Large aperture AO Modulator designed for High Power NIR Fibre and DPSS laser applications

**SPECIFICATIONS**

- **Spectral Range:** 0.36 > 1.5µm
- **Standard A/R Wavelengths:** 1.03 -1.1um
- **Interaction Medium:** Tellurium Dioxide (TeO2)
- **Acoustic Velocity:** 4.2mm/µs
- **Centre Frequency (Fc):** 80MHz
- **RF Bandwidth:** 30MHz
- **Input Impedance:** 50Ω Nominal
- **VSWR:** <1.5:1 @ Fc
- **Clear Aperture:** 8mm
- **Active Aperture Height:** 6mm
- **Static Insertion Loss:** <3% at 1.1um
- **Reflectivity:** < 0.5%/Surface
- **Laser Polarization:** Any
- **DC Contrast Ratio:** >1000:1 min (>2000:1 typical)
- **Cooling:** Water cooled. Corrosion inhibitor strongly recommended. Thermal interlock switch opens at 40degC

**TYPICAL PERFORMANCE at 1.1um**

- **Optical Power:** 500 Watts CW **
- **Beam Diameter (mm):** 5
- **Optical Rise Time (ns):** 760
- **Modulation Bandwidth (MHz) @ MTF = 0.5:** 0.45
- **Deflection Efficiency (% @ CF) *:** 90 Polarization Perpendicular to Base
  85 Polarization Horizontal to Base
- **RF Power:** 6 Watts nominal
- **Bragg Angle (1.07um):** 10.2 mrad
- **Separation Angle at fc:** 20.4 mrad

* Single mode input

** For > 5mm diameter beam. For higher powers densities please contact Isomet
M1312-T80L-6-(TC)

Acousto-Optic Modulator

OUTLINE DRAWING

Dimensions: mm
Case material: Aluminium (standard) or Tellurium Copper (option –TC)

Recommended Driver(s)

Model 522C-7 (Digital Modulation)
Model 532C-7 (Analog Modulation)

Water cooled option: add –W to above driver model number