WAVEOPTICS

OM3

Optical Fiber Specifications

TECHNICAL INFORMATION

WAVEOPTICS

WAVEOPTICS FIBER (M) **OM3**

Optical fiber specifications before cabling

CHARACTERISTICS		WAVEOPTICS OM3
Fiber Code		M
Attenuation	850 nm	≤ 2.3 dB/km
	1300 nm	≤ 0.7 dB/km
	1383 nm	≤ 2.0 dB/km
Attenuation Discontinuities	1300 nm	≤ 0.05 dB
Numerical aperture		0.2 ± 0.015
Bandwidth (Overfilled Launch)	850 nm	≥ 1500 MHz*km
	1300 nm	≥ 500 MHz*km
Laser EMB	850	≥ 2000 MHz*km
Group refractive index	850 nm	1.483
	1300 nm	1.478
Zero dispersion wavelength λo		1295 ≤ λo ≤1340 nm
Transmission link distance for 10Gb/s (LX4)	850 nm	300 m
	1300 nm	300 m
Macrobend attenuation 100 turns @ 37.5 mm radius	850 nm	≤ 0.05 dB
	1300 nm	≤ 0.15 dB
Macrobend attenuation 2 turns @ 15 mm radius	850 nm	≤ 0.1 dB
	1300 nm	≤ 0.3 dB
Macrobend attenuation 2 turns @ 7.5 mm radius	850 nm	≤ 0.2 dB
	1300 nm	≤ 0.5 dB

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Physical Characteristics

CHARACTERISTICS	WAVEOPTICS OM3
Core diameter	50 ± 2.5 um
Cladding diameter	125.0 ± 1.0 um
Core-cladding concentricity error	≤ 1 um
Cladding non-circularity	≤ 1 %
Coating diameter	242.0 ± 7 um
Coating-cladding concentricity error	≤ 10 um

Environmental Characteristics

CHARACTERISTICS	CONDITIONS	WAVEOPTICS OM3
Temperature cycling	-60°C to + 85°C	≤ 0.1 dB/km
Water immersion	23°C ± 2°C	≤ 0.1 dB/km
High temperature aging	85°C ± 2°C	≤ 0.1 dB/km