Smart Link Better Life.

MaxBand® OM2+/OM3/OM4 Bend Insensitive Multimode Fibre

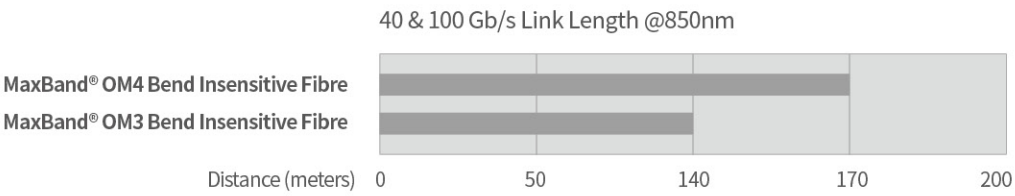
Yangtze Optical Fibre and Cable Joint Stock Limited Company

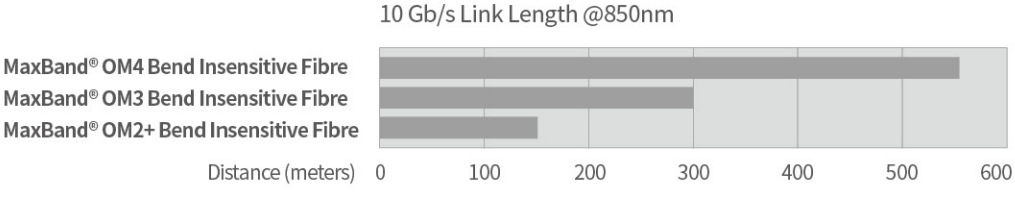
YOFC MaxBand® OM2+ Bend Insensitive Multimode Fibre complies with or exceeds ISO/IEC 11801-1 OM2 specification, IEC 60793-2-10 A1-OM2 specification, and TIA-492AAAF A1-OM2 specification.

YOFC MaxBand® OM3/OM4 Bend Insensitive Multimode Fibres comply with or exceed ISO/IEC 11801-1 OM3/OM4 specifications, IEC 60793-2-10 A1-OM3/A1-OM4 specfications, and TIA-492AAAF A1-OM3/A1-OM4 specifications.

Features	Benefits and Applications
• Optimized for 850nm VCSEL • Compatibility with current OM2+/OM3/OM4 multimode fibre • Superior geometry uniformity • Low attenuation • High bandwidth • Low differential mode delay (DMD)	• Data centers • Data storage networks • High-performance computing centers a • Office centers • Local area networks (LAN) • 1 & 10 & 40 & 100 & 400 Gb/s Ethernet
• Very low macro-bending sensitivity	• Supports the use and installation of optical cables with a small bending radius
• Coated with YOFC's proprietary dual layer UV curable acrylate	• High resistance to micro-bending • Optimized performance in tight-buffer cable applications • Stable performance over a wide range of environmental conditions

System Link Length





Characteristics	Conditions	Specified values	Units
Geometry Characteristics			
Core Diameter	--	50±2.5	[μm]
Core Non-Circularity	--	⩽5.0	[%]
Cladding Diameter	--	125.0±1.0	[μm]
Cladding Non-Circularity	--	⩽0.6	[%]
Coating Diameter	--	245±7	[μm]
Coating/Cladding Concentricity Error	--	⩽10.0	[μm]
Coating Non-Circularity	--	⩽6.0	[%]
Core/Cladding Concentricity Error	--	⩽1.0	[μm]
Delivery Length	--	up to 8.8	[km/reel]
Optical Characteristics			
Attenuation	850nm	⩽2.4	[dB/km]
	1300nm	⩽0.6	[dB/km]
--	--	MaxBand® OM2+/OM3/OM4 Bend Insensitive	
Overfilled Modal Bandwidth	850nm	⩾700/⩾1500/⩾3500	[MHz·km]
	1300nm	⩾500/⩾500/⩾500	[MHz·km]
Effective Modal Bandwidth	850nm	⩾950/⩾2000/⩾4700	[MHz·km]
Application support distance on	--	--	--
40GBASE-SR4 / 100GBASE-SR10[1]	850nm	-/140/170	[m]
10GBASE-SR	850nm	150/300/550	[m]
1000BASE-SR	850nm	750/1000/1100	[m]
DMD Specification	Compliant with and more stringent than the requirements of IEC 60793-2-10		--
Numerical Aperture	--	0.200±0.015	--
Group Refractive Index	850nm	1.482	--
	1300nm	1.477	--
Zero Dispersion Wavelength, λ_0	--	1295-1340	[nm]
Zero Dispersion Slope, S_0	1295nm⩽λ_0⩽1310nm	⩽0.105	[ps/(nm²·km)]
	1310nm⩽λ_0⩽1340nm	⩽0.000375(1590-λ_0)	[ps/(nm²·km)]
Macrobending Loss[2]	--	--	--
2 Turns @ 15 mm Radius	850nm	⩽0.1	[dB]
	1300nm	⩽0.3	[dB]
2 Turns @ 7.5 mm Radius	850nm	⩽0.2	[dB]
	1300nm	⩽0.5	[dB]
Backscatter Characteristics	**1300nm**		
Step (Mean of Bidirectional Measurement)	--	⩽0.10	[dB]
Irregularities Over Fibre Length and Point Discontinuity	--	⩽0.10	[dB]
Attenuation Uniformity	--	⩽0.08	[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	--

Remarks: 1. Support distances considering maximum cable attenuation of 3.0 dB/km at 850 nm, maximum total splice/connector loss of 1.0 dB and VCSELs maximum RMS spectral width ⩽ 0.45 nm

2. The launch condition for the macrobending loss measurement fulfils that described in IEC 61280-4-1.