
Anhydroguide G LOW OH Vis-IR Fiber

Anhydroguide G fiber has an extremely low hydroxyl ion content providing high transmission efficiency from visible through near infra-red wavelengths to 2.5 microns. Jacket options include gold, providing an operating temperature range up to 750°C and Thermocoat, which can be used to manufacture high efficiency bundles. This fiber is employed in high power laser delivery systems, remote spectroscopy, medical, special datacom and other demanding applications. **This is the best low loss fiber for near IR applications.**

Features

- Useful spectral transmission range from 400nm to 2400nm
- Excellent for Holmium and Erbium laser delivery
- Specialty coatings available for extreme temperature (-269 to 750°C), high vacuum and harsh chemical environments (see metal coated and Thermocoat data sheets)
- Laser damage resistant construction transmits 1.3kW/mm² CW at 1060nm; up to 10 Joules, pulsed (Special end preparation may be required)
- High core to clad ratios available for high efficiency bundles (see bundle data sheets)
- Core diameters up to 1500µm
- Sterilizable — ETO, steam, e-beam, gamma radiation
- Radiation resistant
- All dielectric, non-magnetic construction
- Available with N.A.'s of 0.12, 0.22 (standard), and 0.26
- Available with clad/core ratios of 1.1, 1.2, 1.4, and 2.5

Applications

Medical

- Laser surgery
- Dermatology
- Ophthalmology
- Medical diagnostics
- Dental

Industrial

- Optical pyrometers
- Semiconductor manufacturing
- Laser marking
- Laser welding, soldering
- Laser ordnance initiation

Scientific

- IR spectroscopy
- Thomson scattering
- Nuclear fusion monitoring

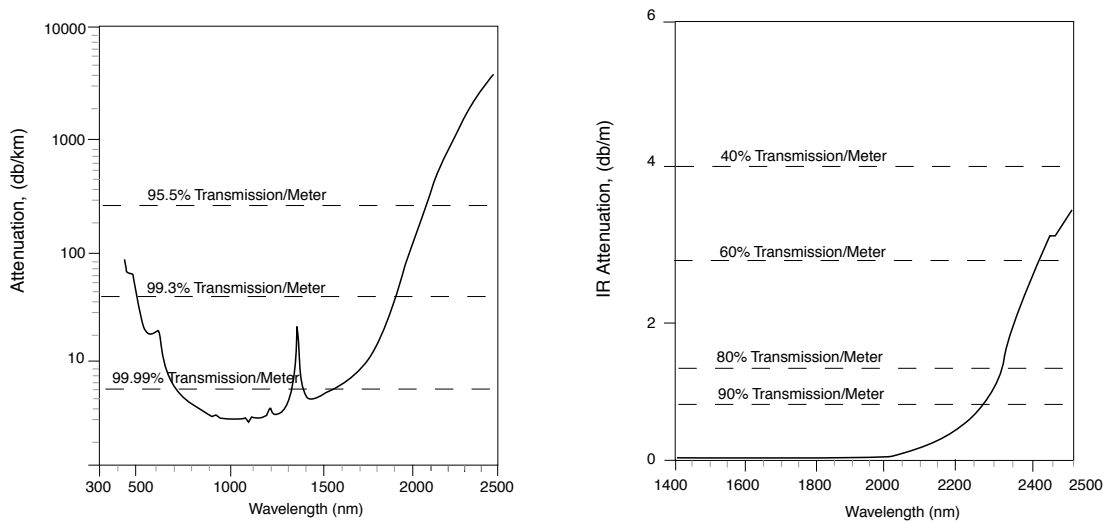
Proof Test (bend method)

50 to 70 kpsi for all fibers

Recommended minimum bend radius:

- Momentary: 200 times the fiber radius
- Long term: 400 times the fiber radius

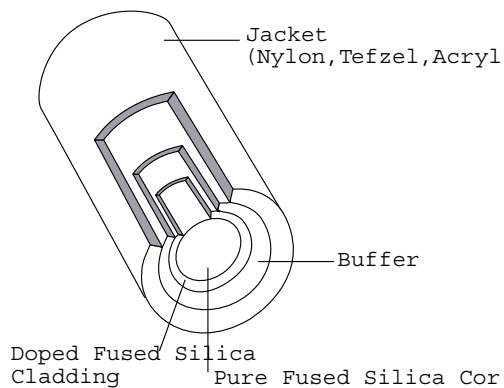
Spectral Attenuation (Typical)



Specifications

Table below reflects standard fiber geometries. Clad to core ratios of 1.2 and 1.4 are available upon request.

Product Code	Ø Core (µm) ±2%	Ø Clad (µm) ±3	Ø Buffer (µm) ±5%	Ø Jacket (µm)
Acrylate Jacketed Fibers Temperature Range: -40 to 85°C				
AFS50/125Y	50	125	-	250
AFS105/125Y	105	125	-	250



Larger diameter fibers with acrylate jackets are also available upon request.
 ©Tetzel is a registered trademark of DuPont.