



## 700 – 1200nm Quasi-Collinear Acousto-Optic Tunable Filter

TF950-500-1-5-NT2

AO Tunable Filters for specialist spectroscopic applications.

Gooch & Housego's AOTF capability is extensive. By combining our scientific knowledge, modelling capability and engineering expertise with our renowned manufacturing skill and high quality, our products are aimed at the most discerning customers, in the most demanding applications.

Quasi-collinear design offers narrow wavelength resolution with excellent out of band wavelength rejection and exceptionally low drive power requirements.

In addition to the standard product shown, custom configurations are available for specialised applications. These include alternative mechanical design, wavelength range, aperture & resolution. We also offer temperature stabilisation or compensation options.

Please contact the sales team for further information.

#### **Key Features:**

- □ Wavelength 700 to 1200nm
- □ Narrow resolution
- ☐ High speed, random access
- □ Excellent out of band rejection
- Solid state technology
  - Custom configurations available

#### **Application examples:**

- ☐ Laser tuning
- Ultra-fast laser systems
- ☐ Fibre systems



### **General Specifications**

Interaction material: Tellurium Dioxide (Anisotropic)
Acoustic Mode: Quasi-Collinear Slow Shear

Wavelength range: 700 - 1200nm Frequency range: 34 - 61MHz Resolution (FWHM): < 0.8nm at 950nm

Active aperture: 5mm
Recommended beam diameter 3.2mm

Incident polarisation:

Linear, vertical with respect to base
Polarisation of diffracted order:

Linear, orthogonal to input (90° rotated)

Pointing stability of diffracted order: < +/- 0.5mrad typical

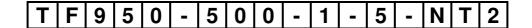
Beam separation:  $> 2.6^{\circ} - 2.8^{\circ}$ Diffraction efficiency:  $> 75\%^{*}$ 

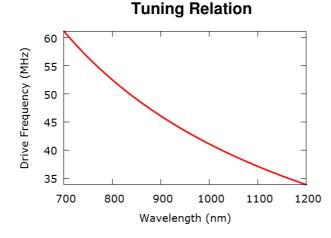
RF drive power: < 100mW / channel

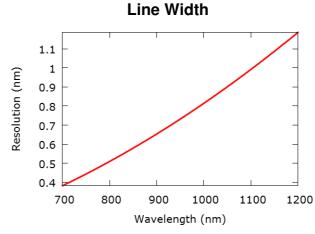
# \*Alignment must use recommended beam diameter with a single mode collimated beam

### **Ordering Code**

**Explanation: TF950-500-1-5-NT2** (AO Tunable Filter, centre wavelength 950nm, 500nm operating range, <1nm resolution, 5.0mm active aperture, NT2 housing).







Contact: sales@goochandhousego.com

www.goochandhousego.com



#### **Mechanical Data**

