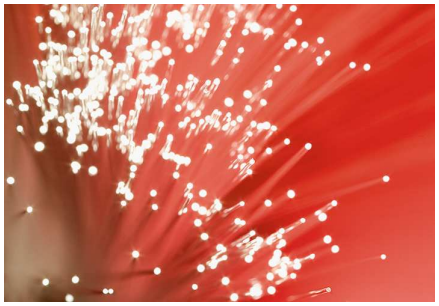
GOF MM Fiber, 50/125 µm (OM2) / C01-060102



This fiber is a graded-index multimode fiber suitable for transmission speeds of up to 10 Gb/s. It 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. This fiber is suitable for use in premises wiring application like LAN's with video, data and or voice services using LED, VCSEL and Fabry-Perot laser sources. The fiber is compliant with all relevant network standards.

Standards and norm

This fiber fulfis the requirements of:	• IEC 60793-2-10 Category A1a • EN 60793-2-10: type A1a • ITU Recommendation G.651 • TIA/EIA-492AAAB
Testing methods are in accordance with the following standards:	• IEC 60793-1-XX: 2002 • EN 60793-1-XX: 2002
When cabled, the fibers fulfil the requirements for use in a number of cabling systems, among them are	• EN 50 173: 2011 category OM2 • ISO/IEC 11801: 2002 category OM2 • IEEE 802.3 – 2002 with amendment 802.3 Section Four • ANSI/TIA/EIA-568.B.3 - 2000
This fiber may be used as an alternative for 62.5/125µm fiber according to	• ANSI X3.166-1990 and IEC 9314-3

Material

Criteria	Value
Core	The core is germanium doped
Coating	Dual layer UV curable acrylate, type DLPC9. The coating offers excellent stable stripping performance, and a unique high and stable value for the dynamic stress corrosion coefficient. This gives a greatly improved mechanical protection of the fiber when used in harsh environments.

Optical properties

Property	Unit	Value	
Attenuation (of cable with fibers)	[dB/km]	At 850 nm: At 1300 nm:	≤ 2.7 ≤ 0.8
Numerical aperture	–		0.200 ± 0.015
In homogeneity of OTDR trace for any two 1000 metre fiber lengths	[dB/km]	Max.:	0.2
Bandwidth (OFL)	[MHz x km]	At 850 nm: At 1300 nm:	≥ 500 ≥ 800
Group index of refraction	–	At 850 nm: At 1300 nm:	1.482 1.477

Dimensional and mechanical properties

Property	Unit	Value	Standard
Core diameter	[µm]	50 ± 2.5	IEC/EN 60793-1-20
Cladding diameter	[µm]	125.0 ± 1.0	IEC/EN 60793-1-20
Cladding non-circularity	[%]	≤ 1.0	IEC/EN 60793-1-20
Core non-circularity	[%]	≤ 5	IEC/EN 60793-1-20
Core-cladding concentricity error	[µm]	≤ 1.5	IEC/EN 60793-1-20
Primary coating diameter - uncoloured	[µm]	242 ± 7	IEC/EN 60793-1-21
Primary coating diameter - coloured	[µm]	250 ± 15	IEC/EN 60793-1-21
Primary coating non-circularity	[%]	≤ 5	IEC/EN 60793-1-21
Primary coating-cladding concentricity error	[µm]	≤ 10	IEC/EN 60793-1-21
Proof stress level	[GPa]	≥ 0.7 (≈ 1 %)	IEC/EN 60793-1-30
Typical average strip force	[N]	1.7	IEC/EN 60793-1-32
Strip force (peak)	[N]	$1.0 \leq F_{peak.strip} \leq 8.9$	IEC/EN 60793-1-32

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