

## Optical Fiber

### TECHNICAL DATA SHEET

## Fiber Optic FC/APC SX Connector green



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### Product Description:

The FC APC Connector is a high-precision, single-mode fiber optic connector featuring an Angled Physical Contact (APC) polish. Designed for applications requiring low insertion loss and high return loss, it ensures stable, high-quality optical signal transmission in both short and long-distance networks.



### Applications:

- Telecommunication networks and backbones
- FTTH (Fiber-to-the-Home) and PON deployments
- LAN/WAN fiber networks
- Data centers and server farms
- CATV systems and optical test setups

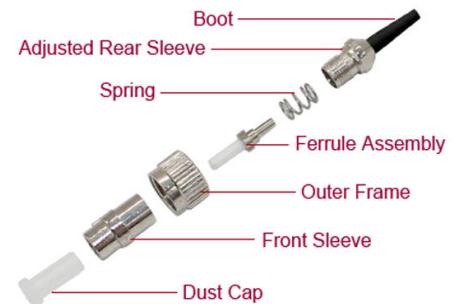
### Technical Specifications:

Parameter	Specification
Connector Type	FC (Ferrule Connector) with APC (Angled Physical Contact)
Fiber Mode	Single-Mode (SM 9/125 $\mu\text{m}$ )
Ferrule Material	Zirconia Ceramic
Ferrule Diameter	2.5 mm (standard for FC)
Insertion Loss (IL)	$\leq 0.3$ dB typical
Return Loss (RL)	$\geq 60$ dB (APC type)

Operating Wavelengths	1310 nm, 1490 nm, 1550 nm
Cable Jacket Diameter	2–3 mm (typical boot size)
Operating Temperature Range	–40 °C to +85 °C
Mating Durability / Cycles	≥ 500 insertions
Standards Compliance	IEC 61754-13, Telcordia GR-326-CORE
Termination Type	Epoxy / Polish Field Termination

## Benefits:

- Low Insertion Loss – ensures minimal signal attenuation for high-quality optical transmission.
- High Return Loss – APC angled polish reduces back-reflection, ideal for long-distance single-mode links.
- Reliable Mechanical Connection – FC threaded design provides secure and stable mating.
- Durable Ferrule Material – zirconia ceramic ensures precise fiber alignment and long-term stability.
- Wide Operating Temperature Range – works reliably from –40 °C to +85 °C.
- Field-Termination Capability – epoxy/polish allows on-site installation and repair.
- Standards Compliance – meets IEC 61754-13 and Telcordia GR-326-CORE for quality and performance.
- Versatile Applications – suitable for telecom, FTTH/PON, LAN/WAN, data centers, CATV, and optical testing.
- Repetitive Use – designed for ≥500 mating cycles without degradation in performance.
- Compact Design – supports 2–3 mm fiber cables with strain relief for durability.



**Raw Materials Detailed List:**

Item	Part	Material	RoHS Compliance
1	Anti-dust Cap	LDPE (Low-Density Polyethylene)	Yes
2	Housing	PBT (Polybutylene Terephthalate)	Yes
3	Inner Core	PBT (Polybutylene Terephthalate)	Yes
4	Spring	SUS304 Stainless Steel	Yes
5	Ferrule	Zirconia Ceramic	Yes
6	Body	Copper Alloy	Yes
7	Boot	TPV (Thermoplastic Vulcanizate)	Yes

**Note:**

The connector boot is available in Blue and White colors.