

Optical Fiber Pigtail

TECHNICAL DATA SHEET

Fiber Pigtail, ST UPC to Underterminated, Simplex, OS2, LSZH



Fiber Pigtail ST UPC to Underterminated Simplex OS2 LSZH

Product Description:

The Fiber Optic Pigtail ST/UPC to Underterminated is a factory-terminated simplex fiber assembly designed for high-performance fiber optic splicing and termination applications. It features a precision-polished ST/UPC connector on one end and an unterminated fiber on the other, enabling fusion splicing into optical distribution frames (ODFs), patch panels, fiber termination boxes (FTBs), and telecommunications networks.



Manufactured with OS2 single-mode (9/125 μm) fiber and a Low Smoke Zero Halogen (LSZH) jacket, the pigtail provides excellent optical performance, low insertion loss, and high durability for indoor installations.

Applications:

- Fiber Optic Distribution Frames (ODF)
- Fiber Termination Boxes (FTB)
- FTTH (Fiber to the Home) networks
- FTTx access networks
- Telecommunications systems
- CATV networks
- Data centers
- LAN/WAN optical networks

Technical Specifications:

Parameter	Value
Fiber Type	OS2 (9/125 μm)
Connector Type	ST/UPC
Polish Type	UPC
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 matings

Environmental Performance

Test Item	Condition	Requirement
Operating Temperature	-40°C to +85°C	Normal Operation
Storage Temperature	-40°C to +85°C	No Performance Degradation
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 Specifications

Item	Specification
Cable Construction	Simplex
Cable Diameter	0.9 mm (Standard)
Fiber Type	OS2 (9/125 μm)
Connector Ferrule	Zirconia Ceramic
Jacket Material	LSZH
Jacket Color	Yellow
Boot Color	Blue
Tensile Strength	$\geq 10 \text{ N}$

Product Features

- ST/UPC connector on one end, unterminated fiber on the other
- OS2 Single Mode (9/125 μm) fiber
- Simplex construction
- Low insertion loss and high return loss
- High-precision ceramic ferrule
- LSZH (Low Smoke Zero Halogen) jacket
- Factory polished and 100% tested