

Corning® HI 980 & RC HI 980 Specialty Optical Fibers

High Index / Bend Insensitive

CORNING



*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 pigtailed, this fiber allows for efficient fiber coupling within photonic products. HI 980 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 micro-induced attenuation and superior mechanical robustness
- Excellent geometry control
- High core index of refraction
- Mode-field diameter matched to erbium-doped fiber, allowing efficient coupling
- High proof test for increased reliability in tight bend configurations
- High numerical aperture
- RC HI 980 provides 80 μm diameter for miniture packaging

Key Optical Specifications

HI 980 and RC HI 980C

| | |
|------------------------------|--------------------|
| Operating Wavelength (nm) | > 980 |
| Fiber 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

| | HI 980 | RC HI 980C |
|-------------------------------------|--------------------------------|------------|
| Cladding Outside Diameter (μm) | 125 ± 0.5 | 80 ± 1 |
| Coating Outside Diameter (μm) | 245 ± 10 | 165 ± 10 |
| Core-to-Cladding Concentricity (μm) | ≤ 0.3 | ≤ 0.5 |
| Standard Lengths | 500 m, 1 km, 2 km, 5 km, 10 km | |
| Proof Test (kpsi) | 200 | 100 or 200 |
| Operating Temperature (°C) | -60 to +85 | |

Performance Characterizations*

| | |
|-------------------------------|----------------|
| Nominal Delta (%) | 1.0 |
| Numerical Aperture | 0.21 |
| Refractive Index Value – Core | 1.471 @ 850 nm |
| Core Diameter (μm) | 3.4 |
| Dispersion (ps/nm/km) | -64 @ 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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