

D1340-aQ110-5



UV Acousto-Optic Modulator/Deflector (Preliminary Data)

1115

The D1340-aQ110 is high speed, high efficiency AO deflector developed specifically for industrial 355nm laser applications including:

- Material Processing
- Drilling
- Surface texturing
- Micro machining

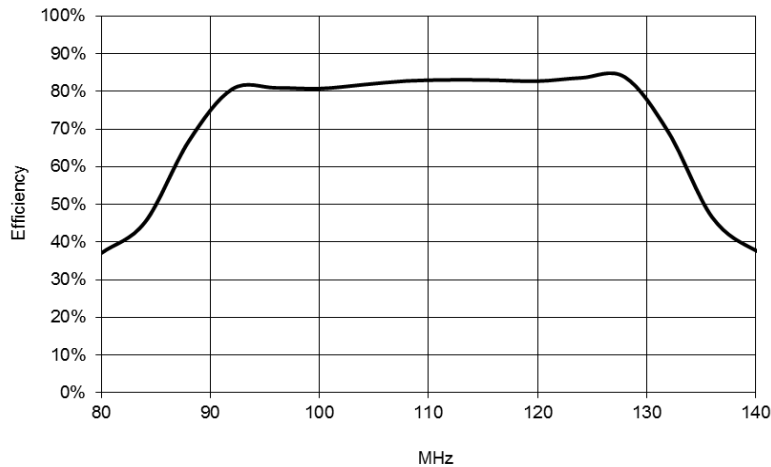
SPECIFICATIONS

Operating Wavelength:	355nm
Centre Frequency (fc):	110MHz
RF Bandwidth:	40MHz minimum
Diffraction Efficiency:	>85% at fc
Input Impedance:	50Ω(Nominal)
Input VSWR:	<1.5:1 @ 110MHz
Active Aperture:	5mm
Optical Insertion Loss:	<3% (<2% typical)
Reflectivity:	<0.5%/Surface
DC Contrast Ratio:	>2500:1 min (5000:1 typical)
Laser Polarization:	Vertical, Perpendicular to scan
Water Cooling (Min):	2L/minute @ 25deg C

PERFORMANCE vs. WAVELENGTH

Wavelength:	355nm
RF Drive Power:	10.0W
Bragg Angle:	3.4mrad
Separation Angle (at fc):	6.8mrad
Scan Angle 90-130MHz:	2.5mrad

ESTIMATED SCAN RESPONSE



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

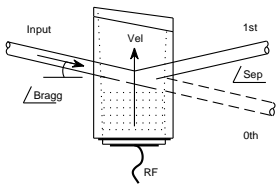
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Quality Assured.

**In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding**



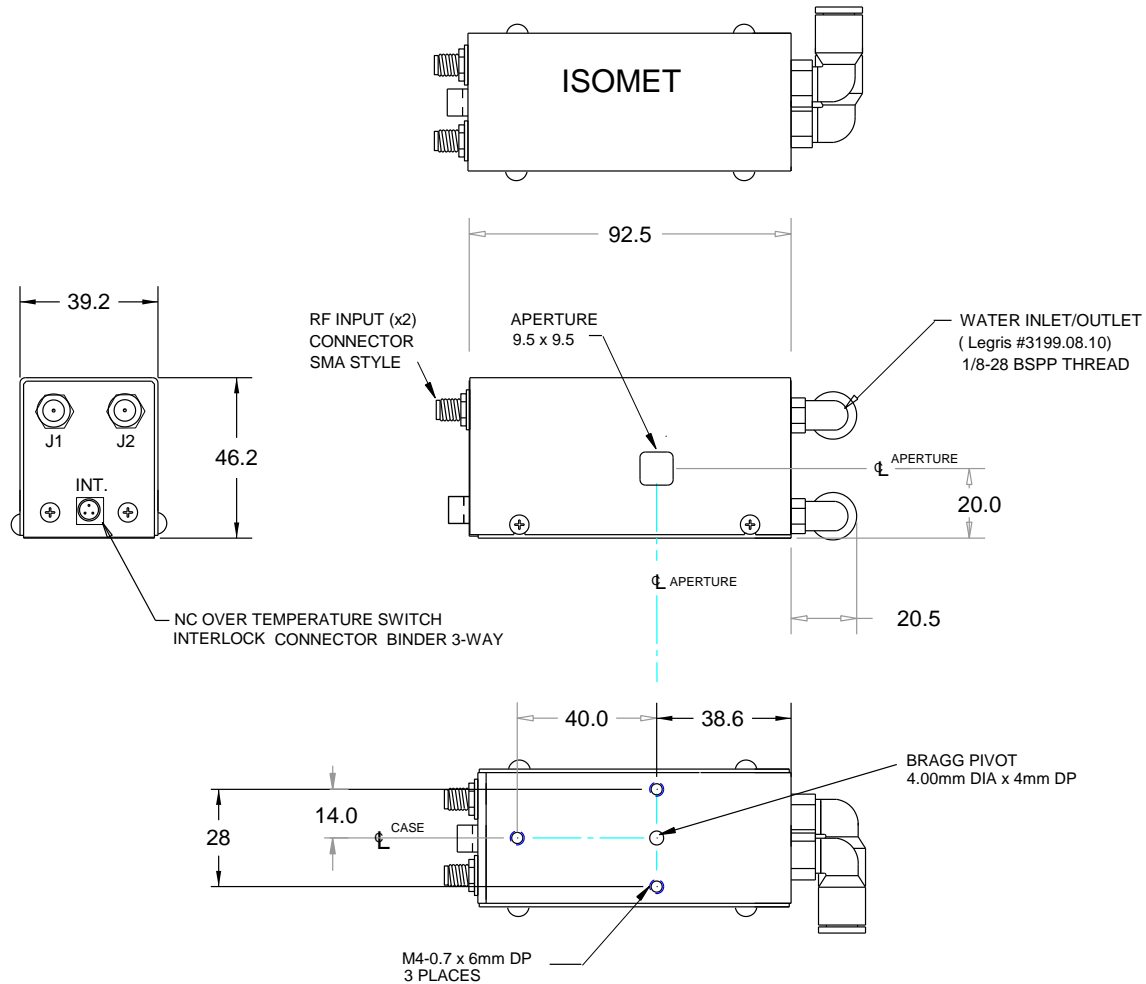
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OUTLINE DRAWING



Water cooled case parts are Aluminium.
Refer application note AN0901 regarding Coolant Specification

DRIVERS

VCO based: Driver/Amplifier RFA333-2
Synthesizer based: iMS-4 programmable synthesizer + RFA0110-2 amplifier

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