

D1460(M)-aQ80L-4, (-6)

Acousto-Optic Modulator



3426

Robust AO Deflector designed for High Power NIR Fibre and DPSS laser applications.

SPECIFICATIONS

A/ R wavelength: 1064nm (others on request)
 Interaction Medium: Quartz
 Acoustic Velocity: 5.7mm/ μ s

Centre Frequency (f_c): 80MHz
 RF Bandwidth (Δf): >40MHz
 Input Impedance: 50 Ω
 Input VSWR: < 1.5:1 at 80MHz

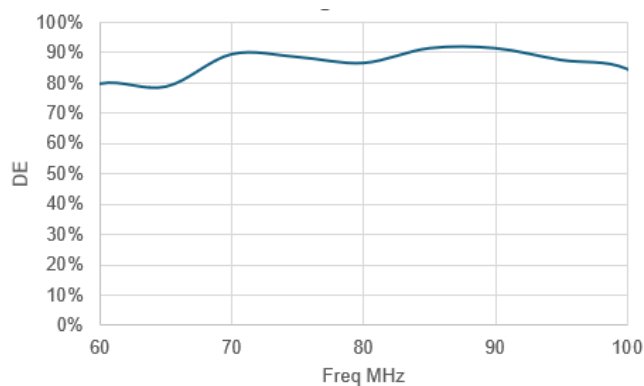
Clear Aperture: 9 mmH x 18 mmL

<u>Model:</u>	<u>-aQ80L-4</u>	<u>-aQ80L-6</u>
Active Aperture, H x L:	4 x 14mm	6 x 14mm
RF power for max DE:	50W,cw	60W,cw
Max CW/average RF power (total):	60W	60W
Optical Power (CW):	500 Watts (4mm)	
Optical Insertion Loss:	< 3%	
Reflectivity:	< 0.5%/surface	
Laser Polarization:	Vertically Polarized	

Bragg Angle: 7.47 mrad
 Separation Angle at f_c : 14.9 mrad
 Scan Angle (Δf): 7.5 mrad

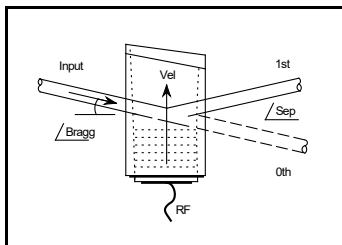
Deflector Performance: Using 4 x 4mm beam
 Total Efficiency: ~80% across 40MHz scan
 Access Time, 0.7 μ sec
 Resolution: 28 resolvable spots
 >1000 non-resolvable points

Typical sweep response



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 Web Page: WWW.ISOMET.COM

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

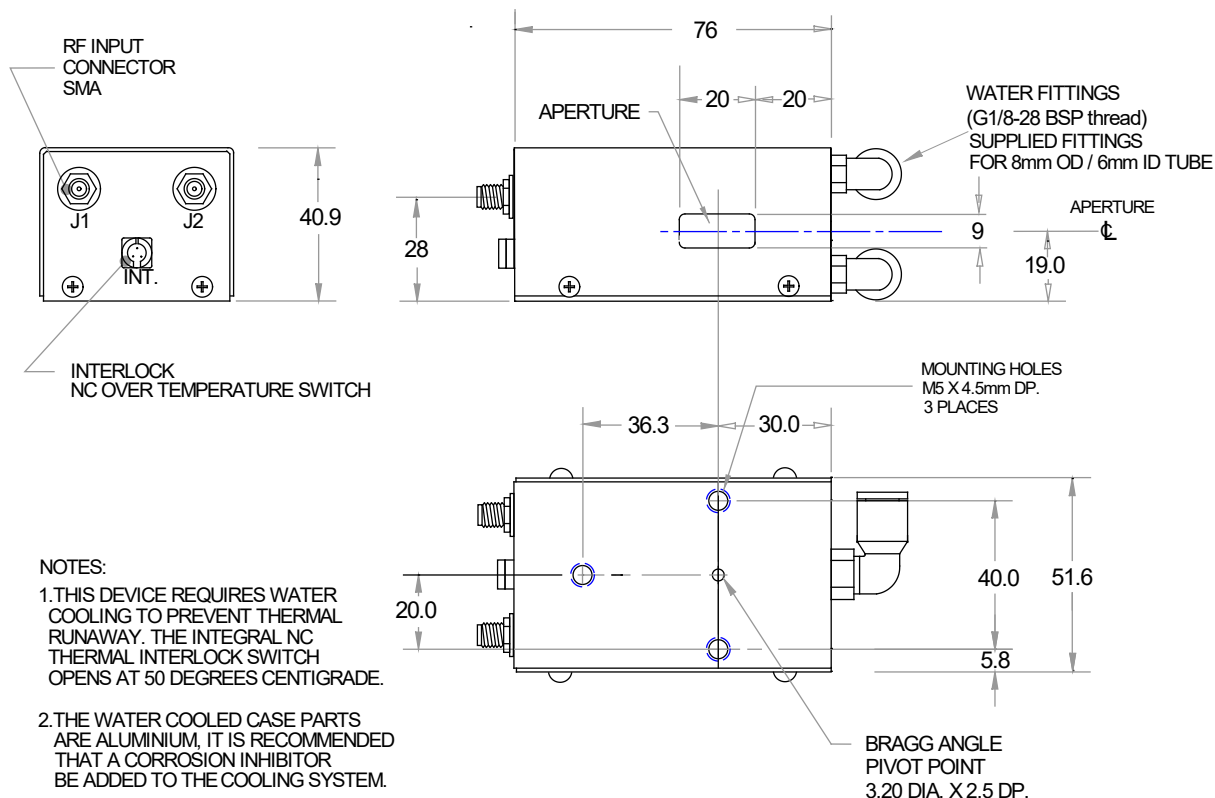


D1460(M)-aQ80L-4, (-6) Acousto-Optic Modulator



3426

OUTLINE DRAWING (Metric)



Use suffix (M) for M3 metric fixing threads.

Water Cooling (minimum): 1litre/minute at < 20°C

Water cooled case parts are made from Aluminium.
Brass (D1460B-) or Copper (D1460C-) case part alternatives are available as an option.

Refer application note AN1906 regarding Coolant Specification

Recommended Drivers

VCO based: RFA3080-2-25
Synthesizer: iMS4-P with amplifier RFA080-2-30

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
ISOMET CORP, 10342 Battleview Parkway, Manassas, VA 20109, USA.
Tel: (703) 321 8301 Fax: (703) 321 8546
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

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