



Fiber Patch Cords

◎ Basic Features:

- ☆ Simplex or duplex fibers for selection.
- ☆ Different fiber connectors for selection.
- ☆ Ferrule Material: Ceramic, stainless steel, polymer
- ☆ Outer Jacket: PVC, FRPVC, LSZH
- ☆ Connector Types: ST/SC/FC/SMA905 or 906/D4/BICONIC/FDDI/MTRJ/LC/E2000/ DIN/EC
- ☆ FC, SC, ST, LC, MU connectors offered in either PC, UPC, APC polishing.
- ☆ Complying to applicables standards such as TIA/EIA-568 and IEC 874-1.
- ☆ Used for Ethernet, fiber optic system, video transmission, CATV and cable TV etc.

◎ Technical Parameters:

- ☆ Cladding Diameter: 125 μ m
- ☆ Core Diameter: 50/62.5 μ m (multimode); 9/125 μ m (single-mode)
- ☆ Tensile Strength: 15Kgf (except for 0.9mm)
- ☆ Diameter: 3mm/2mm
- ☆ Minimum Bending Radius: 10 x Overall Diameter
- ☆ Working Temperature: -40 $^{\circ}$ C ~ +75 $^{\circ}$ C
- ☆ Storage Temperature: -50 $^{\circ}$ C ~ +85 $^{\circ}$ C
- ☆ Minimum Insertion Life Cycles: 1000 times
- ☆ Single mode fiber patch cord (in general): Insertion Loss \leq 0.3 dB (APC/UPC);
Return Loss \geq 50dB (UPC); \geq 60dB (APC)
- ☆ MTRJ single mode fiber patch cord: Insertion loss \leq 0.5 dB; Return Loss \geq 35 dB
- ☆ Multimode fiber patch cord (in general):
Insertion Loss \leq 0.3 dB (PC); \leq 0.3 dB (UPC); \leq 0.3 dB (APC)
Return Loss \geq 35 dB (PC); \geq 50 dB (UPC); \geq 60 dB (APC)
- ☆ MTRJ multimode fiber patch cord: Insertion loss \leq 0.5 dB; Return Loss \geq 20 dB
- ☆ Change on insertion loss for mechanical characteristics:
Interchangeability: 0.2dB
Repeatability (Insertion: 1,000 times): 0.2dB
Anti pulling load: 0.2dB (10Kg tension/3.0mm fiber)
Anti Vibration: 0.2dB (Vibration: 10-58Hz; Amplitude: 1.5mm, 10Hz/min, 2 hrs)
- ☆ Change on insertion loss for environmental characteristics:
Temperature Cycle: 0.2dB (-40 $^{\circ}$ C ~ +80 $^{\circ}$ C 5 cycles)
High Temperature Test: 0.2dB (High Temperature: 85 $^{\circ}$ C, 100 hrs)
Low Temperature Test: 0.2dB (Low Temperature: -40 $^{\circ}$ C, 100 hrs)
Humidity Test: 0.2dB (65 $^{\circ}$ C, 93% relative humidity, 100 hrs)

◎ Product Highlights:

- ☆ Using extra high precision ceramic ferrule with small concentricity error and core diameter, better insertion loss and return loss can be achieved for optimized transmission performance.
- ☆ All fiber surface parameters such as the apex offset, fiber height and radius of curvature comply to IEC standard.
- ☆ Besides attenuation and back reflection testing, cords are also checked by interferometer for fiber surface parameters, including radius of curvature, apex offset and fiber heights for different FC, ST, SC, LC and MU connector types.
- ☆ Simplex, duplex and fan-outs can be offered.
- ☆ Different jacket such as PVC and LSOH grade available for selection.
- ☆ Low insertion loss and high return loss, with excellent interchangeability and repeatability.
- ☆ Durability, damp-proofing, resistant to coupling stress, high pull tension and adaptation to different harsh environment such as dampness, extreme temperature, impact and vibration in accordance to ANSI/TIA and ISO/IEC standard.
- ☆ Environmentally stable, meeting Telcordia requirement.

ST, SC, FC (PC/UPC/APC) Fiber Patch Cord

◎ Basic Features:

- ☆ PC, UPC or APC polishing for selection.
- ☆ Low insertion loss and high return loss.
- ☆ The SC connectors for SC-SC fiber patch cords are of push pull design, being fit for 3.0mm fiber patch cords.
- ☆ The ST connectors for ST-ST fiber patch cords are of metal ring design, being fit for 3.0mm fiber patch cords.
- ☆ The ST connectors of LC-ST fiber patch cords are of metal ring design, being fit for 2.0mm fiber patch cords.
- ☆ The SC connectors of LC-SC fiber patch cords are of push pull design, being fit for 2.0mm fiber patch cords.
- ☆ Significant margin over ANSI/TIA/EIA 568 standard.
- ☆ Fiber Surface Parameters
 - Radius of Curvature: 5~12cm (APC); 7~25cm (PC)
 - Apex Offset: $\leq 100\mu\text{m}$
 - Fiber Height: +100 ~ -100 nm
 - Deviation Angle: $8^\circ \pm 0.3^\circ$

◎ Technical Parameters:

| | PC | | UPC | APC |
|--|---|--------------------|---|---|
| | Simplex | Duplex | | |
| Insertion Loss | $\leq 0.3\text{dB}$ | | $\leq 0.3\text{dB}$ | $\leq 0.3\text{dB}$ |
| Return Loss | $\geq 45\text{dB}$ | $\geq 35\text{dB}$ | $\geq 50\text{dB}$ | $\geq 60\text{dB}$ |
| Working Temperature | $-20^\circ\text{C} \sim 70^\circ\text{C}$ | | $-20^\circ\text{C} \sim 70^\circ\text{C}$ | $-20^\circ\text{C} \sim 70^\circ\text{C}$ |
| Storage Temperature | $-25^\circ\text{C} \sim 80^\circ\text{C}$ | | $-25^\circ\text{C} \sim 80^\circ\text{C}$ | $-25^\circ\text{C} \sim 80^\circ\text{C}$ |
| Maximum change in Insertion Loss with repeated insertion | 0.1dB | | 0.1dB | 0.1dB |
| Maximum Insertion /Withdrawal | ≥ 1000 times | | ≥ 1000 times | ≥ 1000 times |



ST-ST Duplex Patch Cord



SC-SC Duplex Patch Cord



FC-FC Simplex Patch Cord



ADDISON FIBER OPTIC CABLES OMS CABLING SYSTEM

MTRJ, MU, LC Fiber Patch Cords

Basic Features:

- ☆ Push-pull connection, fast and reliable.
- ☆ Low insertion loss and high return loss.
- ☆ Being compact and light weight, it can provide high-density installation.
- ☆ 1.25um ceramic ferrule sfis for both single mode and multimode cables.
- ☆ MTRJ connector/adaptors are fit for duplex zip and round cords together with ribbon fiber cables.
- ☆ LC connector/adaptors are fit for simplex /duplex zip cords and MU connector /adaptor is fit for simplex zip cords.
- ☆ Used for different fiber optic system, fiber optic connector, CATV and testing equipment etc.

Technical Parameters: (LC/MU)

| | PC | | UPC |
|--|-------------|--------|-------------|
| | Simplex | Duplex | |
| Insertion Loss | ≤0.4dB | | ≤0.4dB |
| Return Loss | ≥45dB | ≥35dB | ≥50dB |
| Working Temperature | -20℃~70℃ | | -20℃~70℃ |
| Storage Temperature | -25℃~80℃ | | -25℃~80℃ |
| Maximum change in Insertion Loss with repeated insertion | 0.1dB | | 0.1dB |
| Maximum Insertion /Withdrawal | ≥1000 times | | ≥1000 times |



LC Simplex Patch Cord



MU Simplex Patch Cord

Electrical Specification Parameter: (MTRJ)

| | PC | | UPC |
|--|-------------|--------|-------------|
| | Simplex | Duplex | |
| Insertion Loss | ≤0.5dB | | ≤0.6dB |
| Return Loss | ≥35dB | ≥20dB | ≥45dB |
| Working Temperature | -20℃~70℃ | | -20℃~70℃ |
| Storage Temperature | -25℃~80℃ | | -55℃~85℃ |
| Maximum change in Insertion Loss with repeated insertion | 0.1dB | | 0.1dB |
| Maximum Insertion /Withdrawal | ≥1000 times | | ≥1000 times |



MTRJ Simplex Patch Cord



MTRJ Duplex Patch Cord

SMA, FDDI Fiber Patch Cords

Basic Features:

- ☆ SMA connectors are interchangeable and come with good surface polishing.
- ☆ FDDI connectors are equipped with built-in identification labels.
- ☆ FDDI connectors meet ANSI3T95 FDDI PMD standard.
- ☆ SMA connectors are suitable for use in LAN and low speed system test.
- ☆ FDDI connectors are suitable for duplex system, FDD backbone network and IEEE802.4 Token Bus.

Technical Parameters: (SMA, FDDI)

| | SMA | FDDI |
|--|-------------|-------------|
| Insertion Loss | ≤0.3dB | ≤0.3dB |
| Return Loss | ≥35dB | ≥45dB |
| Working Temperature | -40℃~80℃ | -40℃~80℃ |
| Storage Temperature | -55℃~85℃ | -55℃~85℃ |
| Maximum change in Insertion Loss with repeated insertion | 0.2dB | 0.2dB |
| Maximum Insertion /Withdrawal | ≥1000 times | ≥1000 times |



SMA Simplex Patch Cord



FDDI Duplex Patch Cord

◎ Ordering Information:

| Part No. | Description |
|--------------------------|---|
| AD-ST/ST-D9M001CON-II-JJ | Single Mode ST/ST-ST/ST Duplex 1 Meter PVC Fiber Patch Cord |
| AD-ST/ST-D9M003CON-II-JJ | Single Mode ST/ST-ST/ST Duplex 3 Meter PVC Fiber Patch Cord |
| AD-ST/ST-S9M001CON-II-JJ | Single Mode ST/ST Simplex 1 Meter PVC Fiber Patch Cord |
| AD-ST/ST-S9M003CON-II-JJ | Single Mode ST/ST Simplex 3 Meter PVC Fiber Patch Cord |
| AD-SC/SC-D6M001CON-II-JJ | Multimode 62.5/125 μm SC/SC-SC/SC Duplex 1 Meter PVC Fiber Patch Cord |
| AD-SC/SC-D6M003CON-II-JJ | Multimode 62.5/125 μm SC/SC-SC/SC Duplex 3 Meter PVC Fiber Patch Cord |
| AD-SC/SC-S6M001CON-II-JJ | Multimode 62.5/125 μm SC-SC Simplex 1 Meter PVC Fiber Patch Cord |
| AD-SC/SC-S6M003CON-II-JJ | Multimode 62.5/125 μm SC-SC Simplex 3 Meter PVC Fiber Patch Cord |
| AD-ST/ST-D5M001CON-II-JJ | Multimode 50/125 μm ST/ST-ST/ST Duplex 1 Meter PVC Fiber Patch Cord |
| AD-ST/ST-D5M003CON-II-JJ | Multimode 50/125 μm ST/ST-ST/ST Duplex 3 Meter , PVC Fiber Patch Cord |
| AD-ST/ST-S5M001CON-II-JJ | Multimode 50/125 μm ST-ST Simplex 1 Meter PVC Fiber Patch Cord |
| AD-ST/ST-S5M003CON-II-JJ | Multimode 50/125 μm ST-ST Simplex 3 Meter PVC Fiber Patch Cord |
| AD-ST/ST-D4M001CON-II-JJ | OM3 Multimode 50/125 μm ST/ST-ST/ST Duplex 1 Meter PVC Fiber Patch Cord |
| AD-ST/ST-D4M003CON-II-JJ | OM3 Multimode 50/125 μm ST/ST-ST/ST Duplex 3 Meter PVC Fiber Patch Cord |
| AD-ST/ST-S4M001CON-II-JJ | OM3 Multimode 50/125 μm ST-ST Simplex 1 Meter PVC Fiber Patch Cord |
| AD-ST/ST-S4M003CON-II-JJ | OM3 Multimode 50/125 μm ST-ST Simplex 3 Meter PVC Fiber Patch Cord |
| AD-SC/SC-D4M001CON-II-JJ | OM3 Multimode 50/125 μm SC/SC-SC/SC Duplex 1 Meter PVC Fiber Patch Cord |
| AD-SC/SC-D4M003CON-II-JJ | OM3 Multimode 50/125 μm SC/SC-SC/SC Duplex 3 Meter PVC Fiber Patch Cord |
| AD-SC/SC-S4M001CON-II-JJ | OM3 Multimode 50/125 μm SC-SC Simplex 1 Meter PVC Fiber Patch Cord |
| AD-SC/SC-S4M003CON-II-JJ | OM3 Multimode 50/125 μm SC-SC Simplex 3 Meter PVC Fiber Patch Cord |
| AD-ST-S4M001CON-II-JJ | OM3 Multimode 50/125 μm ST, Simplex 1 Meter PVC Pigtail |
| AD-SC-S4M001CON-II-JJ | OM3 Multimode 50/125 μm SC Simplex 1 Meter PVC Pigtail |
| AD-ST-S9M001CON-II-JJ | Single Mode ST Simplex 1 Meter PVC Pigtail |
| AD-SC-S9M001CON-II-JJ | Single Mode SC Simplex 1 Meter PVC Pigtail |
| AD-ST-S6M001CON-II-JJ | Multimode 62.5/125 μm ST Simplex 1 Meter PVC Pigtail |
| AD-SC-S6M001CON-II-JJ | Multimode 62.5/125 μm SC Simplex 1 Meter PVC Pigtail |
| AD-ST-S5M001CON-II-JJ | Multimode 50/125 μm ST Simplex 1 Meter PVC Pigtail |
| AD-SC-S5M001CON-II-JJ | Multimode 50/125 μm SC Simplex 1 Meter PVC Pigtail |

◎ Ordering Code:

AD-AB-C-D-EFFF-G-HH-II-JJ

ABLeft/Right Connector Types

ST=ST; SC=SC; FC=FC; SMA905=SMA905; SMA906=SMA906; FD=FDDI; MT=MTRJ; LC=LC (FC, SC, ST, LC, MU Connector: PC, UPC, APC for selection)

CCable Type Family

S=Simplex; D=Duplex

DFiber Types

9=Single-mode 9/125μm; 6=Multimode 62.5/125 μm; 5=Multimode 50/125μm; 4=Multimode 50/125μm (OM3)

EFFFLength

F003 =3 Feet; F005 =5 Feet; F007 =7 Feet; M001 =1 Meter; M002 =2 Meter; M003 =3 meter

GFerrule Types

C=Ceramic; S= Stainless Steel; P= Polymer

HH Fire Performance Rating

ON = Normal PVC, OFN grade; OR = FRPVC, OFNR Riser Grade; OP=FEP, OFNP Plenum Grade; FR=FRPVC, to IEC 60332 -3C; LH= LSZH grade to IEC 60754-1, IEC 61034 P1/2

IJacket colors

01-Yellow; 02-Blue; 03-Green; 04-White; 05-Orange; 06-Purple; 07-Red; 08-Grey

JJFiber Outer Diameter

09= φ 0.9mm; 20= φ 2.0mm; 30= φ 3.0mm