



PN: FLOFPTFCG7101

Optical Fiber Pigtail

TECHNICAL DATA SHEET

Fiber Pigtail FC UPC to Unterminated
Simplex OS2 LSZH



Fiber Pigtail FC UPC to Underminated Simplex OS2

LSZH

Product Description

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

Manufactured with OS2 single-mode (9/125 μm) 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 for long-distance transmission and FTTH applications.

Product Features

- FC/UPC 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
- Bend-insensitive 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

- Optical Distribution Frames (ODF)
- Fiber Termination Boxes (FTB)
- Enterprise LAN Networks
- Industrial Ethernet
- Campus Networks
- Patch Panels
- Telecommunications Networks
- Optical Communication Systems

Product Parameters

Item	Specification
Connector A	FC/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	FC/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

Mechanical Specifications

Item	Specification
Cable Construction	Simplex
Cable Diameter	0.9 mm
Fiber Type	OS2 (9/125 μm)

Connector Ferrule	Zirconia Ceramic
Jacket Material	LSZH
Cable Color	Yellow
Operating Temperature	-40°C to +85°C

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

