

Corning® HI 980 & RC HI 980 Specialty Optical Fibers

High Index / Bend Insensitive



Industry standard for 980 pump pigtails for high performance components and small footprint assemblies

Manufactured with Corning's patented Outside Vapor Deposition (OVD) process, Corning® HI 980 Specialty Fiber offers world-class durability and reliability. When used as component pigtails, this fiber allows for efficient fiber coupling within photonic products. It also offers reduced bend attenuation due to its high core index of refraction.

Applications:

HI 980

- Single-mode performance at 980 nm and above
- Component fiber for EDFAs, couplers, and other DWDM components
- Pigtails for pump lasers
- Gratings

RC HI 980

- Component fiber for EDFAs, couplers, and other DWDM components
- Pigtails for pump lasers

Features:

HI 980 and RC HI 980

- Outstanding consistency and uniformity using Corning's patented Outside Vapor Deposition (OVD) process
- Dual acrylate coating system provides excellent protection from microbend-induced attenuation and superior mechanical robustness
- Excellent geometry control
- High core index of refraction
- Mode-field diameter matched to erbium-doped fiber, allowing for efficient coupling
- High proof test for increased reliability in tight bend configurations
- High numerical aperture
- RC HI 980 provides 80 μm diameter for miniature packaging

Key Optical Specifications

Operating Wavelength (nm)	> 980
Cutoff Wavelength (nm)	930 ± 50
Maximum Attenuation (dB/km)	≤ 2.5 @ 980 nm
Mode-field Diameter (µm)	4.2 ± 0.3 @ 980 nm

Key Geometric, Mechanical and Environmental Specifications

Cladding Outside Diameter (µm)	125 ± 0.5	80 ± 1
Coating Outside Diameter (µm)	245 ± 10	165 ± 10
Core-to-Cladding Offset (µm)	≤ 0.3	≤ 0.5
Standard Lengths	500 m, 1 km, 2, km, 5 km, 10 km	
Proof Test (kpsi)	100* or 200	
Operating Temperature (°C)	-60 to 85	

*100 kpsi only available for RC HI980

Performance Characterizations**

Nominal Delta (%)	1.0
Numerical Aperture	0.21
Refractive Index Value – Core	1.471 @ 651 nm
Bendloss (20 mm O.D.; 1550 nm) (dB/turn)	≤ 0.01
Core Diameter (µm)	3.5
Dispersion (ps/nm/km)	-63 @ 980 nm

** Values in this table are nominal or calculated values

Typical Splice Loss

	RC SMF Fiber	HI 980
Wavelength (nm)	1550	980
RC HI 980 (dB)	0.11	0.05

For more information about Corning’s leadership in Specialty Fiber technology visit our website at www.corning.com/specialtyfiber

To obtain additional technical information, an engineering sample or to place an order for this product, please contact us at:

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