OM1 (62.5/125μm) Multimode Fibre

OM1(62.5/125μm)多模光纤

Description 产品描述

OM1(62.5/125μm) Multimode Fibre complies with or exceeds ISO/IEC 11801-1 OM1 specification, IEC 60793-2-10 A1-OM1 specification, and TIA-492AAAF A1-OM1 specification.

OM1(62.5/125μm)多模光纤符合或超过ISO/IEC 11801-1 OM1规范、IEC 60793-2-10 A1-OM1规范和TIA-492AAAF A1-OM1规范。

Features 特点

- Superior geometry uniformity
  优越的几何均匀性
- Low attenuation
  低衰减
- High bandwidth at wavelengths of 850nm and 1300nm
  850nm 和 1300nm 波长的高带宽
- Manufactured by PCVD process
  PCVD工艺制造
- Extremely refined refractive index profile
  极其精细的折射率分布
- Coated with dual layer UV curable acrylate
  涂有双层紫外线固化丙烯酸酯

Benefits and Applications 优势和应用

- Local area networks (LAN)
  局域网 (LAN)
- Video, voice and data services
  视频、语音和数据服务
- Gigabit Ethernet using laser or LED light sources
  使用激光或 LED 光源的千兆以太网
- High resistance to micro-bending
  高抗微弯性
- Optimized performance in tight-buffer cable applications
  紧缓冲电缆应用中的优化性能
- Stable performance over a wide range of environmental conditions
  在广泛的环境条件下性能稳定

Specifications 参数

Geometrical Characteristics 几何特性

Characteristics 特性	Specified values 数据	Units 单位
Core Diameter 芯直径	62.5±2.5	[μm]
Core Non-Circularity 芯不圆度	≤5.0	[%]
Cladding Diameter 包层直径	125.0±1.0	[μm]
Cladding Non-Circularity 包层不圆度	≤1.0	[%]
Coating Diameter 涂层直径	245±7	[μm]
Coating-Cladding Concentricity Error 涂层/包层同心度误差	≤10.0	[μm]
Coating Non-Circularity 涂层不圆度	≤6.0	[%]
Core-Cladding Concentricity Error 芯/包层同心度误差	≤1.5	[μm]
Delivery Length 交货长度	up to 17.6	[km/reel]

Optical Characteristics 光学特性

Characteristics 特性	Conditions 条件		Specified values 数据	Units 单位
Attenuation 衰减	850nm		≤2.7	[dB/km]
	1300nm		≤0.6	[dB/km]
Overfilled Modal Bandwidth 满注入带宽	850nm		≥200	[Mhz·km]
	1300nm		≥500	[Mhz·km]
Numerical Aperture 数值孔径			0.275±0.015	--
Group Refractive Index 群折射率	850nm		1.496	--
	1300nm		1.491	--
Zero Dispersion Wavelength(λ0) 零色散波长(λ0)			1320~1365	[nm]
Zero Dispersion Slope(S0) 零色散斜率(S0)	1320nm≤ λ0 ≤1348nm		≤0.11	[ps/(nm2·km)]
	1348nm≤ λ0 ≤1365nm		≤0.001(1458-λ0)	[ps/(nm2·km)]
Macrobending Loss 宏弯损耗	100 Turns @ 37.5 mm Radius 100圈，半径37.5mm	850nm	≤0.50	[dB]
	100 Turns @ 37.5 mm Radius 100圈，半径37.5mm	1300nm	≤0.50	[dB]

Backscatter Characteristics 背向散射特性 (1300nm)

Characteristics 特性	Specified values 数据	Units 单位
Step (Mean of Bidirectional Measurement) 台阶(双向测量的平均值)	≤0.10	[dB]
Irregularities Over Fibre Length and Point Discontinuity 长度方向的不规律性和点不连续性	≤0.10	[dB]
Attenuation Uniformity 衰减不均匀性	≤0.10	[dB/km]

Environmental Characteristics 环境特性 (850nm & 1300nm)

Characteristics 特性	Conditions 条件	Specified values 数据	Units 单位
Temperature Cycling 温度循环附加衰减	-60°C to +85°C	≤0.10	[dB/km]
Temperature-Humidity Cycling 温度-湿度循环附加衰减	-10°C to 85°C, 4% to 98% RH -10°C到85°C，4%到98%相对湿度	≤0.10	[dB/km]
Water Immersion 浸水附加衰减	23°C, for 30 days 23°C, 30天	≤0.10	[dB/km]
Dry Heat 干热附加衰减	85°C, for 30 days 85°C，30天	≤0.10	[dB/km]
Damp Heat 湿热附加衰减	85°C, 85% RH, 30 days 85°C和85%相对湿度，30天	≤0.10	[dB/km]

Mechanical Specifications 机械特性

Characteristics 特性	Conditions 条件	Specified values 数据	Units 单位
Proof Test 筛选张力	--	≥9.0	[N]
	--	≤1.0	[%]
	--	≥100	[kpsi]
Coating Strip Force 涂层剥离力	typical average force 典型平均值	1.5	[N]
	peak force 峰值	≥1.3, ≤8.9	[N]
Dynamic Stress Corrosion Susceptibility Parameter (nd, typical) 动态疲劳参数(nd, 典型值)		20	--