

Optical Fiber Characteristics

Single Mode Fibers

	Parameter	Standard Grade	Premium Grade	Units
		Single Mode	Single Mode	
Fiber Code		90	91	
Attenuation, Loose Tube Cables				
	@1310nm	0.38	0.35	dB/km
	@1550nm	0.25	0.22	dB/km
Attenuation, Tight Buffer or Semi-Tight Cables				
	@1310nm	0.5	0.45	dB/km
	@1550nm	0.5	0.35	dB/km
Dispersion	between 1285 and 1330 nm	3.5	3.5	ps/nm/km
	between 1525 and 1575 nm	19	19	ps/nm/km
Zero Dispersion Wavelength		1310 ±10	1310±10	nm
Mode Field Diameter	@1300nm	9.3±0.5	9.3±0.5	µm
	@1550nm	10.5±1.0	10.5±1.0	µm
Cable Cut-off Wavelength		1250	1250	nm
Cladding Diameter		125±1.0	125±1.0	µm
Mode Field Concentricity Error 0.8		0.8	µm	
Cladding Non-Circularity		1	1	%
Coating Diameter		250±15	250±15	µm
Proof-Test Level		100	100	kpsi

Multi Mode Fibers

	Parameter	Standard Grade	Premium Grade	Standard Grade	Premium Grade	Units
		MultiMode	MultiMode	MultiMode	MultiMode	
		50/125	50/125	62.5/125	62.5/125	
Fiber Code		50	51	60	61	
Attenuation, Loose Tube Cables						
	@850nm	3.2	3.0	3.75	3.2	dB/km
	@1300nm	1.0	1.0	1.2	1.2	dB/km
Attenuation, Tight Buffer and Semi-Tight Cables						
	@850nm	3.5	3.2	3.75	3.5	dB/km
	@1300nm	1.2	1.2	1.5	1.5	dB/km
Bandwidth	@850nm	400	600	160	300	MHz/km
	@1300nm	400	1200	500	1000	MHz/km
Numerical Aperture		0.2±0.02	0.2±0.02	0.275±0.0015	0.275±0.0015	
Core Diameter		50±3	50±3	62.5±3	62.5±3	µm
Cladding Diameter		125±2	125±2	125±2	125±2	µm
Core Non Circularity		6	6	6	6	%
Cladding Non-Circularity		2	2	2	2	%
Core/Cladding Offset		6	6	6	6	%
Coating Diameter		250±15	250±15	250±15	250±15	µm
Proof-Test Level		50	50	50	50	kpsi