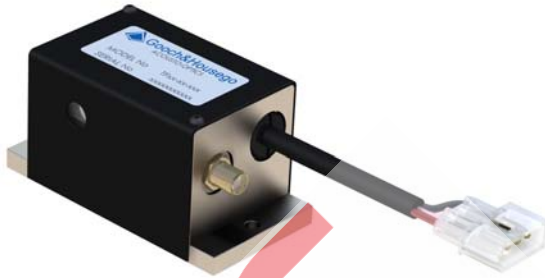




# Gooch & Housego



## 405 – 650nm Acousto-Optic Tunable Filter

TF527-245-6-3-GH18A

An acousto-optic tunable filter (PC AOM) for use at 405 – 650nm. Ideal for laser line selection, particularly in confocal microscopy applications.

Designed to optimise diffracted beam efficiency, quality & pointing stability while maintaining high extinction ratio and low RF drive power, also incorporating patented side-lobe suppression and active temperature stabilisation.

Should ideally be used in conjunction with the 64040-150-0.2ADMDFS-8X1 frequency synthesised driver, allowing independent analogue and digital (blanking) control of up to eight wavelengths.

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.

### Key Features:

- 405 – 650nm
- High Efficiency
- Excellent pointing stability
- Patented side-lobe suppression
- High extinction ratio
- Maintains beam quality
- Low drive power
- Temperature stabilised

### Applications:

- Biomedical:
  - Confocal Microscopy

## General Specifications

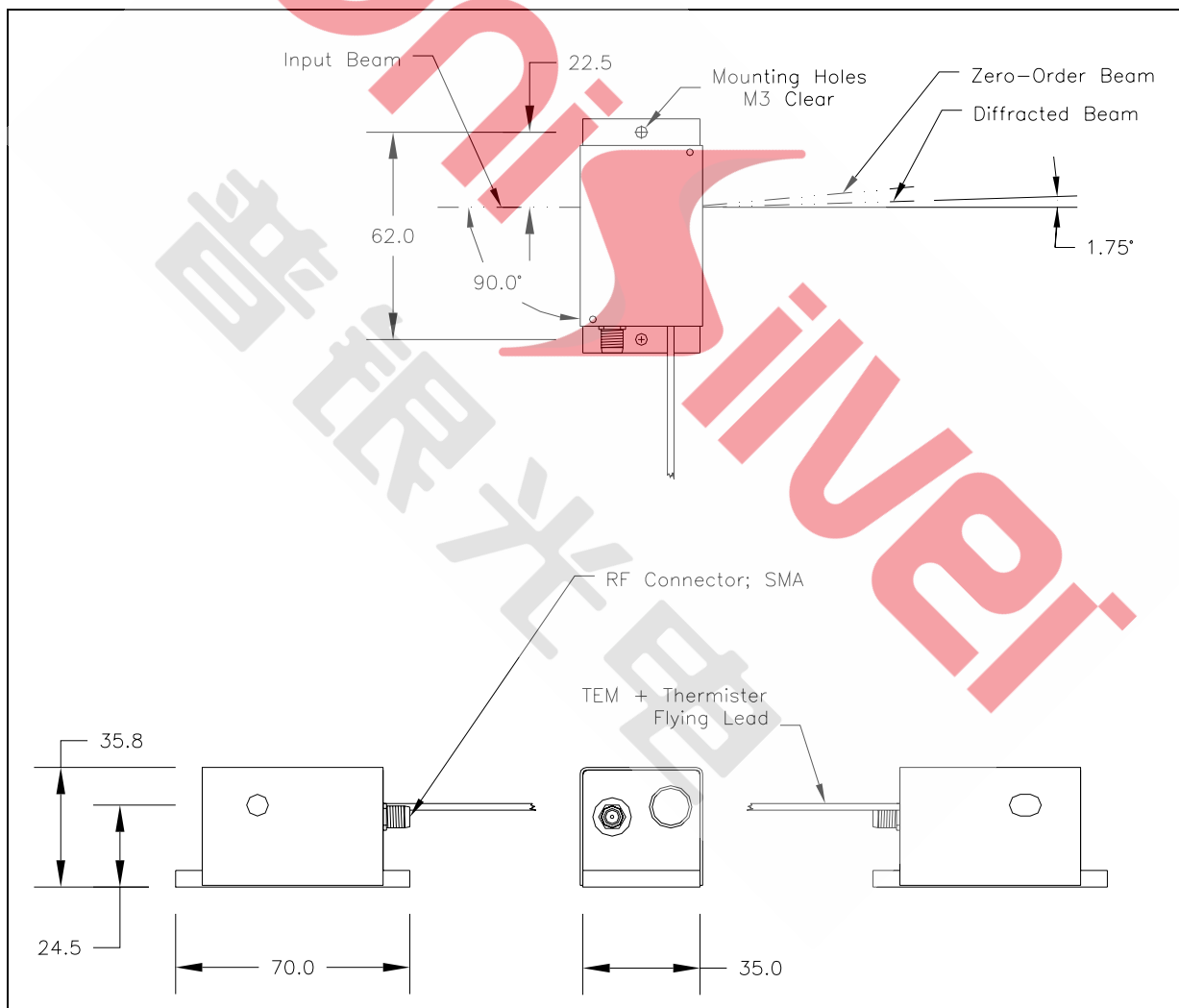
Interaction material:	Tellurium Dioxide (Anisotropic)
Wavelength range:	405 - 650nm
Resolution (FWHM):	< 6nm at 525nm
Active aperture:	3mm
Incident polarisation:	Linear, vertical with respect to base
Polarisation of diffracted order:	Linear, orthogonal to input (90° rotated)
Pointing stability of diffracted order:	< $\pm 0.01^\circ$
Beam separation:	> $3^\circ$
Diffraction efficiency:	> 90%
RF drive power:	< 100mW / channel

Recommended RF Driver: 640-150-0.2ADMDFS-8X1

## Ordering Code

**Explanation:** TF527-245-6-3-GH18 (AOTF, wavelength range 405 – 650nm, 6nm resolution, 3.0mm active aperture, GH18 housing, patented side-lobe suppression).

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## Tuning relation

