

# D1346(M)-aQ80-4, -6

## Acousto-Optic Modulator



1422

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/ $\mu$ s

Centre Frequency (fc): 80MHz  
 RF Bandwidth ( $\Delta$ f): 25MHz  
 Input Impedance: 50 $\Omega$   
 Input VSWR: < 1.5:1 at 80MHz

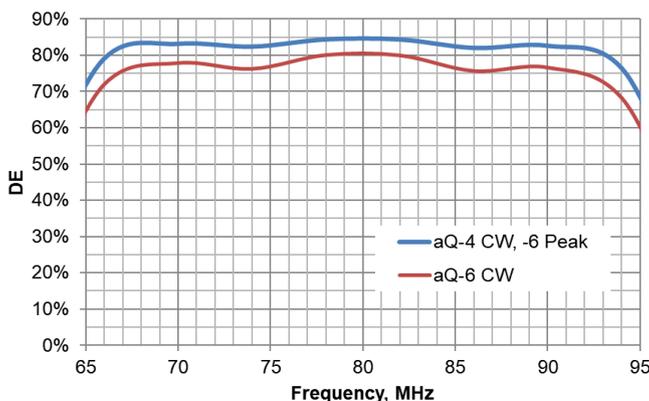
Clear Aperture: 9 mmH x 18 mmL

<u>Model:</u>	<u>-aQ80-4</u>	<u>-aQ80-6</u>
Active Aperture, H x L:	4 x 14mm	6 x 14mm
RF power for max DE:	46W,cw	70W,peak
Max CW/average RF power (total):	50W	50W
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 fc: 14.9 mrad  
 Scan Angle ( $\Delta$ f):: 4.67 mrad

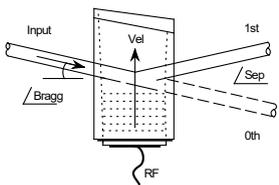
Deflector Performance: Using 4 x 4mm beam  
 Total Efficiency ~80% across 25MHz scan  
 Access Time, 0.7 $\mu$ sec  
 Resolution: 17 resolvable spots  
 >1000 non-resolvable points

Estimated (Single Mode Input)



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



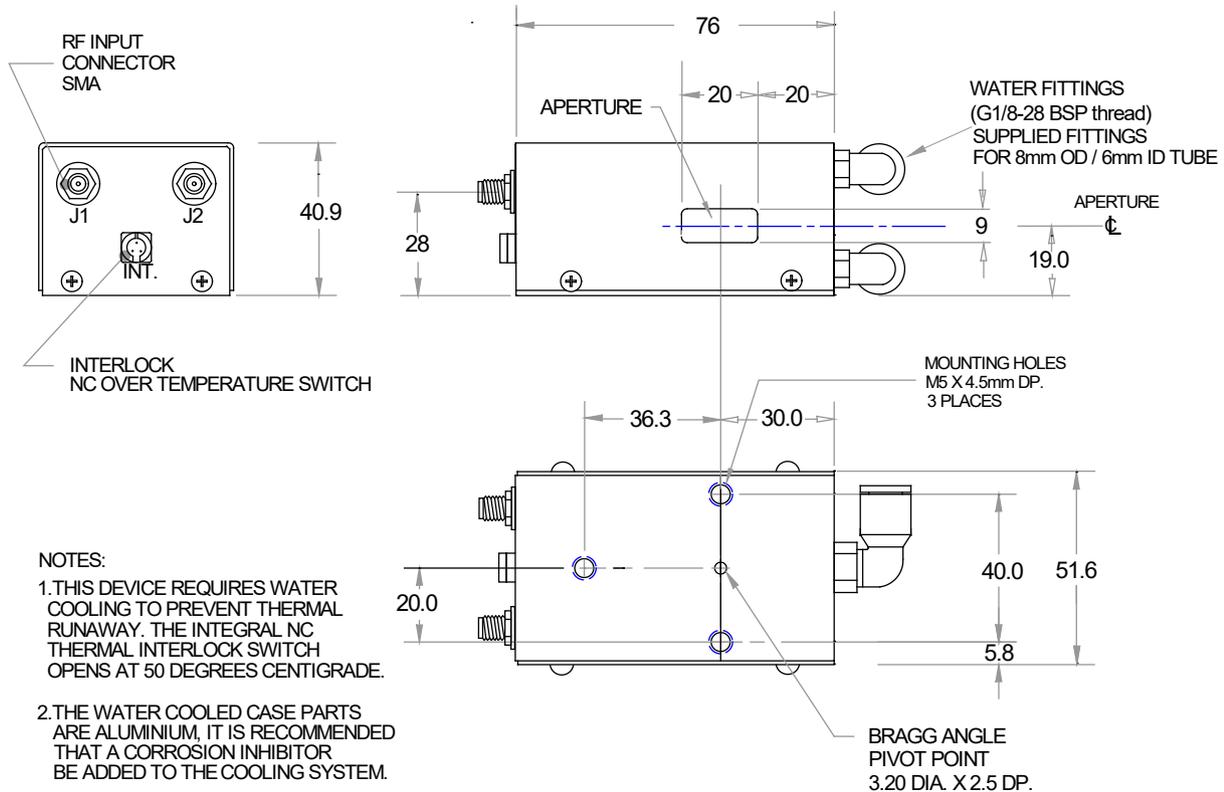
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### OUTLINE DRAWING (Metric)



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 (D1346B-) or Copper (D1346C-) case part alternatives are available as an option.

**Refer application note AN1906 regarding Coolant Specification**

### Recommended Drivers

VCO based: RFA3080-2-25  
 Synthesizer: iMS4-L (or -P) with amplifier RFA080-2-25

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