

# ClearCurve® Photonic Specialty Optical Fibers

**Bendable, spliceable, reliable, and coupler optimized**



**Satisfying the need of Photonic component manufacturers for a single fiber optimized to provide low bend loss, tight geometrical control, high mechanical reliability, and good coupler performance.**

Corning® ClearCurve® Photonic Specialty Optical Fiber meets the growing demand for smaller footprints. This fiber was designed using Corning’s patented ClearCurve technology to give ultra-low bend loss performance. Created with tighter geometrical and mechanical specifications, this fiber enables consistent, reliable, and low loss splicing. ClearCurve Photonic fiber was developed with an optical profile ideal for making couplers.

ClearCurve Photonic Specialty Optical Fiber is optimized for use in photonic components, paving the way for you to reliably and consistently enable information to go faster, farther, and “smarter” in a smaller space.

Applications	
Designed specifically for photonic components in small package sizes	Very tight bend requirements

Features	
10 mm bend radius	High reliability enhanced by 200 kpsi
Low bend loss	FBT coupler friendly
Tighter geometrical control	

Key Optical Specifications	
Operating Wavelength (nm)	1550
Fiber Cutoff Wavelength (nm)	≤ 1450
Maximum Attenuation (dB/km)	0.3 @ 1550 nm
Mode-field Diameter (μm)	9.65 ± 0.5 @ 1550 nm

Key Geometric, Mechanical, and Environmental Specifications	
Cladding Outside Diameter (μm)	125 ± 0.5
Coating Outside Diameter (μm)	245 ± 10
Core-to-Cladding Concentricity (μm)	≤ 0.3
Minimum Order Quantity (m)	500
Proof Test (kpsi)	200
Operating Temperature (°C)	-60 to +85
Coating Type	Dual UV Curable Acrylate
Recommended Minimum Bending Radius (mm)	10

Performance Characterizations*	
Nominal Delta (%)	0.40
Numerical Aperture	0.13
Refractive-Index Value – Core	1.458 @ 850 nm
Core Diameter (μm)	8.8
Dispersion (ps/nm•km)	17.8 @ 1550

\*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](https://www.corning.com/specialtyfiber). To obtain additional technical information, an engineering sample, or to place an order for this product, please contact us at:

**E-mail: [specialtyfiber@corning.com](mailto:specialtyfiber@corning.com)**

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