

## 420 – 700nm Quasi-Collinear Acousto-Optic Tunable Filter

TF560-280-1-5-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 420 to 700nm
- 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



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**Contact us** 

Contact: sales@goochandhousego.com

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## General Specifications

Interaction material:	Tellurium Dioxide (Anisotropic)
Acoustic Mode:	Quasi-Collinear Slow Shear
Wavelength range:	420 - 700nm
Frequency range:	60 – 120MHz
Resolution (FWHM):	< 0.3nm at 560nm
Active aperture:	5mm
Recommended beam diameter	3.5mm
Incident polarisation:	Linear, vertical with respect to base
Polarisation of diffracted order:	Linear, orthogonal to input (90° rotated)
Pointing stability of diffracted order:	< +/- 150µrad typical
Beam separation:	> 2.6° - 2.8°
Diffraction efficiency:	> 75%*
RF drive power:	< 50mW / channel

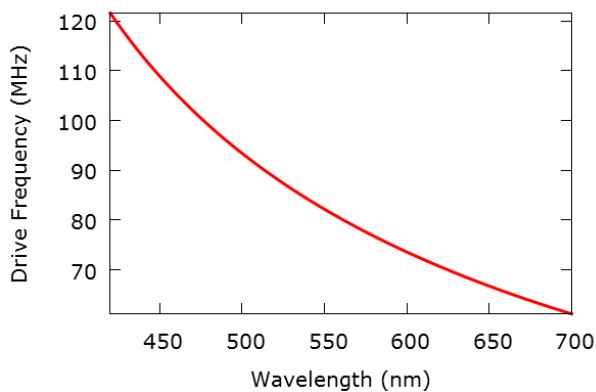
**\*Alignment must use recommended beam diameter with a single mode collimated beam**

## Ordering Code

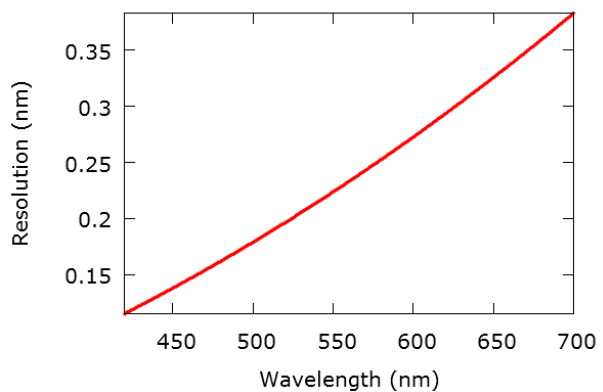
**Explanation:** TF560-280-1-5-NT2 (AO Tunable Filter, centre wavelength 560nm, 280nm operating range, <1nm resolution, 5.0mm active aperture, NT2 housing).

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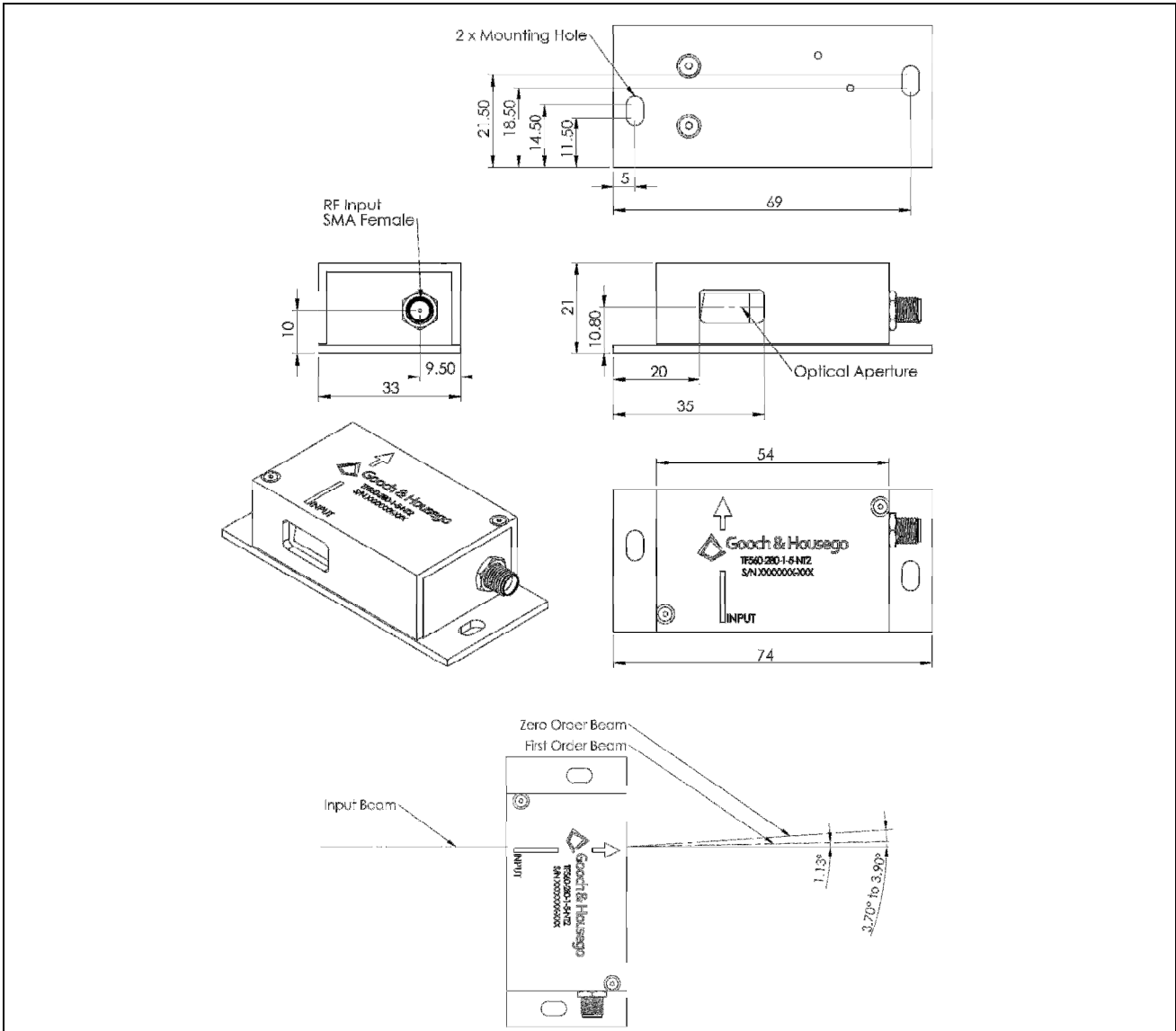
**Tuning Relation**



**Line Width**



**Mechanical Data**




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As part of our policy of continuous product improvement we reserve the right to change specifications at any time  
IWDS021 V1.2