

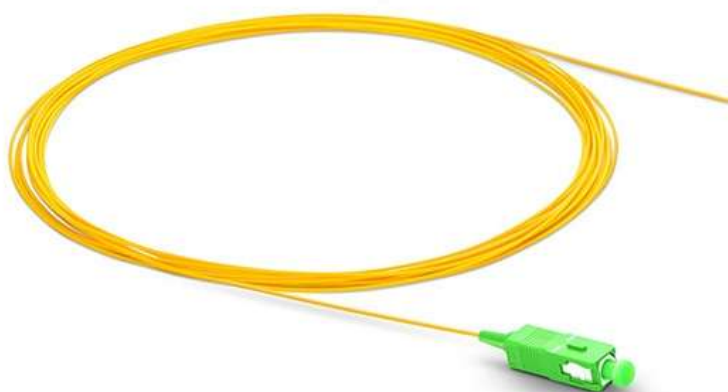


PN: FLOFPTSCAG7101

Optical Fiber Pigtail

TECHNICAL DATA SHEET

**Fiber Pigtail, SC APC to Underminated,
Simplex, OS2,LSZH**



Fiber Pigtail, SC APC to Unterminated, Simplex, OS2,LSZH

Product Description

The Fiber Optic Pigtail SC/APC to Unterminated is a factory-terminated simplex fiber assembly designed for reliable fiber termination and fusion splicing applications. It features a precision SC/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 networks, and optical access systems.

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 ultra-low insertion loss and superior return loss. The 8° angled APC polish minimizes back reflection, making it suitable for GPON, CATV, and high-performance optical transmission systems.

Product Features

- SC/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
- RoHS compliant
- IEC and Telcordia compliant

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	SC/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 μm)
Fiber Standard	ITU-T G.657.A1
Connector Type	SC/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

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
Boot Color	Green
Operating Temperature	-40°C to +85°C

Environmental Performance

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