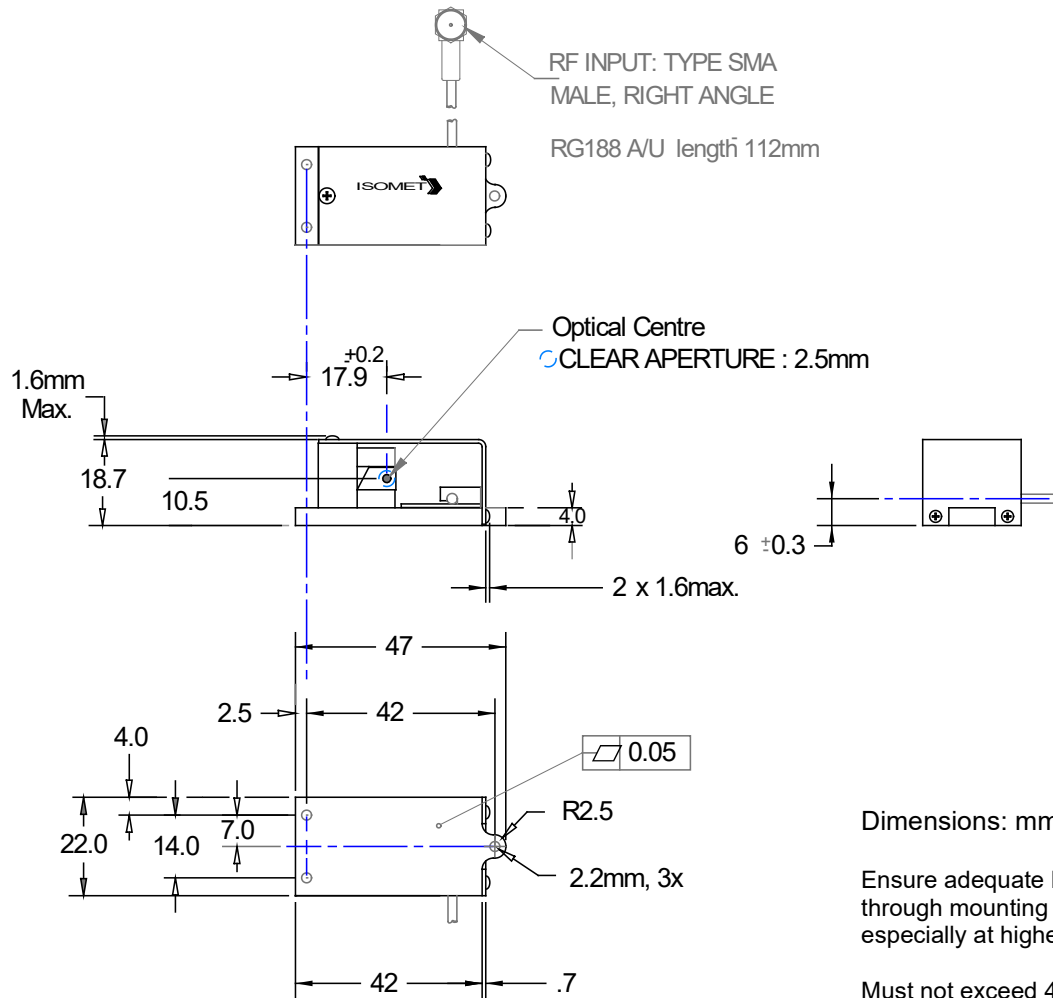


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Outline Drawing



Dimensions: mm

Ensure adequate heatsinking through mounting surface, especially at higher RF powers.

Must not exceed 40degC

Recommended Drive Electronics

Dual Modulation: RFJ080-1-15 or -25

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