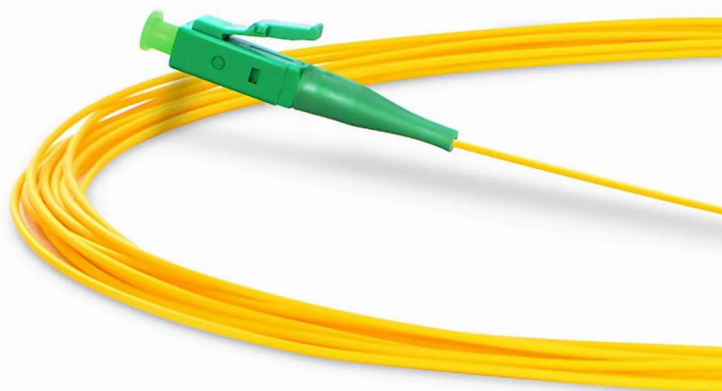


Optical Fiber Pigtail**TECHNICAL DATA SHEET****Fiber Pigtail LC APC to Underminated
Simplex OS2 LSZH**

Fiber Pigtail LC APC to Underterminated Simplex OS2 **LSZH**

Product Description

The Fiber Optic Pigtail LC/APC to Underterminated is a factory-terminated simplex fiber assembly designed for high-performance fiber termination and fusion splicing applications. It features a precision LC/APC connector on one end and an unterminated fiber on the other, making it ideal for Optical Distribution Frames (ODFs), fiber termination boxes (FTBs), FTTH deployments, and passive optical 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 superior return loss. The 8° APC polish minimizes back reflection, making it suitable for GPON, CATV, and high-speed optical communication systems.

Product Features

- LC/APC connector on one end, unterminated fiber on the other
- Simplex construction
- OS2 single-mode fiber (9/125 μm)
- Compliant with **ITU-T G.657.A1**
- 8° APC polished connector for ultra-low back reflection
- 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/APC
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 μ m)
Fiber Standard	ITU-T G.657.A1
Connector Type	LC/APC
Polish Type	APC (8° Angled Polish)
Operating Wavelength	1310 / 1550 nm
Insertion Loss	≤ 0.30 dB (Typical ≤ 0.20 dB)
Return Loss	≥ 60 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	$\Delta IL \leq 0.2 \text{ dB}$
Low Temperature	-40°C, 96 Hours	$\Delta IL \leq 0.2 \text{ dB}$
Thermal Cycling	-40°C to +85°C	$\Delta IL \leq 0.2 \text{ dB}$
Humidity	95% RH, 96 Hours	Stable Performance

Mechanical Reliability

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