

D1445(M)-T180L-2



Acousto-Optic Deflector

(Preliminary)

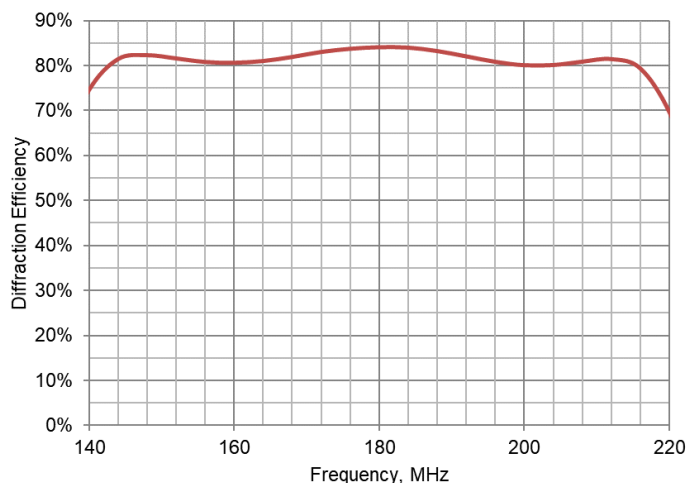
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The D1445-T180L is an AO deflector designed for operation in the blue-green spectrum. This deflector incorporates two section acoustic beam steering to produce an efficient uniform scan response. Applications include high speed, multi-point or continuous beam scanning.

SPECIFICATIONS

Spectral Range:	0.36 > 1.5 μ m	
Operating A/R Wavelengths:	488-633 nm	
Optical Power:	5 Watts **	
Interaction Medium:	Tellurium Dioxide (TeO ₂)	
Acoustic Velocity:	4.2mm/ μ s	
Centre Frequency (Fc):	180MHz (+/- 10% for best sweep)	
RF Bandwidth:	>80MHz, 100MHz typical	
Typical resolution, 2mm beam width:	~40 spots	
Input Impedance:	50 Ω nominal.	
VSWR:	<2:1 @ Fc	
Clear Aperture:	2.5mm	
Active Aperture Height:	2mm	
Static Insertion Loss	<3% at 0.4 μ m	
Reflectivity:	< 0.5%/surface	
Laser Polarization:	Vertical preferred	
Bragg Angle:	488nm	532nm
Scan Angle, 80MHz sweep:	10.45mrad	11.4mrad
RF Power (total):	9.3mrad	10.0mrad
	< 1.3W	< 1.5W

ESTIMATED SCAN PERFORMANCE at 532nm *

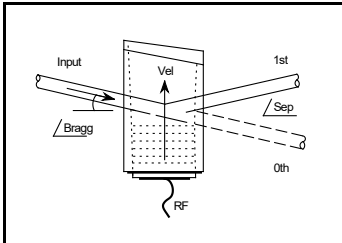


* Single mode input

** For higher powers please contact Isomet

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



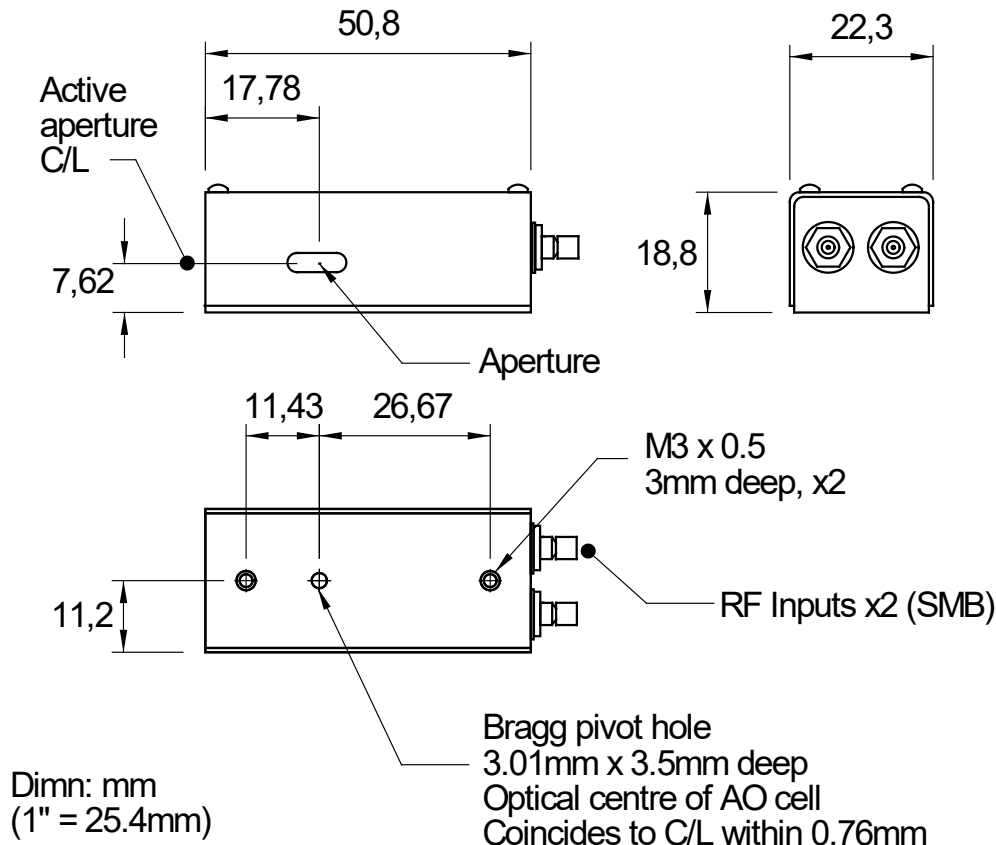
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OUTLINE DRAWING



RF DRIVERS

Isomet Synthesizer: iMS4-P + (2x) AF0-200T-1-1 amplifiers.

External freq' source: BSM1319-180 splitter/delay module + (2x) AF0-200T-1-1 amplifiers.

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