

Fiber Optic Patch cord

Introduction

Fiber Optic Telecom's Fiber Optic Patch Cord, also named as Fiber Optic Jumper or Fiber Optic Patch Cable, is one of the most frequently used components in fiber optic network, and is used to connect fiber optic equipments and components in fiber optic network.

According to the mode, fiber optic patch cord is divided into single mode patch cord and multi mode patch cord.

According to connector styles, it is divided into FC, SC, ST, LC, MTRJ, MU, E2000, DIN patch cord

Generally, single-mode fiber cable color is yellow, its connector and protective sleeve are blue. Its transmission distance is longer. Multi-mode fiber cable color is orange or grey, its connector and protective sleeve are red or black. Its transmission distance is shorter



Features

- Low insertion loss
- High return loss
- Good repeatability
- Good exchangeability
- Excellent environmental adaptability

Specifications

Type	SC		
	PC	UPC	APC
Insertion loss	≤0.2dB		
Return loss	>50dB		
Exchangeability	≤0.2dB		
Repeatability	≤0.2dB		
Vibration test	<0.10dB(10-60Hz,1.5mm amplitude)		
Drop test	<0.10dB (Height:1.5m, 8 times)		
Tensile strength	<0.10dB (68.6N, 10 min)		
Mechanical Durability	<0.20dB (>500 times)		
High-Temperature test	<0.20dB (+85°C, Last 168 hours)		
Low-Temperature test	<0.20dB (-40°C, last 168 hours)		
Temperature cycling test	<0.20dB(-40°C~+75°C, 95%R.H, 21 periods, 168 hours)		
humidity test	<0.20dB (+25°C~+65°C, relative humidity 95%, 168 hours later)		
End-face size	radius of curvature: 10-25(PC/UPC SM) 5-12(APC SM) apex offset: 0-50um Fiber sag: -100 to +100nm		

Type	LC		
	PC	UPC	APC
Insertion loss	≤0.2dB		
Return loss	>50dB		
Exchangeability	≤0.2dB		
Repeatability	≤0.2dB		
Vibration test	<0.10dB(10-60Hz,1.5mm amplitude)		
Drop test	<0.10dB (Height:1.5m, 8 times)		
Tensile strength	<0.10dB (68.6N, 10 min)		
Mechanical Durability	<0.20dB (>500 times)		
High-Temperature test	<0.20dB (+85°C, Last 168 hours)		
Low-Temperature test	<0.20dB (-40°C, last 168 hours)		
Temperature cycling test	<0.20dB(-40°C~+75°C, 95%R.H, 21 periods, 168 hours)		
humidity test	<0.20dB (+25°C~+65°C, relative humidity 95%, 168 hours later)		

	hours later
End-face size	radius of curvature: 7-25(PC/UPC SM) 5-12(APC SM) apex offset: 0-50um Fiber sag: -100 to +100nm

Type	FC		
	PC	UPC	APC
Insertion loss	≤0.2dB		
Return loss	>50dB		
Exchangeability	≤0.2dB		
Repeatability	≤0.2dB		
Vibration test	<0.10dB(10-60Hz,1.5mm amplitude)		
Drop test	<0.10dB (Height:1.5m, 8 times)		
Tensile strength	<0.10dB (68.6N, 10 min)		
Mechanical Durability	<0.20dB (>500 times)		
High-Temperature test	<0.20dB (+85°C, Last 168 hours)		
Low-Temperature test	<0.20dB (-40°C, last 168 hours)		
Temperature cycling test	<0.20dB(-40°C~+75°C, 95%R.H, 21 periods, 168 hours)		
humidity test	<0.20dB (+25°C~+65°C, relative humidity 95%, 168 hours later		
End-face size	radius of curvature: 10-25(PC/UPC SM) 5-12(APC SM) apex offset: 0-50um Fiber sag: -100 to +100nm		

Type	ST		
	PC	UPC	APC
Insertion loss	≤0.2dB		
Return loss	>50dB		
Exchangeability	≤0.2dB		
Repeatability	≤0.2dB		
Vibration test	<0.10dB(10-60Hz,1.5mm amplitude)		
Drop test	<0.10dB (Height:1.5m, 8 times)		
Tensile strength	<0.10dB (68.6N, 10 min)		
Mechanical Durability	<0.20dB (>500 times)		
High-Temperature test	<0.20dB (+85°C, Last 168 hours)		
Low-Temperature test	<0.20dB (-40°C, last 168 hours)		

Temperature cycling test	<0.20dB (-40℃~+75℃, 95%R.H, 21 periods, 168 hours)
humidity test	<0.20dB (+25℃~+65℃, relative humidity 95%, 168 hours later)
End-face size	radius of curvature: 10-25(PC/UPC SM) apex offset: 0-50um Fiber sag: -100 to +100nm

Type	MU		
	PC	UPC	APC
Insertion loss	≤0.2dB		
Return loss	>50dB		
Exchangeability	≤0.2dB		
Repeatability	≤0.2dB		
Vibration test	<0.10dB(10-60Hz,1.5mm amplitude)		
Drop test	<0.10dB (Height:1.5m, 8 times)		
Tensile strength	<0.10dB (68.6N, 10 min)		
Mechanical Durability	<0.20dB (>500 times)		
High-Temperature test	<0.20dB (+85℃, Last 168 hours)		
Low-Temperature test	<0.20dB (-40℃, last 168 hours)		
Temperature cycling test	<0.20dB (-40℃~+75℃, 95%R.H, 21 periods, 168 hours)		
humidity test	<0.20dB (+25℃~+65℃, relative humidity 95%, 168 hours later)		
End-face size	radius of curvature: 7-25(PC/UPC SM) 5-12(APC SM) apex offset: 0-50um Fiber sag: -100 to +100nm		

Type	MTRJ		
	PC	UPC	APC
Insertion loss	≤0.2dB		
Return loss	>50dB		
Exchangeability	≤0.2dB		
Repeatability	≤0.2dB		
Vibration test	<0.10dB(10-60Hz,1.5mm amplitude)		
Drop test	<0.10dB (Height:1.5m, 8 times)		
Tensile strength	<0.10dB (68.6N, 10 min)		
Mechanical Durability	<0.20dB (>500 times)		
High-Temperature test	<0.20dB (+85℃, Last 168 hours)		
Low-Temperature	<0.20dB (-40℃, last 168 hours)		

test	
Temperature cycling test	<0.20dB (-40°C~+75°C, 95%R.H, 21 periods, 168 hours)
humidity test	<0.20dB (+25°C~+65°C, relative humidity 95%, 168 hours later)
End-face size	NA

Applications

- Telecom and Datacom
- FTTx+LAN/EoC
- CATV& Multimedia Tx/Rx
- Fiber optic equipments test