

Corning® RC SMF Specialty Optical Fiber

CORNING



Low loss fused components for EDFA and small bend radius applications

Manufactured with Corning's patented Outside Vapor Deposition (OVD) process, and based on decades of experience in specialty fiber development, Corning® RC SMF Specialty Fiber sets the industry standard for consistent geometric properties, high mechanical reliability and efficient splicing.

Applications:

- Low-loss miniature fused devices for C-band and L-band
- Ultra-compact components requiring small bend radii
- Pigtails in bend insensitive applications
- Sensors

Features:

- 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
- Ultra-tight specifications
- World-class reliability support for handling and deployment
- Technical support for splicing to 125 μm products
- Ultra-low splice loss to SMF-28e+®
- 80 μm diameter for miniature packaging
- Low bending loss
- Excellent geometry control

RC SMF

Key Optical Specifications

Operating Wavelength (nm)	> 1300
Maximum Attenuation @ 1310 nm (dB/km)	0.7
Maximum Attenuation @ 1550 nm (dB/km)	0.5
Cutoff Wavelength (nm)	≤ 1290
Coiled Cutoff at 80 mm Diameter (nm)	1210 ± 60
Coiled Cutoff at 32 mm Diameter (nm)	1140 ± 60
Mode-field Diameter @ 1310 nm (μm)	9.2 ± 0.3
Mode-field Diameter @ 1550 nm (μm)	10.4 ± 0.8

Key Geometric, Mechanical and Environmental Specifications

Cladding Outside Diameter (μm)	80 ± 1
Coating Outside Diameter (μm)	165 ± 10
Core-to-Cladding Offset (μm)	≤ 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

Performance Characterizations*

Nominal Delta (%)	0.36
Numerical Aperture	0.12
Bend Loss (20 mm O.D.; 1550 nm) (dB/turn)	≤ 0.1
Core Diameter (μm)	8.0

* Values in this table are nominal or calculated values

Typical Splice Loss

	SMF-28e+ [®] Fiber	RC HI 1060	RC PANDA PM 1550	RC HI 1060 FLEX	RC HI 980
Wavelength (nm)	1550	1550	1550	1550	980
RC SMF Fiber (dB)	0.05	0.08	0.09	0.12	0.11

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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