

OM1 Multimode Fibre

FEATURES:

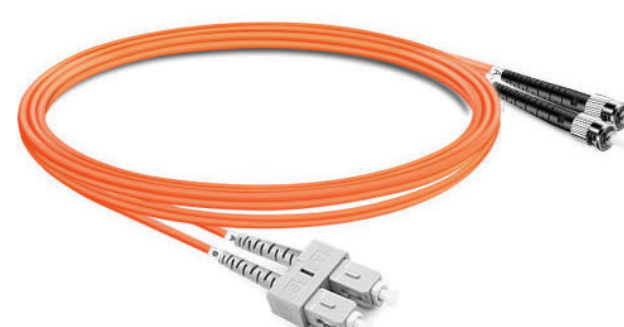
CERTECH OM1 Multimode Fibre complies with or exceeds ISO/IEC 11801

OM1 specification, IEC 60793-2-10 type A1b Optical Fibre Specification, and TIA/EIA-492AAAA-A detail specification.

- Extremely refined refractive index profile
- Low attenuation
- High bandwidth at both 850nm and 1300nm wavelengths
- Superior geometry, uniformity
- Coated with dual layer UV curable acrylate

BENEFITS AND APPLICATIONS

- Local area networks (LAN)
- Video, voice and data services
- Gigabit Ethernet (IEEE 802.3z) using laser or light emitting diode (LED) sources
- Optimized performance in tight-buffer cable applications
- High resistance to micro-bending
- Stable performance over a wide range of environmental conditions



Characteristics	Conditions	Specified values	Units
Geometry Characteristics			
Core Diameter	-	62.5±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	-	≤10.0	[µm]
Coating Non-Circularity	-	≤6.0	[%]
Core/Cladding Concentricity Error	-	≤1.5	[µm]
Delivery Length	-	up to 17.6	[km/reel]
Optical Characteristics			
Attenuation	850nm	≤2.7	[dB/km]
	1300nm	≤0.6	[dB/km]
Overfilled Modal Bandwidth	850nm	≥200	[MHz·km]
	1300nm	≥500	[MHz·km]
Numerical Aperture	-	0.275±0.015	--
Group Refractive Index	850nm	1.496	--
	1300nm	1.491	--
Zero Dispersion Wavelength, λ_0	-	1320~1365	[nm]
Zero Dispersion Slope, S_0	1320nm ≤ λ_0 ≤ 1348nm	≤0.11	[ps/(nm ² ·km)]
	1348nm ≤ λ_0 ≤ 1365nm	≤0.001 (1458- λ_0)	[ps/(nm ² ·km)]
Macrobending Loss	-	--	--
100 Turns @ 37.5 mm Radius	850nm	≤0.50	[dB]
	1300nm	≤0.50	[dB]
Backscatter Characteristics			
1300nm			
Step (Mean of Bidirectional Measurement)	-	≤0.10	[dB]
Irregularities Over Fibre Length and Point Discontinuity	-	≤0.10	[dB]
Attenuation Uniformity	-	≤0.10	[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_0 , typical)	-	20	--