

# D1412-T80L-3

## Acousto-Optic Modulator

Preliminary



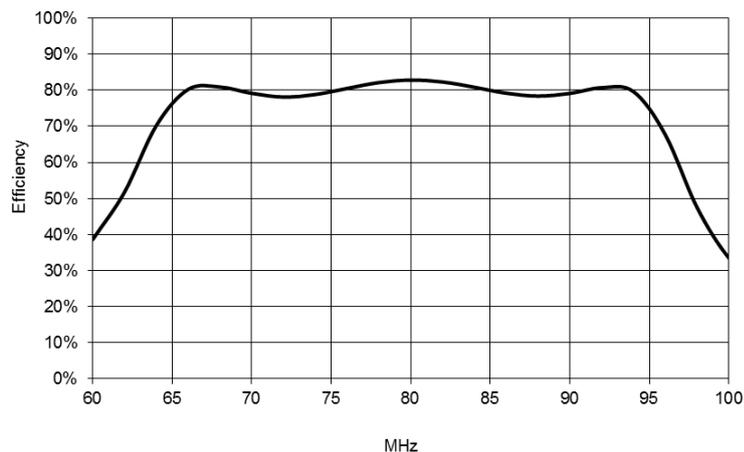
1520

Compact AO Deflector designed for High Power Fibre and DPSS, NIR lasers. The unit incorporates two section acoustic beam steering to produce a flat scan response. Applications include high speed, sequential multi-point scanning or fast sweep operation.

### SPECIFICATIONS

Spectral Range:	0.36 > 1.5µm
Standard A/R Wavelengths:	1.1µm
Optical Power:	150 Watts **
Interaction Medium:	Tellurium Dioxide (TeO <sub>2</sub> )
Acoustic Velocity:	4.2mm/µs
Centre Frequency (Fc):	80MHz nominal
RF Bandwidth:	30MHz
Input Impedance:	50Ω Nominal
VSWR:	<1.5:1 @ Fc
Clear Aperture:	6.5mm
Active Aperture Height:	3mm
Static Insertion Loss	<3% at 1.1µm
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Any
RF Power (total):	5 Watts nominal
Bragg Angle:	10.2 mrad
Typical Scan Angle:	7.7 mrad
Cooling:	Conduction to a cooled surface required

### TYPICAL SCAN PERFORMANCE at 1.1µm \*

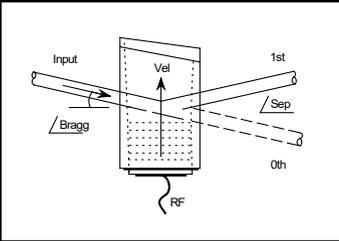


\* Single mode input

\*\* For higher powers please contact Isomet

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**  
 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.  
 Tel: (703) 321 8301 Fax: (703) 321 8546  
 E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

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



# D1412-T80L-3

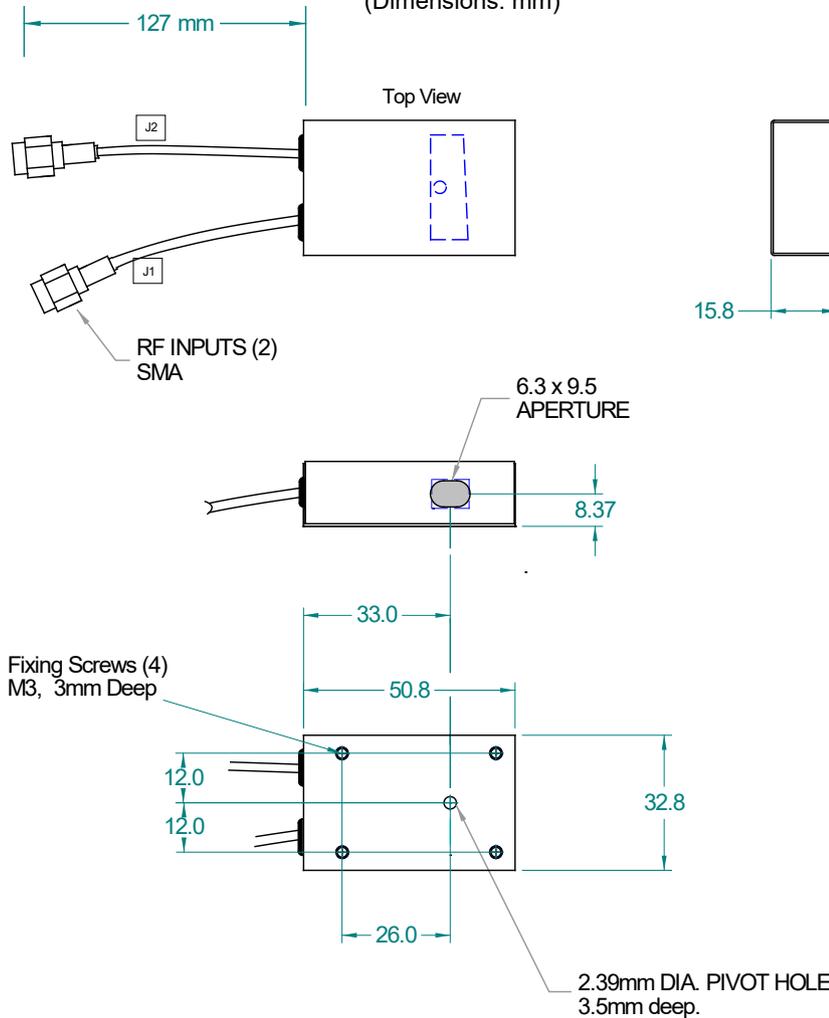
## Acousto-Optic Modulator

Preliminary



1520

### OUTLINE DRAWING (Dimensions: mm)



### Recommended Driver Options

VCO based: RFA3080-2-5

or

Synthesizer based: 1 off IMS4-P plus 2 off AF0-85T-4 amplifiers

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**  
 ISOMET CORP, 10342 Battleview Parkway, Manassas, VA 20109, USA.  
 Tel: (703) 321 8301 Fax: (703) 321 8546  
 E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

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