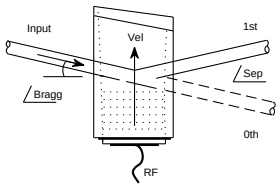


D1211-aQ110-5-(A/R)

UV Acousto-Optic Modulator/Deflector

0215

The D1211-aQ110 has been designed specifically for use with high power 355nm lasers.
This water cooled AOD is designed for high beam pointing stability and low dynamic wavefront distortion.

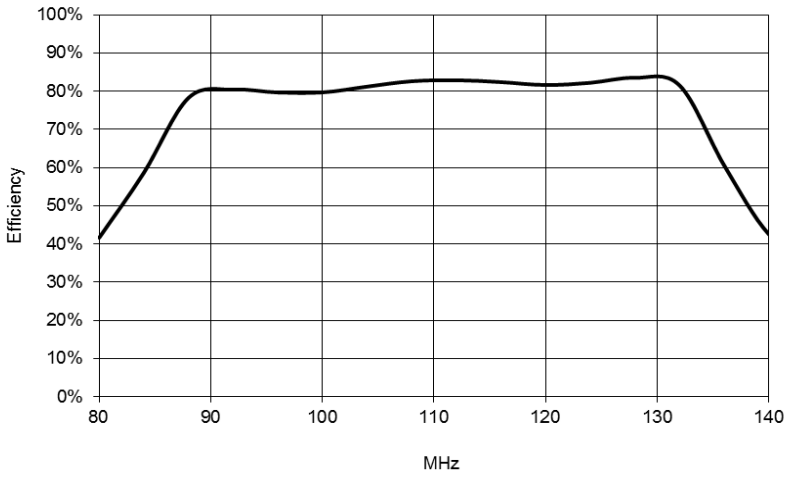
SPECIFICATIONS

Operating Wavelength:	330-360nm
Interaction medium:	Quartz
Acoustic Velocity:	5.7mm/µs
Centre Frequency (fc):	110MHz
RF Bandwidth:	40MHz
Diffraction Efficiency:	80% +/- 5% across scan
Input Impedance:	50Ω (nominal)
Input VSWR:	<1.5:1 @ 110MHz
Active Aperture:	5mm (nominal)
Optical Insertion Loss:	<3% (<2% typical)
Reflectivity:	<0.5%/ surface
DC Contrast Ratio:	>2500:1 min (5000:1 typical)
Laser Polarization:	Vertical, Perpendicular to Base
Water Cooling (Min):	1L/minute @ 25deg C

PERFORMANCE vs. WAVELENGTH

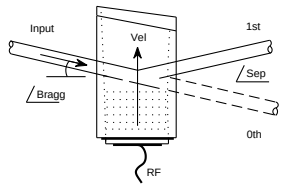
Wavelength:	355nm
RF Drive Power:	12.0W
Bragg Angle:	3.4mrad
Separation Angle (at fc):	6.8mrad
Scan Angle 90-130MHz:	2.5mrad

ESTIMATED SCAN RESPONSE



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, 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



D1211-aQ110-5-(A/R)

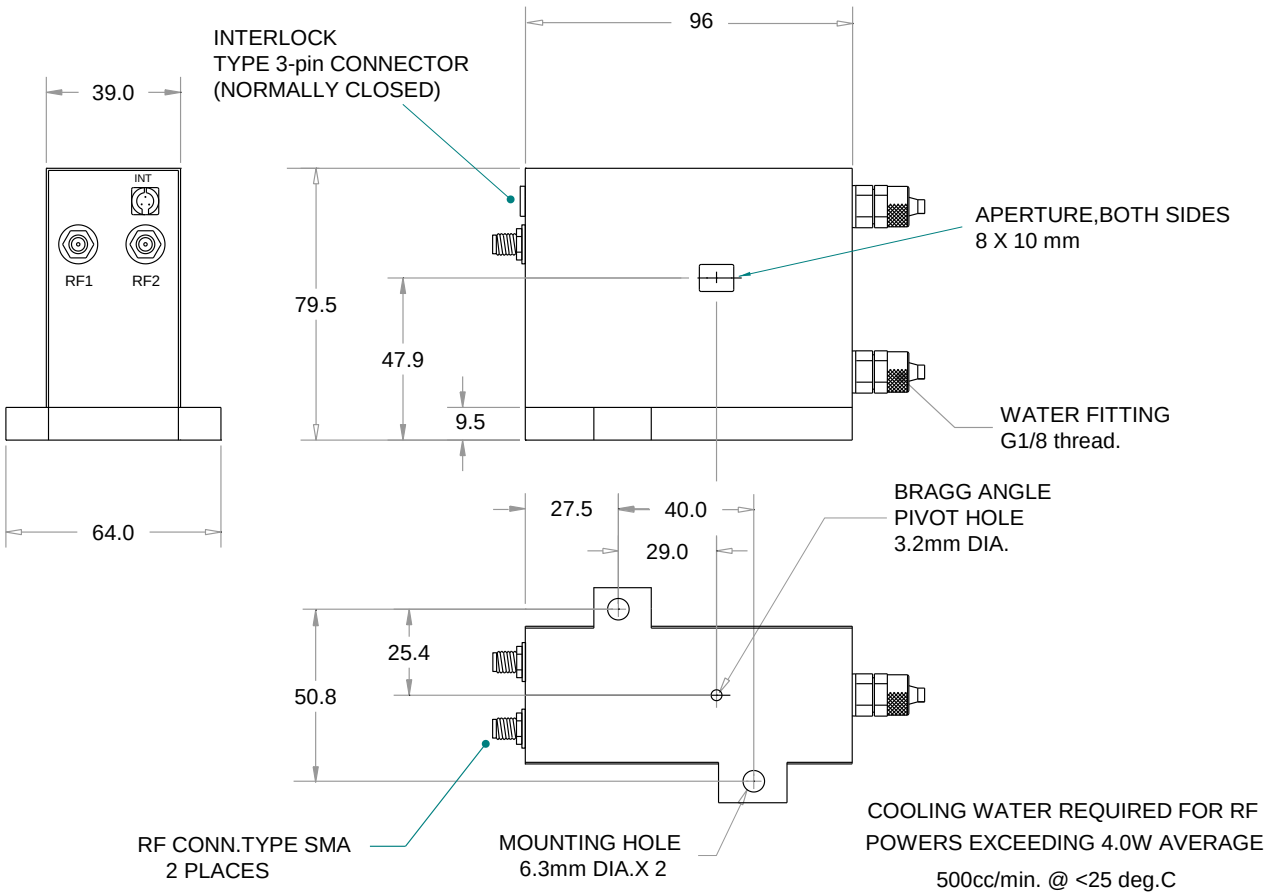
UV Acousto-Optic Modulator/Deflector

0215

Suggested RF Drive Electronics:

Tuneable with modulation: RFA333/2

OUTLINE DRAWING



Cooling water required for RF powers exceeding 4W average.
An internal isolated thermal interlock switch opens at 35°C

Water cooled case parts are Aluminium.
It is recommended that a corrosion inhibitor is added to the cooling system.

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