# Corning® HI 1060 FLEX & RC HI 1060 FLEX Specialty Optical Fibers

## High Index / Bend Insensitive

CORNING


*High performance WDM components and ultra-low bend loss applications*

*Manufactured with Corning's patented Outside Vapor Deposition (OVD) process, Corning® HI 1060 FLEX Specialty Fiber sets the world-wide 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:

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

### Features:

#### HI 1060 FLEX and RC HI 1060 FLEX

- 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-low bending loss
- Low excess loss
- Low splice loss to SMF-28e+® fiber and Corning ER 1550C3
- Excellent geometry control
- RC HI 1060 FLEX offers 80 µm diameter for sub-miniature packaging



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| | HI 1060 FLEX | RC HI 1060 FLEX |
|---|---|---|
| **Key Optical Specifications** | | |
| Operating Wavelength (nm) | > 980 | |
| Maximum Attenuation (dB/km) | ≤ 2.5 @ 980 nm<br>≤ 1.0 @ 1550 nm | |
| Cutoff Wavelength (nm) | 930 ± 40 nm | |
| Mode-field Diameter (µm) | 4.0 ± 0.3 @ 980 nm<br>6.3 ± 0.3 @ 1550 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 | |
| **Performance Characterizations*** | | |
| Nominal Delta (%) | 1.0 | |
| Numerical Aperture | 0.22 | |
| Refractive Index Value – Core | 1.472 @ 651 nm | |
| Dispersion (ps/nm/km) | -65 @ 980 nm<br>-50 @ 1060 nm | |
| Bendloss (@ 20 mm O.D., 1550 nm) (dB/turn) | ≤ 0.01 | |
| Core Diameter (µm) | 3.4 | |

* Values in this table are nominal or calculated values

## Typical Splice

| | HI 1060 FLEX | SMF-28e+® | RC SMF | ER 1550C3 | HI 1060 | HI 980 | PM 980 |
|---|---|---|---|---|---|---|---|
| Wavelength (nm) | 1550 | 1550 | 1500 | 1550 | 980 | 980 | 980 |
| HI 1060 FLEX (dB) | 0.03 | 0.07 | --- | 0.03 | 0.06 | 0.04 | 0.09 |
| RC HI 1060 FLEX (dB) | --- | 0.22 | 0.12 | 0.08 | --- | --- | --- |

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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