

Corning® CPO FlexConnect™ Fiber

Bend-resilient, single-mode fiber optimized for short-length, co-packaged optics in the O-band



Reduce Multipath Interference in Short-Length Architectures

Bend-resilient fibers needed for the tight packaging conditions of co-packaged optics (CPO) architectures can suffer from multipath interference (MPI) in short lengths less than 2 meters. Corning’s CPO FlexConnect single-mode fiber has improved bend performance compared to Corning® SMF-28® Ultra fiber and is designed to reduce MPI penalty in short lengths. It has a favored 9.2 μm mode field diameter at 1310 nm for coupling compatibility and minimizing insertion loss. This fiber solves bend and MPI challenges faced by optical and mechanical designers.

Applications	
Short length single-mode fiber links in CPO	Fiber deployments requiring < 10 mm radius bends
Single-mode fiber component pigtailed	

Features	Benefits
Outstanding consistency and uniformity using our patented OVD process	Large 9.2 μm mode field diameter for coupling compatibility
High resistance to optical bend loss	Excellent geometry control
Reduced MPI penalty when used in < 2 m lengths	

Key Optical Specifications	
Operating wavelength (nm)	> 1260
Fiber Cutoff wavelength (nm)	< 1260
Maximum attenuation @ 1310 nm (dB/km)	0.35
Mode-field diameter @ 1310 nm (μm)	9.2 ± 0.4

Key Geometric, Mechanical, and Environmental Specifications	
Cladding outside diameter (μm)	125 ± 0.7
Coating outside diameter (μm)	242 ± 5
Core-to-cladding concentricity (μm)	≤ 0.5
Minimum order quantity (m)	1,000
Proof test (kpsi)	100
Operating temperature (°C)	-60°C to +85°C

Performance Characterization*	Mandrel Radius (mm)	
	10	7.5
Macrobend Loss (dB/turn) @ 1310 nm	0.025	0.1

*Values in this table are nominal or calculated values

For more information about Corning's leadership in specialty fiber technology, visit our website at 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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