# **SC Fiber Optic Patch Cord and Pigtail**

### Fiber Optic Patch Cord and Pigtail Description

Fiber optic patch cord and pigtail are components to link the equipments and components in fiber optic network. Fiber optic patch cord sometimes is also called fiber optic jumper or fiber optic adapter cables. There are many types of fiber optic patch cord according to different types of fiber optic connector including FC、ST、SC、LC、E2000、MTRJ、MPO、SMA905、SMA906、MU、FDDI、DIN、D4、ESCON、VF45、F3000、LX.5 etc. According to different polished ferrule type in the connector, there are PC, UPC, APC fiber optic patch cord; Generally there are two types of fiber optic patch cords: single mode fiber optic patch cord and multimode fiber optic patch cord. Usually single mode fiber optic patch cord is with 9/125µm fiber glass with yellow jacket, multi mode fiber optic patch cord is with 50/125 or 62.5/125µm fiber glass with orange jacket.

Fiber optic patch cords are with various kinds of cables. Cable jacket material can be PVC, LSZH; OFNR, OFNP etc. There are simplex fiber optic patch cord and duplex fiber optic patch cord and multi fiber cable assemblies, and there are Ribbon fan out fiber cable assemblies and bundle fiber optic cable assemblies.

We are providing the broadest choice of fiber optic (cable) patch cords (pigtail, assembly, assemblies, jumper) to the industry including ST optic fiber patch cord, FC fiber optic patch cord, SC fiber optic patch cord, LC fiber optical patch cord, E2000 fiber optical patch cord, MTRJ fiber optic patch cord, MPO fiber optical patch cord, MTP fiber optical patch cord, MU optic fiber patch cord, SMA (905 and 906) fiber optical patch cord, FDDI fiber optical patch cord, ESCON fiber optic patch cord, DIN fiber optical patch cord, D4 fiber optical patch cord, VF45 fiber optical patch cord, F3000 fiber optical patch cord and other types of connector fiber patch cord with Ultra-polished (UPC), Angle-Polished (APC) or other polishing requirement.

#### SC Fiber optic Patch Cord and Pigtail

SC connector is invented by the Japanese company Nippon Telegraph and Telephone, SC fiber optic patch cords is with a locking tab on the cable termination, it is a push and pull type fiber optic connector. SC fiber optic patch cord is with SC fiber optic connector. Ceramic ferrules of SC fiber optic patch cords make them accurate alignment. Due to low cost, simplicity as well as good durability features, SC connector is one of the most widely used type of fiber optic patch cords. SC fiber optic patch cords can be simplex or duplex, single mode or multimode. For single mode SC fiber optic patch cords , there are PC polished type and APC polished type, for multi mode SC fiber optic patch cords, they are all PC polished type.

#### **Available range**

Telecommunication Network Fiber Broad Band Network CATV system LAN and WAN system FTTP

## **Picture**







1. SC/UPC S-SM 0.9mm Patch Cord 2. SC/UPC S-SM 2.0mm Patch Cord 3. SC/UPC D-SM 2.0mm Patch Cord





4. SC/APC S-SM 2.0mm Patch Cord 5. SC/UPC D-MM 2.0mm Patch Cord

#### **Characteristics**

- 1. Using high precision ceramic ferrule
- 2. Low insertion loss and high return loss
- 3. Excellent stability and high repetition
- 4. 100% Optic test (Insertion Loss & Return Loss)

## **Components**

- 1. Connector: Single mode and multimode are optional. PC, UPC and APC connector (8 degree and 9 degree) optional.
- 2. Cable: Single mode and multimode optional;

Simplex, duplex, multi cores optional

Yangtze fiber or corning fiber optional;

Chinese Kevlar and original Kevlar optional;

Common, armored, waterproof cable optional,

PVC, LSZH, HYTREL, OFNR, OFNP optional

Cable diameter: 0.9mm, 1.6mm, 1.8mm, 2.0mm, 3.0mm etc optional

# **SC Type Specification**

Parameter	Unit	Mode Type	SC/PC	SC/UPC	SC/APC
Insertion Loss	dB	SM	≤0.3	≤0.3	≤0.3
		MM	≤0.3	≤0.3	
Return Loss	dB	SM	≥50	≥50	≥60
		MM	≥35	≥35	
Repeatability	dB	Additional loss<0.1db,return loss< 5 dB			
Interchangeability	dB	Additional loss<0.1db,return loss< 5 dB			
Connection times	times	>1000			
Operating Temperature	$^{\circ}$	-40℃- +75 ℃			
Storage Temperature	$^{\circ}$	-40℃- +85 ℃			

# **Technical Test Data**

Test Item	Test Condition and Test Result			
Wet-resistance	Condition: under temperature:85℃,relative humidity 85% for			
	14days.			
	Result: insertion loss≤0.1dB			
Temperature change	Condition: under temperature -40°C-+75°C,relative humidity			
	10%-80%, 42 times repetition for 14days.			
	Result: insertion loss≤0.1dB			
Put in water	Condition: under temperature 43°C, PH5.5 for 7days			
	Result: insertion loss≤0.1dB			
vibrancy	Condition: Swing1.52mm, frequency 10Hz~55Hz, X、Y、Z			
	three directions:2 hours			
	Result: insertion loss≤0.1dB			
Load bend	Condition: 0.454kg load, 100 circles			
	Result: insertion loss≤0.1dB			
Load Torsion	Condition: 0.454kgload, 10 circles			
	Result: insertion loss ≤0.1dB			
Tensibility	Condition: 0.23kg pull (bare fiber), 1.0kg (with shell) Result:			
	insertion≤0.1dB			
strike	Condition: High 1.8m, three directions ,8 in each direction			
	Result: insertion loss≤0.1dB			
Reference standard	BELLCORE TA-NWT-001209, IEC, GR-326-CORE standard			