



NEX1 Technologies Co., Ltd

Technical Characteristics of Armor Optical Fiber Cable for Patch Cords

OPTICAL CHARACTERISTICS:

Attenuation @ 1310 nm / 1550 nm	$\leq 0.34 / 0.22$	dB/km
Fiber cutoff Wavelength	1200 ~ 1300	nm
Cable cutoff Wavelength	≤ 1260	nm
Mode Field Diameter	9.2 ± 0.5	um
Dispersion @ 1290 ~ 1330 nm	≤ 2.85	ps / (nm*km)
Dispersion @ 1550 nm	≤ 18	ps / (nm*km)
Zero Dispersion Wavelength	1300 ~ 1322	nm
Zero Dispersion Slope	≤ 0.093	ps / (nm ² *km)
Polarization Mode Dispersion	≤ 0.2	ps / km ^{1/2}

BACKSCATTER CHARACTERISTICS:

Attenuation Variation vs. Wavelength 1285 ~ 1330 nm	≤ 0.05	dB/km
Attenuation Uniformity (OTDR trace, dB) Point or Step defect	≤ 0.05	dB
Attenuation Directional Uniformity	≤ 0.05	dB/km



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PHYSICS CHARACTERISTICS:

Cladding Diameter	125 ± 1	um
Cladding Non-circularity	≤ 1.0	%
Mode Field Concentricity	≤ 0.8	um
Coating Diameter	245 ± 10	um
Cladding / coating Concentricity Error	≤ 6	um
Fiber Curl	≤ 4	m
Proof Test	≥ 100	kpsi
Bend Inducted Attenuation at 1310 nm 100 Turn Round a Mandrel of 60mm Diameter	≤ 0.05	dB

ENVIRONMENTAL CHARACTERISTICS:

Temperature Dependence at 1310nm and 1550nm Inducted Attenuation – 60°C to 80°C	≤ 0.05	dB/km
Damp Heat Dependence at 1310nm and 1550nm Induced Attenuation 85°C、85%R.H. 30 days	≤ 0.05	dB/km
Water-soak Dependence at 1310nm and 1550nm Induced Attenuation at 20 °C for 30 days	≤ 0.05	dB/km