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

**SPECIFICATIONS**

- **Spectral Range:** NIR
- **Operating Wavelength:** 1.064µm / 1.1µm (others on request)
- **Interaction Medium:** Dense Flint Glass
- **Acoustic Velocity:** 3.6mm/µs
- **Centre Frequency (fc):** 40MHz
- **RF Bandwidth (Δf):** 20MHz
- **Input Impedance:** 50Ω
- **Input VSWR:** < 1.5:1 at 40MHz
- **Clear Aperture:** 9 mmH x 14 mmL
- **Active Aperture:** 4 mmH x 14 mmL
- **Optical Insertion Loss:** < 3%
- **Reflectivity:** < 0.5%/Surface
- **Laser Polarization:** Random
- **Water Cooling (minimum):** 1 litre/minute at < 20°C
- **Outline Dimensions:** (See reverse)

**TYPICAL PERFORMANCE at 1.064µm**

- **Optical Power:** 100 Watts **
- **Input beam diameter:** 2mm 4mm
- **Optical access time:** 0.35us 0.70us
- **Diffraction Efficiency:** > 85% * > 85% *
- **RF Power:** 20 Watts nominal
- **Bragg Angle:** 5.9 mrad
- **Separation Angle at fc:** 11.7 mrad

* Single mode input

** For higher powers please contact Isomet
1202-4
Acousto-Optic Modulator

OUTLINE DRAWING

THIS DEVICE REQUIRES WATER COOLING TO PREVENT THERMAL RUNAWAY
THE INTEGRAL NC THERMAL INTERLOCK SWITCH OPENS AT 32 degC
THE WATER COOLED CASE PARTS ARE ALUMINIUM
IT IS RECOMMENDED THAT A CORROSION INHIBITOR SUCH AS 'COPAL' BY FERNOX IS ADDED TO THE COOLING SYSTEM

Recommended Driver
Modulator Driver/Amplifier RFA141