

## 600 – 1100nm Acousto-Optic Tunable Filter

TF850-500-10-6-GH58A

AO Tunable Filter for spectroscopic applications.

High speed, random access, solid state technology is making AOTF based spectrometers an ideal for on line process control 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.

Use in conjunction with our frequency synthesised driver (DDS) enables active wavelength / temperature stabilisation.

Multichannel RF drivers allowing active pass band resolution and profile control are also available – please enquire.

Patented side lobe suppression technology provides excellent out of band suppression.

In addition to the standard product shown, custom configurations are available for specialised applications. These include alternative mechanical design, wavelength range, aperture & resolution.

Please contact us for further information.

### Key Features:

- ☐ Wavelength 600 – 1100nm
- ☐ High speed, random access
- ☐ Adaptable resolution
- ☐ Solid state technology
- ☐ Patented out of band suppression
- ☐ Custom configurations available

### Application examples:

- ☐ Pharmaceutical
- ☐ Environmental
- ☐ Biomedical
- ☐ Food & drink
- ☐ Agriculture
- ☐ Chemical

## General Specifications

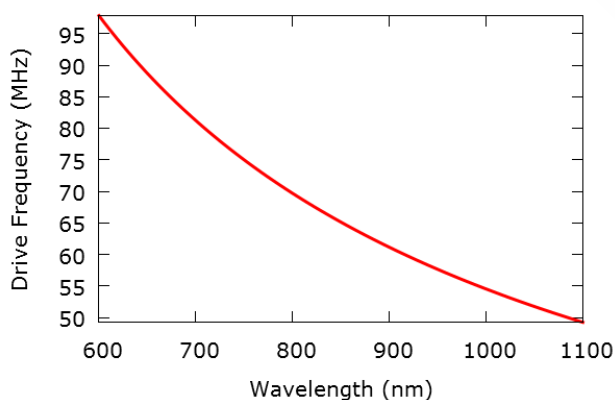
Interaction material:	Tellurium Dioxide (Anisotropic)
Wavelength range:	600 - 1100nm
Frequency range:	49 – 98MHz
Resolution (FWHM):	~ 10nm at 850nm
Active aperture:	6mm
Incident polarisation:	Linear, vertical with respect to base
Polarisation of diffracted order:	Linear, orthogonal to input (90° rotated)
Pointing stability of diffracted order:	< ± 0.01° typical
Field Of View:	± 2°
Beam separation:	≥ 4°
Transmission:	> 95%
Diffraction efficiency:	> 90%
RF input impedance:	50Ω
RF drive power:	< 1.5W
Cooling:	Conduction through base

## Ordering Code

**Explanation:** TF850-8-6-GH58A (AO Tuneable Filter – centre wavelength 850nm – 500nm operating range - 10nm resolution - 6.0mm active aperture – GH58 housing, with side lobe suppression).

**T F 8 5 0 - 5 0 0 - 1 0 - 6 - G H 5 8 A**

**Tuning Relation**



**Line Width**

