

D1445(M)-T220L-1.5

Acousto-Optic Deflector

(Preliminary)



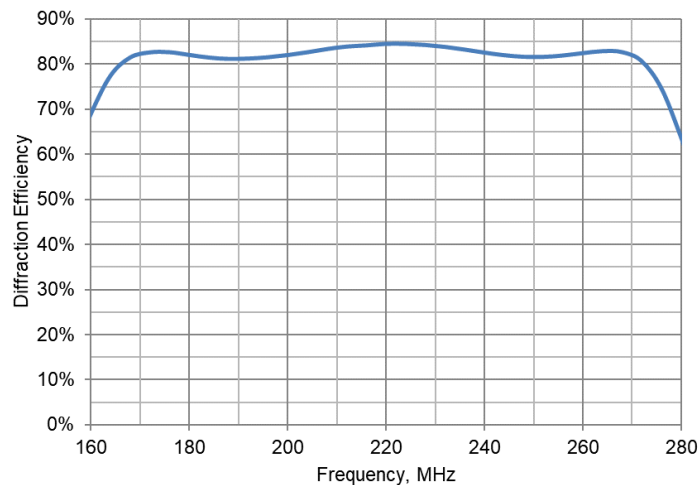
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The D1445-T220L is an AO deflector designed for operation in the deep blue spectrum. This deflector incorporates two section acoustic beam steering to produce an efficient uniform scan response. Applications include high speed, multi-point or continuous beam scanning.

SPECIFICATIONS

Spectral Range:	0.36 > 1.5 μ m	
Operating A/R Wavelengths:	390-440 nm	
Optical Power:	5 Watts **	
Interaction Medium:	Tellurium Dioxide (TeO ₂)	
Acoustic Velocity:	4.2mm/ μ s	
Centre Frequency (Fc):	220MHz (+/- 10% for best sweep)	
RF Bandwidth:	>85MHz, 100MHz typical	
Input Impedance:	50 Ω nominal.	
Typical resolution, 1.5mm beam width:	~30 spots	
VSWR:	<2:1 @ Fc	
Clear Aperture:	2mm	
Active Aperture Height:	1.5mm	
Static Insertion Loss	<3% at 0.4 μ m	
Reflectivity:	< 0.5%/surface	
Laser Polarization:	Vertical preferred	
Bragg Angle:	399nm	411nm
Scan Angle, 92MHz sweep:	10.45mrad	10.76mrad
RF Power (total):	8.75mrad	9.00mrad
	< 1W	< 1W

ESTIMATED SCAN PERFORMANCE at 399nm *

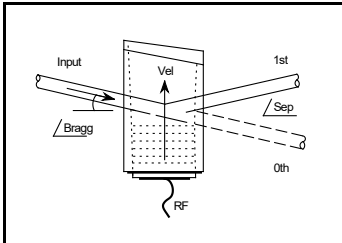


* Single mode input

** For higher powers please contact Isomet

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



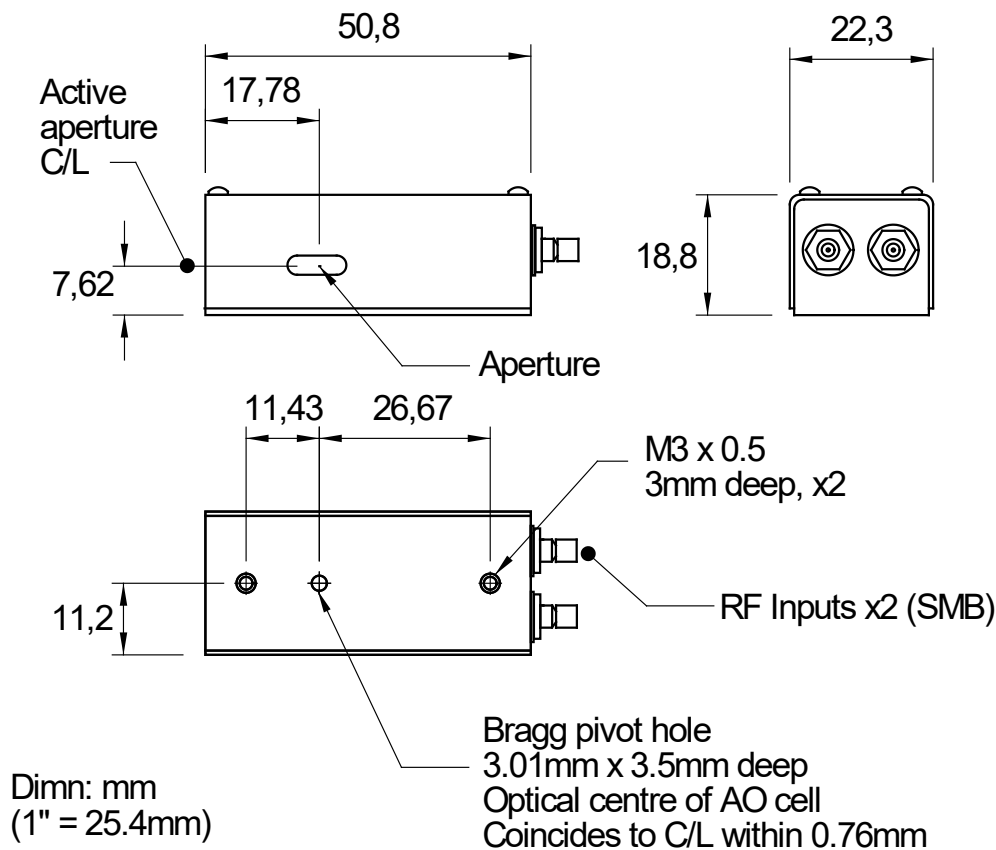
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OUTLINE DRAWING



RF DRIVERS

Isomet Synthesizer: iMS2-HF + (2x) AF0-200T-1-1 amplifiers.

External freq' source: BSM1319-220 splitter/delay module + (2x) AF0-200T-1-1 amplifiers.

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