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X Wave™ & X Wave - S™

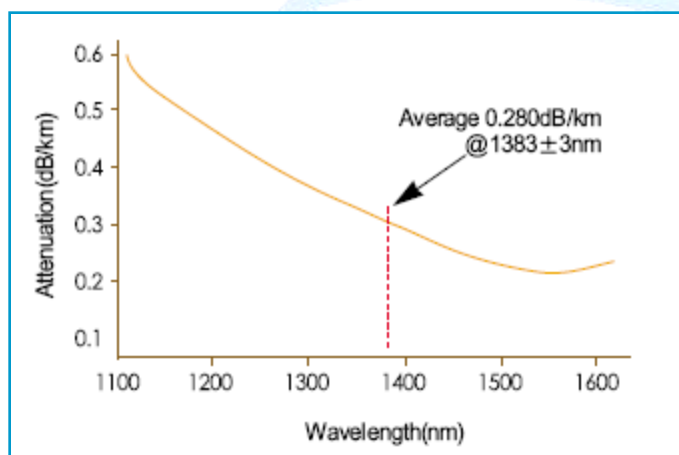
Low Water Peak & Zero Water Peak Single Mode Fiber

Features & Benefits

- A 50% increase in usable optical spectrum
- Transmission capability from 1260nm to 1625nm by removing the OH Ion around 1383nm
- Long term attenuation reliability by absence of hydrogen aging defects
- Excellent geometrical properties for active alignment splicing technique available with excellent splice loss control
- Mechanically strippable coating
- Environmentally compatible
- Meets all industry standards
 - ITU-T Recommendation G.652(Tables A,BC and D)
 - IEC Specifications 60793-2-50 Type b1.3
 - TIA/EIA 492-CAAB
 - Telcordia Generic Requirements GR-20-CORE

Performance

- Ultra Low Loss LWP SMF - Spectral attenuation after Hydrogen Aging



Over 50% More spectrum

- Optimun dispersion For 10 Gb/s
- Low cost operation

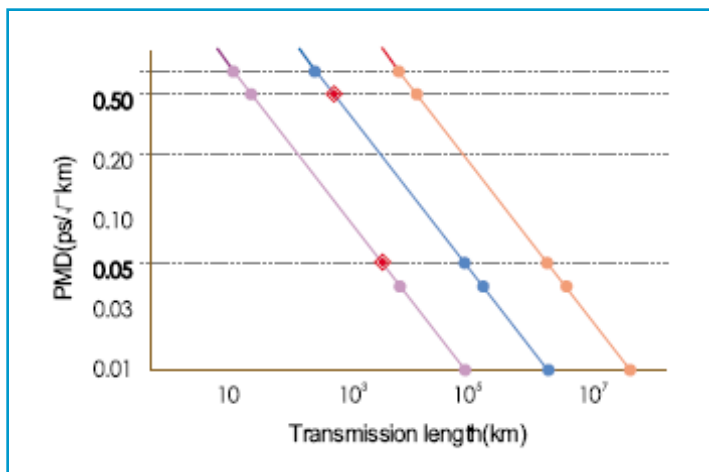


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•Ultimate Low PMD Single Mode Fiber

- Manufactured using unsurpassed quality Control, ultimate Low PMD SMF is specified At levels that improve upon even the most Recent PMD specifications in ITU G.652 D.



Specification

Characteristics	Specified Values	Tolerances	Unit	
Optical Properties				
Attenuation	1310nm	≤ 0.34	dB/km	
	1383nm	≤ 0.31*	dB/km	
	1490nm	≤ 0.21	dB/km	
	1550nm	≤ 0.20	dB/km	
	1625nm	≤ 0.21	dB/km	
Point Discontinuity	1550nm	0.05	Max	dB
Mode Field Diameter	1310nm	9.2	±0.4	μm
	1550nm	10.4	±0.5	μm
Cutoff Wavelength	Cable	1260	Max	nm
Chromatic Dispersion	1550nm	18	Max	ps/(nm • km)
	1625nm	22	Max	ps/(nm • km)
	Zero Dispersion Wavelength	1310~1324	Max	nm
	Slope @λ ₀	0.092	Max	ps/(nm ² • km)
Macro bending Attenuation	1turns, ϕ32mm 1550nm	0.03	Max	dB
	100turns, ϕ50mm 1310nm & 1550nm	0.03	Max	dB
	100turns, ϕ60mm 1625m	0.03	Max	dB
PMD	Link Design Value	≤ 0.06**	Max	ps/√m
	Maximum Individual Fiber	≤ 0.2	Max	ps/√m

* Attenuation values at this wavelength represent post-hydrogen aging performance. ** Complies with IEC 60794-3:2001, Section 5.5, Method I, September 2001. Alternative attenuation offerings available upon request.

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Geometrical Properties

Cladding Diameter	125	±0.7	μm
Cladding Non-Circularity	0.7	Max	%
Core/Cladding Concentricity Error	0.5	Max	μm
Coating Diameter	245	±5	μm
Coating Non-Circularity	6	Max	%
Coating/Cladding Concentricity Error	10	Max	μm

Mechanical Properties

Proof Test	1s	100***	Min	kpsi
Fiber Curl	Radius of curvature	4	Min	m
Coating Strip Force	30mm - 500mm/min	1.3-8.9		n
Dynamic Tensile Strength (0.5meter gauge length)	Unaged	≥550	Min	kpsi
		750	Typical	kpsi
	Aged	≥440	Min	kpsi
		750	Typical	kpsi
Stress Corrosion Parameter unaged and aged		≥21	Min	
		≥25	Typical	

*** Higher Proof test levels available upon request.

Environmental Properties

Temperature Cycling	-60°C to +85°C	0.05***	Max	dB/km
Temperature Humidity Cycling	-10°C to +85°C up to 98% RH	0.05	Max	dB/km
Water Immersion	23 ± 2°C	0.05	Max	dB/km
Heat Aging	85 ± 2°C	0.05	Max	dB/km

*** Induced Attenuation 1310nm, 1550nm & 1625nm / Operating Temperature Range: -60°C to +85°C

Performance Properties

Effective Group Index (Neff)	1310m	1.467	Typical
	1550m	1.468	Typical

