

Optical Fiber

TECHNICAL DATA SHEET

Fiber Optic SC/APC SX Connector Green



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Product Description:

The SC APC Connector is a single-mode fiber optic connector featuring an Angled Physical Contact (APC) polish designed to minimize back reflection and ensure high-performance optical transmission. It uses a push-pull locking mechanism, providing secure and easy installation in various fiber optic networking environments.



Applications:

- FTTH (Fiber-to-the-Home) networks
- Passive Optical Networks (PON / GPON)
- Telecom backbone infrastructure
- Optical Distribution Frames (ODF)
- LAN / WAN fiber networks
- Data centers and patch panels
- CATV optical systems
- Optical testing and measurement equipment

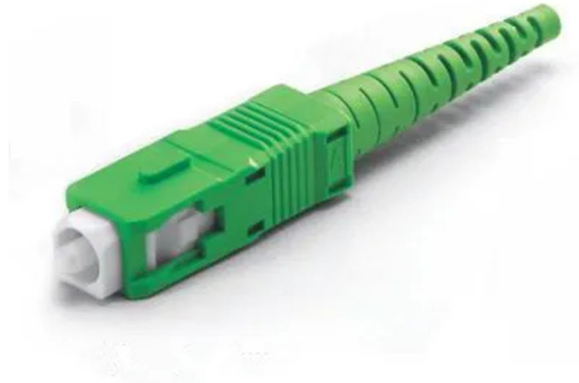


Technical Specifications:

Parameter	Specification
Connector Type	SC (Subscriber Connector)
Polish Type	APC (Angled Physical Contact, 8°)
Fiber Type	Single-Mode (9/125 μm)
Ferrule Material	Zirconia Ceramic
Ferrule Diameter	2.5 mm
Insertion Loss (IL)	≤ 0.3 dB (Typical)
Return Loss (RL)	≥ 60 dB
Operating Wavelength	1310 nm, 1490 nm, 1550 nm
Cable Jacket Diameter	2.0 mm / 3.0 mm
Operating Temperature	-40 °C to +85 °C
Durability (Mating Cycles)	≥ 500 cycles
Housing Material	PBT (Polybutylene Terephthalate)
Boot Material	TPU / TPV
Insertion / Extraction Force	10–20 N (Typical)
Standards Compliance	IEC 61754-4, Telcordia GR-326-CORE
RoHS Compliance	Yes

Benefits:

- Low Insertion Loss – Ensures efficient optical signal transmission (≤ 0.3 dB typical).
- High Return Loss – APC angled polish minimizes back-reflection (≥ 60 dB), ideal for long-distance single-mode networks.
- Push-Pull Locking Mechanism – Secure, easy, and reliable connection without twisting.
- Precise Fiber Alignment – Zirconia ceramic ferrule ensures consistent performance.
- Wide Operating Temperature Range – Suitable for -40 °C to $+85$ °C environments.
- High Durability – Supports ≥ 500 mating cycles without degradation.
- Compact Design – Compatible with standard 2–3 mm jacketed fiber cables.
- Standards Compliant – Meets IEC 61754-4 and Telcordia GR-326-CORE requirements.
- RoHS Compliant Materials – Safe for global deployment.



Raw Materials Detailed List:

Item	Part	Material	ROHS Compliance
1	Anti-dust Cap	LDPE	Yes
2	Housing	PBT	Yes
3	Inner Core	PBT	Yes
4	Spring	SUS304 Stainless Steel	Yes
5	Ferrule	Zirconia Ceramic	Yes
6	Body	Copper Alloy	Yes
7	Boot	TPV	Yes