

Nufern 980/1550 nm Coupler Fiber

Nufern 980C-HP fiber is a high-performance, mid-NA fiber optimized for use by coupler manufacturers in the telecom industry. It features low, consistent splice and bend loss, and a design to minimize excess loss in the coupler. The fiber is produced with extremely tight second mode cut-off tolerance, and the high tensile strength critical for long-term reliability in tight bend radius applications. These high-performance specifications also result in improved production yields and reduced component manufacturer costs.

Typical Applications

- WDM pump/signal couplers for EDFAs
- CATV couplers; Tap couplers
- Bi-directional splitters and combiners
- Ultra-compact components requiring small bend radii

Features & Benefits

- Exceptional uniformity and core/clad concentricity — Low, consistent splice loss to telecom components
- Extremely tight second mode cutoff tolerance — High yield coupler manufacturing
- Higher proof test levels — Critical for long-term reliability in tight bend applications

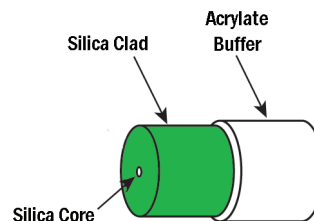
Optical Specifications

Operating Wavelength (nominal)	980 - 1600 nm
Mode Field Diameter	4.9 ± 0.3 μm @ 980 nm 7.7 ± 0.3 μm @ 1550 nm
Second Mode Cut-Off	930 ± 30 nm
Attenuation	< 3 dB/km @ 980 nm
Numerical Aperture (nominal)	0.16
Bend Loss for 100 turns @ LTBR (nominal)	0.001 dB @ 980 nm
Bend Radius for 0.05 dB per 100 Turns (nominal)	Much less than LTBR @ 980 nm

Geometrical & Mechanical Specifications

Clad Diameter	125 ± 1 μm
Coating Diameter	245 ± 15 μm
Core-Clad Concentricity	< 0.3 μm
Coating/Clad Offset	≤ 5 μm
Fiber Non-Circularity	≤ 2%
Coating Material	UV Cured, Dual Acrylate
Operating Temperature	- 55 to + 85° C
Short-Term Bend Radius	≥ 6 mm
Long-Term Bend Radius	≥ 13 mm
Proof Test Level	≥ 200 kpsi (1.4 GN/m ²)

980C-HP



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Standard specifications and design parameters are listed above. Specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements.