Multi Mode 50/125 OM2

This graded-index 50/125 µm multimode fiber has a 50 µm core diameter and a 125 µm cladding diameter. The fiber is designed for use at 850 nm and/or 1300 nm and is suitable for use in premises cabling applications ,like Local Area Networks(including backbone, riser and horizontal)with video, data and/or voice services Using LED, VCSEl and Fabry-Perot laser sources at 850 nm or 1300 nm. This multimode fiber assures full compatibility with legacy systems, like Fast Ethernet, FDDL, ATM, Fiber Channel and 1Gb/s Ethernet. Because of the nature of the Plasma-activated Chemical Vapor Deposition(PVCD) manufacturing process, this fiber offers the highest bandwidth available in the market. The fiber complies with or exceeds ITU Recommendation G.651.1,IEC 60793-2-10 type A1a.1 Optical Fiber Specification, TIA/EIA-492AAAB-A detail Specification.

Optical Characteristics For Multi Mode 50/125 µm (OM2)

CHARACTERISTIC	CONDITION	SPECIFIC VALUE	UNIT
Optical characteristics	OM2		
Attenuation	850 nm	≤2.3	[dB/km]
	1300 nm	≤0.6	
Minimum Modal Bandwidth	850 nm	≥500	[MHz.km]
	1300 nm	≥500	
Effective Modal band width	850 nm	≥950	[MHz.km]
Application Support Distance on	10 GB SX 850 nm	150	[m]
	GB SX 850 nm	750	
	GB LX 1300 nm	600	
Numerical Aperture (NA)		0.200±0.015	
Group index of refraction (Typical)	850 nm	1.482	
	1300 nm	1.477	
Zero Dispersion Wavelength		1295-1340	[nm]
Zero Dispersion Slope	1295-1310 nm	≤0.105	[ps/(nm².km)]
	1310-1320 nm	≤0.000375*(1590-λo)	
Macro bending induced loss 100 turns@30mm diameter	850 nm	≤0.50	[dB]
	1300 nm	≤0.50	
Geometrical characteristics			
Core Diameter		50±2.5	[µm]
Cladding diameter		125.0±1.0	[µm]
Core Non-circularity		≤5.0	[%]
Cladding non circularity		≤1.0	[%]
Coating diameter		245±7	[µm]
Coating/cladding concentricity error		≤10.0	[µm]
Coating no circularity		≤6.0	[%]
Core/cladding concentricity error		≤1.5	[µm]
Delivery Length		Up to 8.8	[km/reel]
Environmental Characteristics	850 nm,1300 nm		
Temperature dependence induced attenuation	- 60°C to +85°C	≤0.10	[dB/km]
Temperature humidity cycling induced attenuation	-10°C to +85°C, 98% RH	≤0.10	[dB/km]
Damp heat dependence induced attenuation	85°C and 85% RH, for 30days	≤0.10	[dB/km]
Water soak dependence induced attenuation	23°C, for 30days	≤0.10	[dB/km]
Dry heat aging	85°C, for 30days	≤0.10	[dB/km]
Back scatter Characteristics	1300 nm		
Step (Mean of Bidirectional measurement)		≤0.10	[dB]
Irregularities over fiber length & point discontinuity		≤0.10	[dB]
Attenuation uniformity		≤0.08	[dB/km]
Mechanical Characteristics			
Proof test		≥9.0	[N]
		≥1.0	[%]
		≥100	[Kpsi]
Coating Strip Force	Typical Average	1.5	[N]
	Peak	≥1.3 & ≤8.9	[N]
Dynamic Stress corrosion susceptibility Parameter		27	