

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

YOFC[®] MaxBand[®] OM2⁺ Bend Insensitive Multimode Fibre complies with or exceeds ISO/IEC 11801 OM2 specification, IEC 60793–2–10 type A1a.1 Optical Fibre Specification, and TIA/EIA–492AAAB–A detail specification.

YOFC® MaxBand® OM3/OM4 Bend Insensitive Multimode Fibres comply with or exceed ISO/IEC 11801 OM3/OM4 specification, IEC 60793–2–10 type A1a.2 and A1a.3 ptical Fibre Specification, and TIA/EIA–492AAAC/492AAAD detail specification.

Features	Benefits and Applications	
- Very low macro-bending sensitivity	- The fibre is easier to handle and install without excessive care when	
- The fibre can be installed in loops as small as	storing the fibre, for example, in splicing cassettes.	
7.5mm radius with less than 0.2dB bending loss	- Supports installation with small cable bend radii and compact organize	
at both 850nm and 1300nm	 Facilitates jumper moves, adds and changes. 	
- Low micro-bending sensitivity		
- Maintaining compatibility with current	- Central offices	
OM2 ⁺ /OM3/OM4 multimode optical fibre.	- Data centers	
- Specially designed for 10Gb/s Ethernet	- High performance computing centers	
applications using low cost 850nm VCSELs	- Local Area Networks	
- Supporting 40 & 100 Gb/s applications	- Storage Area Networks	
- Low differential mode delay (DMD)	- 1 & 10 & 40 & 100 Gb/s Ethernet	
- Low attenuation		
- Coated with YOFC's proprietary dual layer UV	 Optimized performance in tight-buffer cable applications 	
curable acrylate.	- High resistance to microbending	
	- Stable performance over a wide range of environmental conditions	

System Link Length

MaxBand[®] OM4 Bend Insensitive Fibre MaxBand[®] OM3 Bend Insensitive Fibre MaxBand[®] OM2⁺ Bend Insensitive Fibre

Distance (meters)

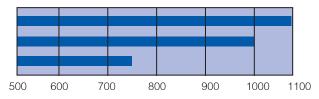
MaxBand[®] OM4 Bend Insensitive Fibre MaxBand[®] OM3 Bend Insensitive Fibre MaxBand[®] OM2⁺ Bend Insensitive Fibre

Distance (meters)

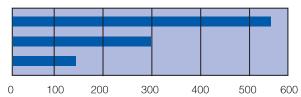
MaxBand[®] OM4 Bend Insensitive Fibre MaxBand[®] OM3 Bend Insensitive Fibre

Distance (meters)

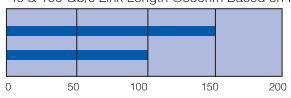
1 Gb/s Link Length @850nm Based on IEEE802.3z



10 Gb/s Link Length @850nm Based on IEEE802.3ae



40 & 100 Gb/s Link Length @850nm Based on IEEE802.3ba



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

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		≤1.0	[%]
Coating Diameter		245 ± 7	[µm]
Coating/Cladding Concentricity Error		≤12.0	[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	≤2.3	[dB/km]
	1300nm	≤0.6	[dB/km]
		MaxBand®OM2+/OM3 /OM4 I	
OFL 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			
10 Gigabit Ethernet S 850nm		150/300/550	[m]
Gigabit Ethernet SX 850nm		750/1000/1100	[m]
Gigabit Ethernet LX 1300nm		600/600/600	[m]
40 & 100 Gigabit Ethernet 850nm		- /100/150	[m]
DMD Specification		See Note 1	[m]
Numerical Aperture		0.200 ± 0.015	
Group Refractive Index	850nm	1.482	
	1300nm	1.477	
Zero Dispersion Wavelength		1295-1320	[nm]
Zero Dispersion Slope	1295-1300nm	≤0.001 × (λ0 −1190)	[ps/(nm².km
	1300-1320nm	≤0.11	[ps/(nm².km
Macrobending induced loss			
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 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]
Watersoak dependence induced attenuation	23℃ for 30 days	≤0.10	[dB/km]
Damp heat dependence induced attenuation	85°C and 85% RH, for 30days	≤0.10	[dB/km]
Dry heat aging	85℃ for 30 days	≤0.10	[dB/km]
Mechanical Specification			
Proof test		≥9.0	[N]
		≥1.0	[%]
		≥ 1.00 ≥ 100	[kpsi]
Coating strip force	typical average force	1.5	[N]
	peak force	≥1.3 ≤8.9	[N]
	1	~ 1.0 ~ 0.0	F1

^{1.} DMD specifications are compliant with and more stringent than the requirements of IEC 60793-2-10 (type A1a.2 for OM3 and type A1a.3 for OM4 and TIA-492AAAC (OM3) and 492AAAD (OM4).

Delivering Signals Smartly | www.yofc.com | 013