

➤ Multi Mode 50/125 OM3

To support high performance, low-cost, short reach 10 Gb/s applications, developed a 850 nm laser-optimized 50 μm multimode fiber: Max Band -OM3 multimode fiber, formerly known as MaxBand300. These applications are in particular Local Area Networks (LAN) backbones up to 300 m (10GBASE-SX), Storage Area Networks (SAN), Data Centers up to 100 m at 40G/100G speeds (40GBASE-SR4 and 100GBASE-SR10) and Central Office connections. The Max Band multimode fibers are produced by the proprietary Plasma-activated Chemical Vapor Deposition process (PCVD), acknowledged worldwide as offering the best core profile accuracy in multimode fiber. Thanks to the special bandwidth performance of the MaxBand-OM3 multimode fiber, a broad range of legacy and 10 Gb/s applications can be supported. This range of multimode products offers end-users the best possible optimization of their networks in the most flexible way. The OM3 multimode fiber complies with or exceeds IEC 60793-2-10 type A1a.2 Optical Fiber Specification, ISO/IEC 11801 OM-3 Specification, TIA/EIA-492AAAC detail Specification.

➤ Optical Characteristics For Multi Mode 50/125 μm (OM3)

CHARACTERISTIC	CONDITION	SPECIFIC VALUE	UNIT
Optical characteristics		OM3	
Attenuation	850 nm	≤2.3	[dB/km]
	1300 nm	≤0.6	
Minimum Modal Bandwidth	850 nm	≥1500	[MHz.km]
	1300 nm	≥500	
Effective Modal band width	850 nm	≥2000	[MHz.km]
Application Support Distance on	10 GB SX 850 nm	300	[m]
	GB SX 850 nm	1000	
	GB LX 1300 nm	600	
	40 & 100 GB 850nm	100	
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/(nm ² .k m)]
	1310-1320 nm	≤0.000375*(1590-λ ₀)	
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		≤12.0	[μm]
Coating no circularity		≤6.0	[%]
Core/cladding concentricity error		≤1.0	[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	