Gooch & Housego specialise in providing optical components for high power fibre laser and amplifier systems. In-house control of critical manufacturing processes, from crystalline material selection and orientation, cutting, polishing and AR coating through to fibre coupling, ensure our components are of the highest optical quality.

The ‘Fibre-Q’ Acousto-Optic Modulator is designed for use in pulsed fibre laser amplifier systems. Giving optimum performance in demanding applications, such as material processing.

In addition to the standard product shown, custom configurations are available for specialised applications.

**General Specifications**

- **Interaction material:** Tellurium Dioxide
- **Wavelength:** 1550nm (other wavelengths available on request)
- **Average optical power handling:** 5W
- **Peak (pulse) optical power handling:** 30kW typical (dependent on pulse width)
- **Insertion loss:** < 3dB (< 2.5dB typical)
- **Return loss:** > 40dB (> 50dB version available on request)
- **Extinction ratio (1st order on / off):** > 50dB
- **Polarisation extinction ratio (PER):** > 15db (> 18dB typical)
- **Rise-time / fall-time:** 35ns
- **Frequency:** 80MHz
- **VSWR:** < 1.2:1
- **Input impedance:** 50Ω
- **RF power:** < 3.0W
- **Frequency shift:** 80MHz (up-shift)
- **Fibre type:** Fujikura PM1550 (SM15-PS-U25A)
- **900µm sleeving, 1.5m length**
- **Alternative fibre manufacturers on request**
- **Fibre termination:** Bare fibre
- **Recommended RF driver:** A35080
Ordering Code:

Explanation: T-M080-0.4C2J-3-F2P (Modulator, 80MHz, 0.4mm active aperture, compressional mode, Tellurium Dioxide, 1550nm, SMA female bulk head connector, 2 fibre, polarisation maintaining (PM1550)

Other Gooch & Housego products which may be of interest:

Our extensive range of components for fibre laser applications includes:
- Isolators
- High power multimode combiners
- Combiners with all types of signal feedthrough fibre
- Ultra low ratio tap couplers
- WDMs for combining signals with red pointer lasers

Please send your specifications to sales@goochandhousego.com or contact your local sales representative to discuss your requirements.