POFC Prime Optical Fiber Corporation

Singlemode Omnilit™ Fiber *Product Information*

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The Omnilit™ Fiber support ITU-T G.652C/D specifications and the attenuation at 1385nm less than that at 1310nm. This specification conforms to the requirement of IEC 60793 B1.3.

Characteristics	*Conditions*	*Specified Values*	*Unit*
OPTICAL CHARACTERISTICS			
Attenuation Coefficient	1310 nm	≦ 0.34	〔dB/km〕
	1385 nm	≦ 0.31*	〔dB/km〕
	1550 nm	≦ 0.21	〔dB/km〕
	1625 nm	≦ 0.24	〔dB/km〕
The maximum attenuation between 1285 to 1330 nm is within 0.05 dB/km of the attenuation at 1310 nm.			
The maximum attenuation between 1525 to 1575 nm is within 0.05 dB/km of the attenuation at 1550 nm.			
*Attenuation increases due to hydrogen aging at this wavelength will be ≦0.01 dB/km and evaluated in accordance with the IEC 60793-2 test procedure.			
Mode Field Diameter	1310 nm	9.2 ± 0.4	〔μm〕
	1550 nm	10.4 ± 0.5	〔μm〕
Fiber Cut-Off Wavelength		1150～1330	〔nm〕
Cable Cut-Off Wavelength		<1260	〔nm〕
Zero Dispersion Wavelength		1300～1322	〔nm〕
Zero Dispersion Slope		≦ 0.092	〔ps/(nm^2·km)〕
Dispersion Coefficient	1285 – 1330 nm	≦ 3.1	〔ps/(nm·km)〕
	1550 nm	≦ 18	〔ps/(nm·km)〕
	1625 nm	≦ 22	〔ps/(nm·km)〕
Fiber Polarization Mode Dispersion (PMD)		≦ 0.2	〔ps/√km〕
BACKSCATTER CHARACTERISTICS			
Attenuation Directional Uniformity		≦ 0.03	〔dB/km〕
Attenuation Uniformity		≦ 0.05	〔dB〕
Reflections		Not Allowed	
Group Index of Refraction	1310 nm	1.467	
	1550 nm	1.468	
PHYSICAL CHARACTERISTICS			
Core / Cladding Concentricity Error		≦ 0.8	〔μm〕
Cladding Diameter		125 ± 1	〔μm〕
Cladding Non-Circularity		≦ 2.0	〔%〕
Coating Diameter (UV Curable Acrylate)		245 ± 10	〔μm〕
Clad/Coat Concentricity Error		≦ 6	〔μm〕
Fiber curl		≧ 4	〔m〕
Proof Test		100	〔Kpsi〕
Bend Induced Attenuation at 1625 nm (100 turns around a mandrel of 60 mm diameter)		≦ 0.1	〔dB〕
Fatigue Resistance Parameter (nd)		20	
Average Coating Strip Force / Peak Coating Strip Force		≧ 105 / 140 (1.4)	〔g〕/ (N)
Length (Typical)		12.6～25.2	〔Km〕
ENVIRONMENTAL CHARACTERISTICS			
Temperature Dependence at 1310 nm and 1550 nm Induced Attenuation – 60℃ to +85℃		≦ 0.05	〔dB/km〕
Watersoak Dependence at 1310 nm and 1550 nm Induced Attenuation at 20℃ for 30 days		≦ 0.05	〔dB/km〕
Damp Heat Dependence at 1310 nm and 1550 nm Induced Attenuation at 85℃, 85%R.H., 30 days		≦ 0.05	〔dB/km〕

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