



# 9µm G652D FIBER

DESCRIPTION	VALUE	UNIT
● Optical characteristics		
Attenuation	1310 nm <0.36	[dB / km]
	1383 nm (After H <sub>2</sub> aging) <0.35	[dB / km]
	1550 nm <0.22	[dB / km]
	1625 nm <0.24	[dB / km]
Dispersion coefficient	1285 - 1340 nm >-3.0	[ps / (nm • km)]
	1550 nm <18	[ps / (nm • km)]
	1625 nm <22	
Zero dispersion wavelength	>1302	[nm]
Zero dispersion slope	<0.091	[ps / (nm <sup>2</sup> • km)]
Polarization Mode Dispersion		
PMD Maximum Individual Fibre	<0.2	[ps / √km ]
PMD Design Link Value	<0.08	[ps / √km ]
Fiber cutoff wavelength	>1180	[nm]
Cable cutoff wavelength	<1260	[nm]
Mode field diameter (MFD)	1310 NM 9.2±0.4	[µ m]
	1550 NM 10.4±0.8	[µ m]
Group index of refraction (Typical)	1310 NM 1.466	
	1550 NM 1.467	
● Backscatter characteristics	1310 nm, 1550 nm	
Step (mean of bidirectional measurement)	<0.05	[dB]
Irregularities over fibre length and point discontinuity	<0.05	[dB]
Difference backscatter coefficient (bidirectional measurement)	<0.03	[dB / km]
Attenuation uniformity	<0.01	[dB / km]
● Geometrical characteristics		
Cladding diameter	125.0±1.0	[µ m]
Cladding non-circularity	<1.0	[%]
Coating diameter	242±7	[µ m]
Coating / cladding concentricity error	<12.0	[µ m]
Coating non-circularity	<6.0	[%]
Core / cladding concentricity error	<0.6	[µ m]
Curl (radius)	<4	[µ m]



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● Environmental characteristics		
Temperature dependence	1310 nm, 1550 nm	
Induced attenuation	-60°C to +85°C	<0.05 [dB / km]
Temperature-humidity cycling	-10°C to +85°C, 90% R.H.	<0.05 [dB / km]
Induced attenuation	85°C, 85% R.H., 30 days	<0.05 [dB / km]
Damp heat dependence	-20°C for 30 days	<0.05 [dB / km]
Induced attenuation		
Watersoak dependence		
Induced attenuation		
● Mechanical characteristics		
Proof test	off line	>9.0 [N]
		>1.0 [%]
		>100 [kpsi]
Bending Dependence	1550 nm	
Induced Attenuation	1 turn, 32mm diameter	<0.50 [dB]
	100 turns, 60mm diameter	<0.50 [dB]
Coating strip force	typical average force	1.7 [N]
	peak force	>1.3 <8.9 [N]
Dynamic stress corrosion susceptibility parameter (nd, Typical)		>27