

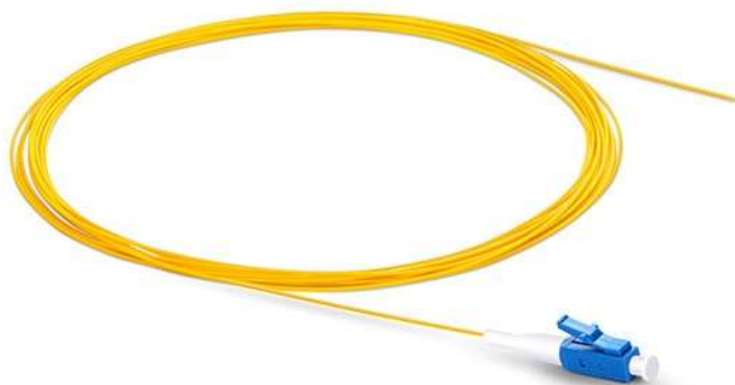


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Optical Fiber Pigtail

TECHNICAL DATA SHEET

**Fiber Pigtail LC UPC to Unterminated
Simplex OS2 LSZH**



Fiber Pigtail LC UPC to Underminated Simplex OS2 **LSZH**

Product Description

The **Fiber Optic Pigtail LC/UPC to Underminated** is a factory-terminated simplex fiber assembly designed for reliable fiber termination and fusion splicing applications. It features a precision **LC/UPC connector** on one end and an **underminated fiber** on the other, making it ideal for Optical Distribution Frames (ODFs), fiber termination boxes (FTBs), patch panels, FTTH deployments, and telecommunications networks.

Manufactured with **OS2 single-mode (9/125 μm)** bend-insensitive optical fiber compliant with **ITU-T G.657.A1** and protected by a **Low Smoke Zero Halogen (LSZH)** jacket, this pigtail provides excellent optical performance with low insertion loss and high return loss, ensuring reliable long-distance optical transmission.

Product Features

- LC/UPC connector on one end, underminated fiber on the other
- Simplex construction
- OS2 single-mode fiber (9/125 μm)
- Compliant with **ITU-T G.657.A1**
- Bend-insensitive optical fiber
- Low insertion loss and high return loss
- High-precision zirconia ceramic ferrule
- LSZH (Low Smoke Zero Halogen) jacket
- Factory polished and 100% optically tested
- Excellent mechanical durability and reliability

Applications

- FTTH (Fiber to the Home)
- GPON / EPON Networks
- Optical Distribution Frames (ODF)
- Fiber Termination Boxes (FTB)
- CATV Networks
- Telecommunications Networks
- Optical Access Networks
- Passive Optical Networks (PON)

Product Parameters

Item	Specification
Connector A	LC/UPC
Connector B	Unterminated
Fiber Type	OS2 (9/125 μm)
Fiber Standard	ITU-T G.657.A1
Cable Construction	Simplex
Jacket Material	LSZH

Optical Specifications

Parameter	Value
Fiber Type	OS2 (9/125 μm)
Fiber Standard	ITU-T G.657.A1
Connector Type	LC/UPC
Polish Type	UPC
Operating Wavelength	1310 / 1550 nm
Insertion Loss	≤ 0.30 dB (Typical ≤ 0.20 dB)
Return Loss	≥ 50 dB
Repeatability	≤ 0.20 dB
Interchangeability	≤ 0.20 dB
Durability	≤ 0.20 dB change after 500 mating cycles

Environmental Performance

Test Item	Condition	Requirement
High Temperature	+85°C, 96 Hours	$\Delta\text{IL} \leq 0.2$ dB
Low Temperature	-40°C, 96 Hours	$\Delta\text{IL} \leq 0.2$ dB
Thermal Cycling	-40°C to +85°C	$\Delta\text{IL} \leq 0.2$ dB
Humidity	95% RH, 96 Hours	Stable Performance

Mechanical Reliability

Test Item	Requirement
Mating Durability	≥ 500 Cycles
Tensile Strength	≥ 10 N
Vibration Resistance	$\Delta IL \leq 0.2$ dB
Shock Resistance	$\Delta IL \leq 0.2$ dB
Twist Test	Meets IEC Requirements