

2000 – 4000nm Quasi-Collinear Acousto-Optic Tunable Filter

TF3000-2000-3-7-GH78

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 2000 to 4000nm
- 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)
Mode:	Quasi-Collinear Slow-Shear AO Interaction
Wavelength range:	2000 - 4000nm
Frequency range:	14 – 29MHz
Resolution (FWHM):	< 2.6nm at 3000nm
Active aperture:	7mm
Recommended Beam Diameter	5.1mm (diffraction-limited)
Polarisation:	Polarisation sensitive
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
Beam separation:	> 2°
RF input impedance:	50Ω
Transmission:	> 95%
Diffraction efficiency:	> 75% typical*
RF drive power:	~ 250mW @ 2000nm, ~ 1.1W @ 4000nm
Maximum RF Power:	5W
Cooling:	Conduction through base

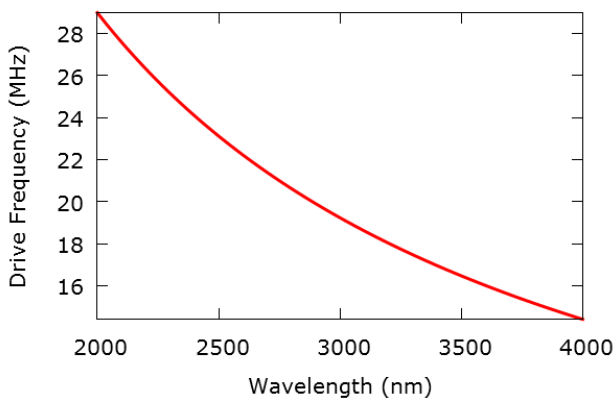
***Alignment must use recommended beam diameter with a single mode collimated beam**

Ordering Code

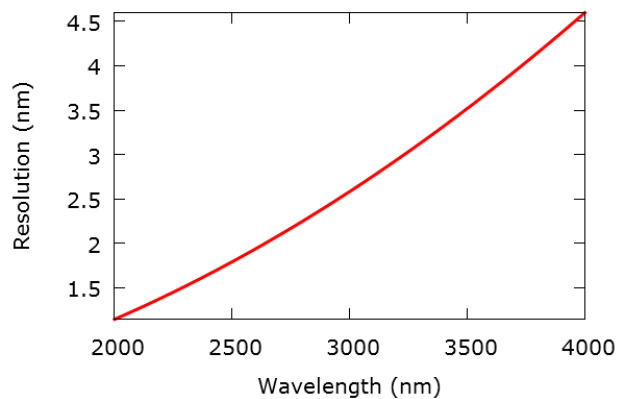
Explanation: TF3000-2000-3-7-GH78 (AO Tunable Filter, centre wavelength 3000nm, 2000nm operating range, <3nm resolution, 7mm active aperture, GH78 housing).

T F 3 0 0 0 - 2 0 0 0 - 3 - 7 - G H 7 8

Tuning Relation



Line Width



Mechanical Data

