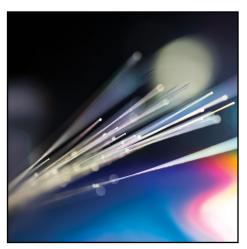
CORNING





Corning RCBI Optical Fiber Reduced-clad, bend-insensitive fiber

Specialty Optical Fibers

Corning understands the changing needs of the telecom industry. Fibers must have the capacity to reliably handle steadily increasing information at higher data rates, in an ever-decreasing footprint. Reducing the glass cladding diameter of a fiber can enable a significant step-change in package size. As module packages shrink in response to these changes, long lengths of fiber are deployed in permanently bent configurations, requiring consideration of the optical and mechanical impact of continuous, tightly wound coils. That is why we designed our new reduced-clad fiber specifically to be bend insensitive.

Applications

Ultra-compact components requiring small bend radii
Photonic components in small package sizes
WDM components
Fiber array units
Pigtail assemblies

The new Corning RCBI optical fiber is the first reduced-clad fiber compatible with G.657 and G.652. This bend insensitive fiber features a thin cladding diameter of 80 microns. RCBI offers outstanding optical components with low attenuation, superior macrobending performance, and industry-leading geometry to continually pursue smaller packaging.

Key Optical Specifications

Description	RCBI 1310	RCBI 1550
Operating Wavelength (nm)	1310, 1550	1550
Fiber Cutoff Wavelength (nm)	≤ 1260	≤ 1520
Maximum Attenuation @ 1310 (dB/km)	0.5	N/A
Maximum Attenuation @ 1550 (dB/km)	0.3	0.3
Mode-Field Diameter @ 1310 (µm)	8.6 ± 0.4	N/A
Mode-Field Diameter @ 1550 (μm)	9.65 ± 0.5	9.65 ± 0.5

Key Geometric, Mechanical, and Environmental Specifications

	RCBI 1310	RCBI 1550	
Cladding Outside Diameter (µm)	80.5	80.5 ± 0.5	
Coating Outside Diameter (µm)	165 :	165 ± 10	
Core-to-Cladding Concentricity (μm)	≤ (≤ 0.3	
Proof Test (kpsi)	20	200	
Operating Temperature (°C)	-60°C to	-60°C to +85°C	
Coating Type	UV Curabl	UV Curable Acrylate	
Minimum Order Quantity (m)	50	500	

Performance Characterizations

	RCBI 1310	RCBI 1550
Recommended Minimum Bend Radius (mm)	5	5
Macrobend Loss @ 5 mm radius, dB/turn: 1550 nm	≤ 0.3	≤ 0.1
1625 nm	≤ 0.5	≤0.3

For more information about Corning's leadership in Specialty Fiber technology, visit our website at <u>www.corning.com/specialtyfiber</u> To obtain additional technical information, an engineering sample, or to place an order for this product, please contact us at:

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