

# M1080-T80L

## Acousto-Optic Modulator



1106

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

### SPECIFICATIONS

Spectral Range: 0.36 > 1.5 $\mu$ m  
 Standard A/R Wavelengths: 1.0 -1.1 $\mu$ 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 at 1.1 $\mu$ m

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

RF Power: 2.7 Watts nominal

Bragg Angle: 10.5 mrad

Separation Angle at fc : 21.0 mrad

\* 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

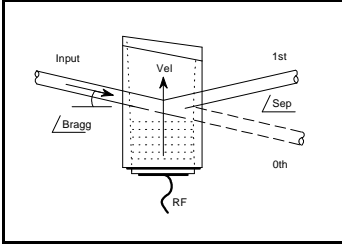
E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM)    Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

**Quality Assured.**

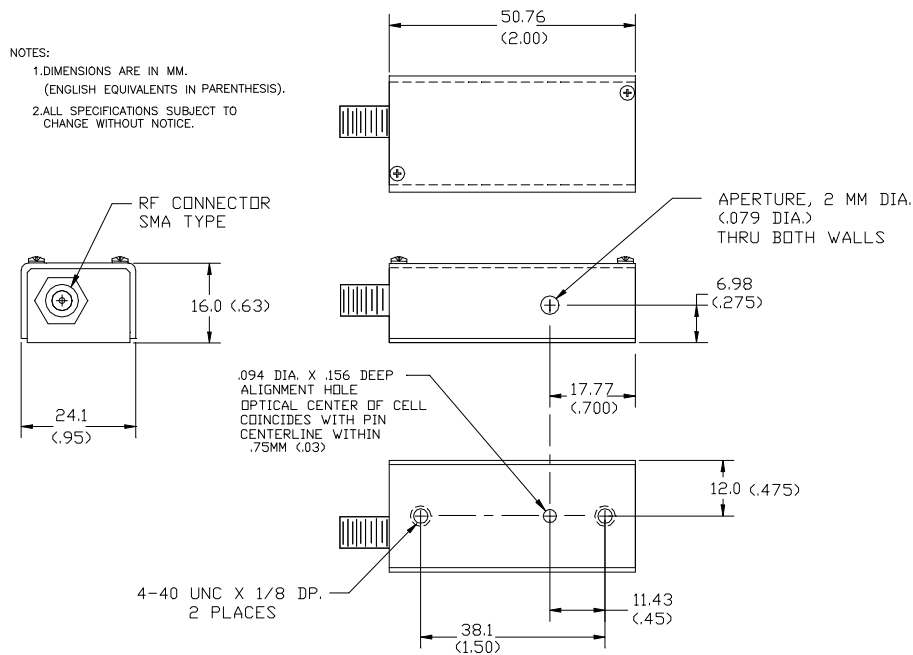
**In-house: Crystal Growth,  
 Optical Polishing,  
 A/R coating, Vacuum Bonding**

# M1080-T80L

## Acousto-Optic Modulator



### OUTLINE DRAWING



### RECOMMENDED DRIVERS

Model 522C-4 (Digital Modulation)

Model 532C-4 (Analog Modulation)

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