

OM1(62.5/125μm) Multimode Fibre

Yangtze Optical Fibre and Cable Joint Stock Limited Company



YOFC OM1(62.5/125μm) Multimode Fibre complies with or exceeds ISO/IEC 11801-1 OM1 specification, IEC 60793-2-10 A1-OM1 specification, and TIA-492AAAF A1-OM1 specification.

Features	Benefits and Applications
<ul style="list-style-type: none"> • Superior geometry uniformity • Low attenuation • High bandwidth at wavelengths of 850nm and 1300nm • Manufactured by PCVD process • Extremely refined refractive index profile 	<ul style="list-style-type: none"> • Local area networks (LAN) • Video, voice and data services • Gigabit Ethernet using laser or LED light sources
<ul style="list-style-type: none"> • Coated with YOFC's proprietary dual layer UV curable acrylate 	<ul style="list-style-type: none"> • High resistance to micro-bending • Optimized performance in tight-buffer cable applications • Stable performance over a wide range of environmental conditions

Characteristics	Conditions	Specified values	Units
Geometry Characteristics			
Core Diameter	--	62.5±2.5	[μm]
Core Non-Circularity	--	≤5.0	[%]
Cladding Diameter	--	125.0±1.0	[μm]
Cladding Non-Circularity	--	≤1.0	[%]
Coating Diameter	--	245±7	[μm]
Coating/Cladding Concentricity Error	--	≤10.0	[μm]
Coating Non-Circularity	--	≤6.0	[%]
Core/Cladding Concentricity Error	--	≤1.5	[μm]
Delivery Length	--	up to 17.6	[km/reel]
Optical Characteristics			
Attenuation	850nm	≤2.7	[dB/km]
	1300nm	≤0.6	[dB/km]
Overfilled Modal Bandwidth	850nm	≥200	[MHz · km]
	1300nm	≥500	[MHz · km]
Numerical Aperture	--	0.275±0.015	--
Group Refractive Index	850nm	1.496	--
	1300nm	1.491	--
Zero Dispersion Wavelength, λ_0	--	1320~1365	[nm]
Zero Dispersion Slope, S_0	1320nm ≤ λ_0 ≤ 1348nm	≤0.11	[ps/(nm ² · km)]
	1348nm ≤ λ_0 ≤ 1365nm	≤0.001(1458- λ_0)	[ps/(nm ² · km)]
Macrobending Loss	--	--	--
100 Turns @ 37.5 mm Radius	850nm	≤0.50	[dB]
	1300nm	≤0.50	[dB]
Backscatter Characteristics		1300nm	
Step (Mean of Bidirectional Measurement)	--	≤0.10	[dB]
Irregularities Over Fibre Length and Point Discontinuity	--	≤0.10	[dB]
Attenuation Uniformity	--	≤0.10	[dB/km]
Environmental Characteristics		850nm & 1300nm	
Temperature Cycling	-60°C to 85°C	≤0.10	[dB/km]
Temperature-Humidity Cycling	-10°C to 85°C, 4% to 98% RH	≤0.10	[dB/km]
Water Immersion	23°C, 30 days	≤0.10	[dB/km]
Dry Heat	85°C, 30 days	≤0.10	[dB/km]
Damp Heat	85°C, 85% RH, 30 days	≤0.10	[dB/km]
Mechanical Specification			
Proof Test	--	≥9.0	[N]
	--	≥1.0	[%]
	--	≥100	[kpsi]
Coating Strip Force	typical average force	1.5	[N]
	peak force	≥1.3, ≤8.9	[N]
Dynamic Stress Corrosion Susceptibility Parameter (n_d , typical)	--	20	--