

D1449-aQ120L-4, -6 (1um)

IR Acousto-Optic Deflector

(Preliminary)



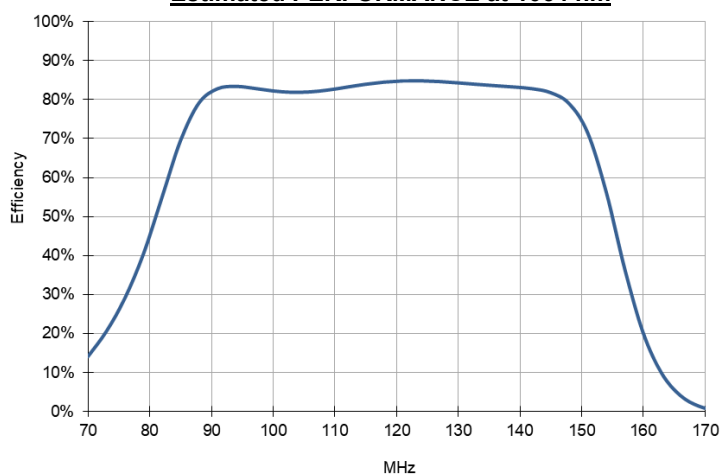
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Robust AO Deflector designed for use with high power NIR laser applications.

SPECIFICATIONS

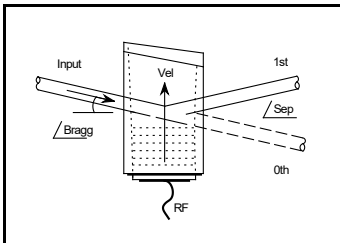
A/ R wavelength:	1064nm (others on request)
Interaction Medium:	Quartz
Acoustic Velocity:	5.7mm/ μ s
Centre Frequency (fc):	120MHz
RF Bandwidth (Δ f):	60MHz
Input Impedance:	50 Ω
Input VSWR:	< 2:1 at 120MHz
Clear Aperture:	14mm
Active Aperture: H=4	4mm x 10mm (CW operation)
H=6	6mm x 10mm (Duty cycled operation)
Optical Power:	600 Watts (CW)
Optical Insertion Loss:	< 3%
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Vertical
<u>Deflector Performance:</u>	Using 4mm beam
Diffraction Efficiency (DE)	>80% across 60MHz scan
Access Time:	0.7 μ sec
Resolution:	40 resolvable spots
	>1000 non-resolvable points (driver dependent)
RF Power, total	80 Watts maximum
Bragg Angle:	11.1mrad
Separation Angle at fc:	22.2mrad
Scan Angle (Δ f)::	11mrad

Estimated PERFORMANCE at 1064 nm



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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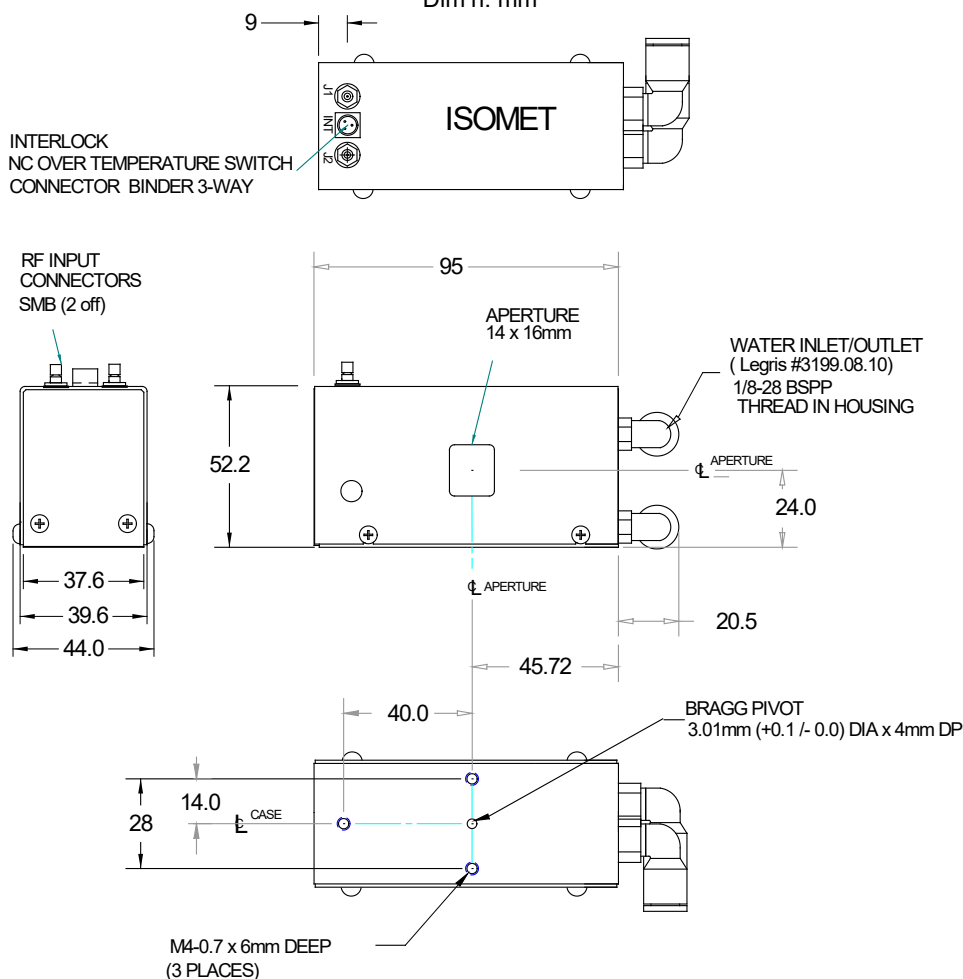
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OUTLINE DRAWING

Dim'n: mm



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

All case parts in contact with coolant are fabricated in Aluminium

Refer application note AN1906 regarding Coolant Specification

Options:

- BR: Case parts in contact with coolant fabricated in Nickel plated Brass
- M : Metric M5 mounting hole threads

Recommended Drivers

Synthesizer model: iMS4-P with amplifier AM1-120T-2-50

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