

Optical characteristics of TeraCap Bend Insensitive Zero water peak Singlemode fiber



		TeraSafe™ 9/125 μm (G.657.A1)		TeraSafe™ Plus 9/125 μm (G.657.B2)	
Attenuation		@1310nm	≤ 0.35dB/km	≤ 0.35dB/km	≤ 0.35dB/km
		@1383nm	≤ 0.35dB/km (After H ₂ aging)	≤ 0.35dB/km (After H ₂ aging)	≤ 0.35dB/km (After H ₂ aging)
		@1460nm	≤ 0.25dB/km	≤ 0.25dB/km	≤ 0.25dB/km
		@1490nm		≤ 0.23dB/km	≤ 0.23dB/km
		@1550nm	≤ 0.21dB/km	≤ 0.21dB/km	≤ 0.21dB/km
		@1625nm	≤ 0.23dB/km	≤ 0.23dB/km	≤ 0.23dB/km
Attenuation vs. Wavelength	@1310nm	1285~1330nm	≤ 0.03dB/km	≤ 0.03dB/km	≤ 0.03dB/km
	@1550nm	1525~1575nm	≤ 0.02dB/km	≤ 0.02dB/km	≤ 0.02dB/km
Dispersion coefficient		1285~1340nm	-3.0~3.0 ps/nm.km		
		@1550nm	≤ 18 ps/nm.km		
		@1625nm	≤ 22 ps/nm.km		
Zero dispersion wavelength			1300~1324nm	1300~1324nm	
Zero dispersion slope			≤ 0.092 ps/nm ² .km	≤ 0.092 ps/nm ² .km	
Zero dispersion slope(Typical)			≤ 0.086 ps/nm ² .km		
Polarization Mode Dispersion (PMD)		Maximum Individual Fiber	≤ 0.1ps/√km	≤ 0.1ps/√km	≤ 0.1ps/√km
		Design Link Value	≤ 0.06ps/√km	≤ 0.06ps/√km	≤ 0.06ps/√km
Cut-off wavelength			≤ 1260nm	≤ 1260nm	
Mode field diameter(MFD)		@1310nm	8.8±0.4μm	8.8±0.4μm	8.8±0.4μm
		@1550nm	9.8±0.5μm	9.8±0.5μm	9.8±0.5μm
Group Index of Refraction		@1310nm	1.466	1.466	1.466
		@1550nm	1.467	1.467	1.467

Backscatter Characteristics(@1310nm/@1550nm)

Geometrical Characteristics

Cladding diameter	125.0±0.7μm	125.0±0.7μm
Cladding noncircularity	≤ 0.7%	≤ 0.7%
Primary Coating diameter	245±5μm	245±5μm
Coating/Cladding concentricity error	≤ 12.0μm	≤ 12.0μm
Coating noncircularity	≤ 6.0%	≤ 6.0%
Core/Cladding concentricity error	≤ 0.5μm	≤ 0.5μm
Curl(Radius)	≥ 4m	≥ 4m

Environmental Characteristics (@1310nm/@1550nm)

Mechanical Characteristics

Proof test (off line)		≥ 9.0N (≥ 100kpsi)	≥ 9.0N (≥ 100kpsi)
Attenuation at bending dependence @1550nm	1 turn,15mm diameter		≤ 0.5dB
	1 turn,20mm diameter	≤ 0.75dB	≤ 0.1dB
	10 turn,30mm diameter	≤ 0.25dB	≤ 0.03dB
	100 turn,50mm diameter	≤ 0.05dB	
Coating strip force(Typical)		1.7N	1.7N
Dyanamics stress corrosion susceptibility parameter(n_{gr} , Typical)		≥ 27	≥ 27