

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 & 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	980 – 1600 nm
Core NA	0.160
Mode Field Diameter	4.9 ± 0.3 μm @ 980 nm 7.7 ± 0.3 μm @ 1550 nm
Cutoff	930 ± 30 nm
Core Attenuation	≤ 3.0 dB/km @ 980 nm

980C-HP

Geometrical & Mechanical Specifications

Cladding Diameter	125.0 ± 1.0 μm
Core Diameter	4.4 μm
Coating Diameter	245.0 ± 15.0 μm
Coating Concentricity	< 5.0 μm
Core/Clad Offset	≤ 0.30 μm
Clad Non-Circularity	≤ 2.0 %
Coating Material	UV Cured, Dual Acrylate
Operating Temperature Range	-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)



7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 E-mail info @ nufern.com • www.nufern.com Nufern products are manufactured under an ISO 9001:2008 certified quality management system.



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.