Corning® HI 1060 FLEX Specialty Fiber

Ultra-low Bending Loss in C- and L-Bands



PI1441

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Manufactured with Corning's patented outside vapor deposition process, Corning HI 1060 FLEX Specialty Fiber sets the worldwide standard for uniformity and reliability. Completely re-engineered for fused biconic taper component manufacturing, this specialty fiber is ideal for use in smaller footprint components and EDFAs. Combining ultra-low bending loss, low insertion loss, and excellent spliceability, Corning HI 1060 FLEX Specialty Fiber enables higher yields and performance throughout the value chain.

Applications

- Premium grade WDM couplers for EDFAs
- Tap couplers
- Splitters and combiners
- CATV couplers
- Ultra-compact components requiring small bend radii
- Pigtails in bend-sensitive applications
- Low loss fused devices for C- and L-Band

Features

- Ultra-low bending loss
- Low excess loss
- Low splice loss to SMF-28e® fiber and Corning Er 1550C3
- Patented outside vapor deposition process provides outstanding consistency and uniformity
- Dual acrylate coating system provides superior mechanical robustness
- Excellent geometry control

Key Optical Specifications

Maximum Attenuation	≤ 2.5 dB/km @ 980 nm ≤ 1.0 dB/km @ 1550 nm
Cutoff Wavelength	$930 \pm 40 \text{ nm}$
Mode-field Diameter	4.0 ± 0.3 μm @ 980 nm 6.3 ± 0.3 μm @ 1550 nm
Bend Loss @ 1550 nm	≤ 0.1 dB 5 turns at 10-mm radius

Key Geometric Specifications

Cladding Outside Diameter	125 ± 0.5 μm
Coating Outside Diameter	245 ± 10 μm
Core-to-cladding Offset	≤ 0.3 µm

Performance Characterizations

Excess Loss in Device (Typical)	≤ 0.1 dB
Operating Temperature	−60 to 85°C
Nominal Delta (Typical)	1 %
Numerical Aperture (Typical)	0.2
Standard Lengths	0.5, 1, 2, 5 km
Proof Test	100, 200 kpsi

Typical Splice Loss

	HI 1060 FLEX	SMF-28e [®] Fiber	HI 980	HI 1060	PM 980	Er 1550C	Er 1550C3
HI 1060 FLEX	0.03 dB	0.07 dB	0.04 dB	0.06 dB	0.09 dB	0.05 dB	0.03 dB

For More Information

For more information about Corning's leadership in specialty fiber technology, visit our website at www.corning.com/photonicmaterials.

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

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