

# M1080-T80L-1.5(M)

(Metric)  
NIR Acousto-Optic Modulator



0615

Compact AO Modulator designed for Medium to High Power NIR Fibre and DPSS laser applications

## SPECIFICATIONS

Spectral Range: 0.36 > 1.5 $\mu$ m  
 A/R Wavelengths: 0.7 – 0.9 $\mu$ m or 1.064 $\mu$ m  
 Interaction Medium: Tellurium Dioxide (TeO<sub>2</sub>)  
 Acoustic Velocity: 4.2mm/ $\mu$ s

Centre Frequency (Fc): 80MHz  
 RF Bandwidth: 30MHz  
 Input Impedance: 50 $\Omega$  Nominal  
 VSWR: <1.5:1 @ Fc

Clear Aperture: 3.5mm  
 Active Aperture: 1.5mm  
 Static Insertion Loss: <3% at 1.1 $\mu$ m  
 Reflectivity: < 0.5%/Surface  
 Laser Polarization: Any

DC Contrast Ratio: >1000:1 min (>2000:1 typical)

Cooling: Conduction

Outline Dimensions: (See reverse)

## TYPICAL PERFORMANCE

Optical Power: 20 Watts \*\*

Beam Diameter (mm): 0.5 1.5

Optical Rise Time (ns): 77 230

Modulation Bandwidth (MHz) @ MTF = 0.5: 4 1.4

Deflection Efficiency (% @ CF) \* : >85 >85 Polarization Perpendicular to Base  
 >80 >80 Polarization Horizontal to Base

	<b>780nm</b>	<b>840nm</b>	<b>1064nm</b>
RF Power (nominal):	1.9 W	2.2 W	2.8 W
Bragg Angle:	7.4 mrad	8.0 mrad	10.5 mrad
Separation Angle at fc :	14.9 mrad	16.0 mrad	21.0 mrad

PLEASE SPECIFY OPERATING WAVELENGTH

\* Single mode input

\*\* For higher powers please contact Isomet

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

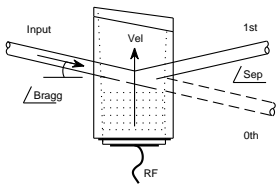
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: [ISOMET@ISOMET.COM](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**



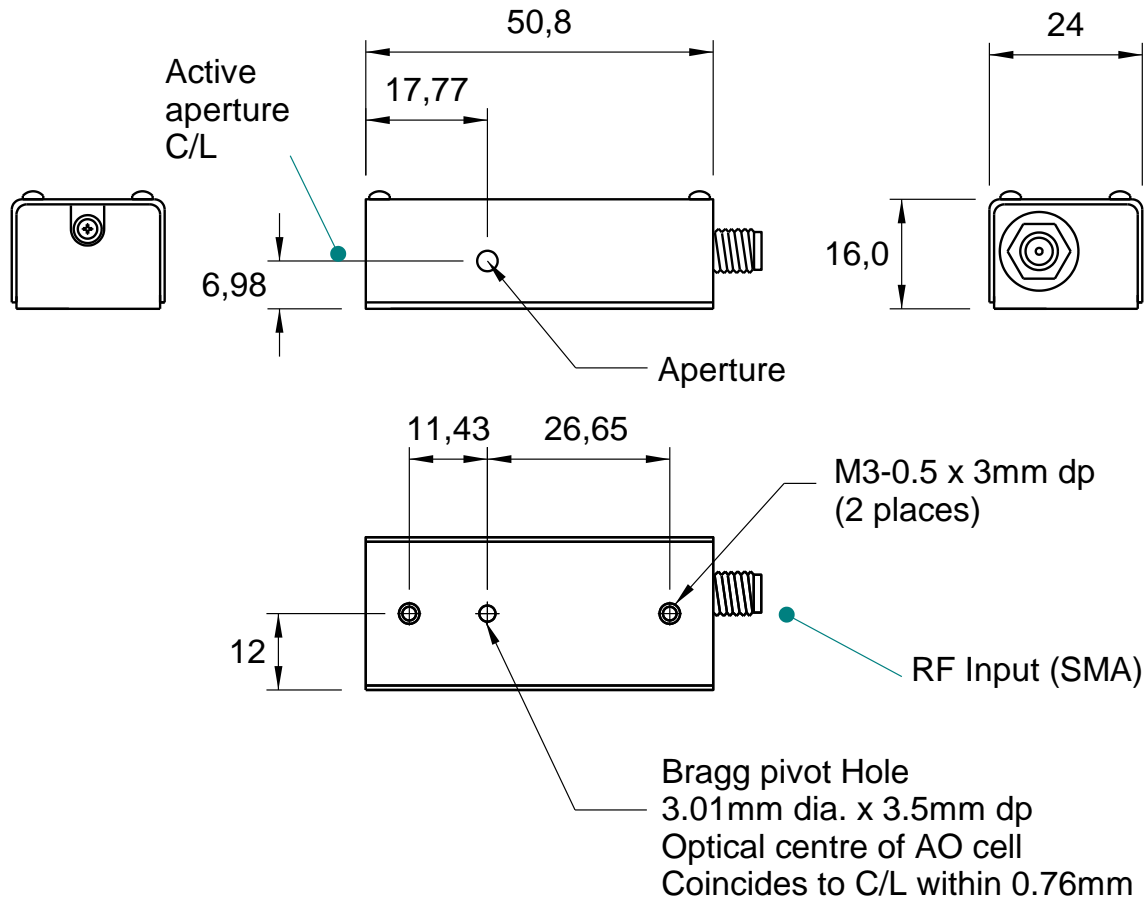
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### OUTLINE DRAWING



### Recommended Drivers

Model 522C-4 (Digital Modulation)

Model 532C-4 (Analog Modulation)

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