

G.657.A2 Single-mode Fiber Features			
Features	Conditions	Value	Unit
Optical Requirements			
Attenuation	1310nm	≤0.36	dB/km
	1383nm	≤0.34	dB/km
	1550nm	≤0.22	dB/km
	1625nm	≤0.24	dB/km
Zero dispersion wavelength		1300~1324	nm
Zero dispersion slope		≤0.092	ps/(nm ² .km)
PMD		≤0.2	ps/
Link Design Value		≤0.06	ps/
Typical Value		0.04	ps/
Cable cutoff wavelength (λ _{cc})		≤1260	nm
Mode Field Diameter (MFD)	1310nm	9.2±0.4	μm
Effective Group Index of Refraction (N _{eff})	1310nm	1.4683	
	1550nm	1.4688	
Point discontinuities	1310nm	≤0.05	dB
	1550nm	≤0.05	dB
Geometrical Requirements			
Cladding diameter		125±0.7	μm
Cladding non-circularity		≤0.7	%
Coating diameter		245±10	μm
Coating-cladding concentricity error		≤12.0	μm
Core-cladding concentricity error		≤0.5	μm
Curl (radius)		≥4.0	m
Environmental Requirements (1310&1550nm&1625nm)			
Temperature dependence	-60°C~+85°C	≤0.05	dB/km
Temperature-humidity cycling	-10°C~+85°C, 98%RH	≤0.05	dB/km
Water-soaked Dependence	23°C, for 30 days	≤0.05	dB/km
Damp Heat Dependence	85°C and 85%RH, for 30 days	≤0.05	dB/km
Dry heat	85°C, for 30 days	≤0.05	dB/km
Mechanical Requirements			
Proof test		≥9.0	N
Macro-bend induced attenuation 10 turns Φ30mm	1550nm	≤0.03	dB
	1625nm	≤0.1	dB
Macro-bend induced attenuation 1 turns Φ20mm	1550nm	≤0.1	dB
	1625nm	≤0.2	dB
Macro-bend induced attenuation 1 turns Φ15mm	1550nm	≤0.5	dB
	1625nm	≤1.0	dB
Coating strip force	Typical average force	1.0~5.0	N
	Peak force	1.3~8.9	N
Dynamic stress corrosion susceptibility Parameter Nd		≥20	
Delivery length	2.1~50.4		km/reel