

Fibre Optic

Multimode Optical Fibre 50/125

Applications

Graded-Index multimode optical fibres 50/125 micron. The fibres are designed for use at 850, 953 and 1300 nm. These fibres are suitable for use in premises wiring applications, like Local Area Networks (LAN) with video, data and voice using LED, VCSEL or Laser Fabry Perot sources.

The fibre complies with or exceeds ITU-T Recommendation G651.1 (OM2, OM3 y OM4), IEC 60793-2-10 A1a.1, A1a.2, A1a.3, A1a.4 Optical Fibre Specification, ISO/IEC 11801 OM2 / OM3 / OM4 / OM5 specification, TIA/EIA-492AAAB, TIA/EIA-492AAAC, TIA/EIA-492AAAD, TIA/EIA-492AAAE,

Optical Characteristics

		OM2	OM3	OM4	OM5
Attenuation Coefficient (dB/Km)	850 nm	≤ 2.4	≤ 2.4	≤ 2.4	≤ 2.4
	953 nm	-	-	-	≤ 1.8
	1300 nm	≤ 0.7	≤ 0.7	≤ 0.7	≤ 0.6
Bandwidth (MHz.Km)	850 nm	≥ 500	≥ 1500	≥ 3500	≥ 3500
	953 nm	-	-	-	≥ 1800
	1300 nm	≥ 500	≥ 500	≥ 500	≥ 500
Link Distance (m)	1000Base-SX	550	900	1100	1000
	1000Base-LX	550	550	550	600
	10GBASE-SX	82	300	550	400
	40GBASE-SR4	--	100	150	150
	100GBASE-SR1		100	150	100
Numerical Aperture		0.200 ± 0.015			
Group Index of Refraction	850 nm	1.482			
	1300 nm	1.477			



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Geometrical And Mechanical Characteristics

Core diameter	$50 \pm 2.5 \mu\text{m}$
Core non-circularity	$\leq 5 \%$
Core / Cladding concentricity error	$\leq 1.5 \mu\text{m}$
Cladding diameter	$125 \pm 1.0 \mu\text{m}$
Cladding non-circularity	$\leq 1.0 \%$
Primary coating diameter	$245 \pm 10 \mu\text{m}$
Coating concentricity error	$\leq 12.0 \mu\text{m}$
Proof Test	$\geq 8.8 \text{ N} / \geq 1 \% / \geq 100 \text{ Kpsi}$