

# FIBER OPTIC ACCESSORIES

PIGTAIL MTRJ , SM/MM



## FEATURES

- The style is diverse, the interface is complete
- Low insertion loss and added loss
- Height of attenuation
- High back loss, small volume, light weight
- End-face geometry and quality superior than IEC and Telcordia standards.
- LSZH, OFNP, OFNR cable jacket.
- Mechanical performance: IEC 61754-18 standard
- RoHS and REACH materials compliant.



## APPLICATION

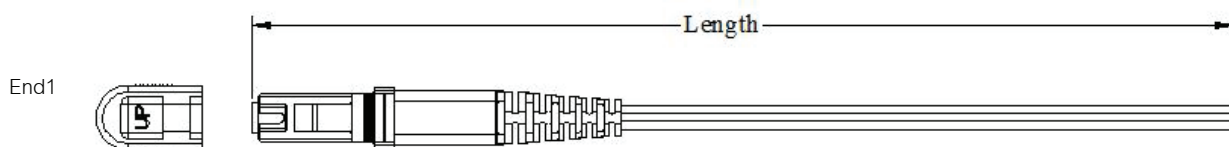
- Optical fiber communication systems engineering
- Fiber optic data communication network
- Fiber CATV engineering
- Other optical technology tests

## CONNECTOR TYPES

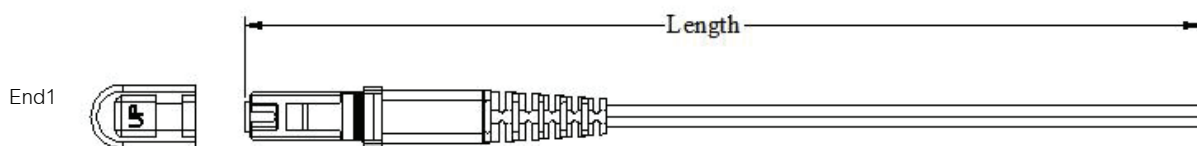
Type	Reference		Note
MTRJ	IEC 61754-18	Single mode duplex	PC: Black connectors, Black boots APC: Black connectors, Black boots
		Multimode duplex	PC: Black Connectors, Black boots

## DIMENSIONAL DIAGRAMS

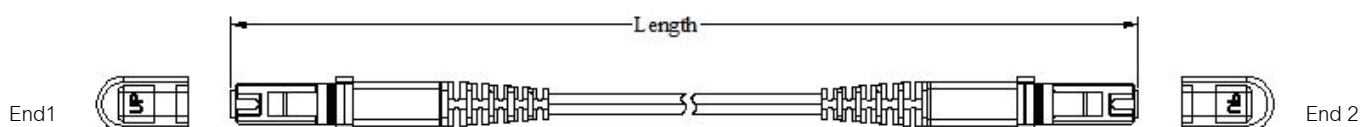
MTRJ 0.9mm duplex pigtail



MTRJ 2.0mm duplex pigtail



MTRJ 2.0mm duplex patchcord



## PATCH CORD VERSIONS

Jumper tolerance requirement	
Overall length (L)(M)	length of tolerance (CM)
0<L≤20	+10/-0
20<L≤40	+15/-0
L>40	+0.5%L/-0

## OPTICAL CHARACTERISTICS

Item	Single mode	Multimode	Reference
Insertion loss	Typical value≤0.25dB;Maximum≤0.50	Typical value≤0.25dB;Maximum≤0.50	IEC 61300-3-34
Return loss	≥ 50dB (PC) ≥ 60dB (APC)	≥30dB (PC)	IEC 61300-3-6

## END-FACE GEOMETRY

Ferrule parameter		IEC-61300--3-30	
		Minimum	Maximum
ROC	ROC-X:	2000mm	∞
	ROC-Y:	50mm	∞
Angle	Angle-X:	-0.2°	0.2°
	Angle-Y: PC	-0.2°	0.2°
	APC	7.85°	8.15°
	Fiber Hight:	1000nm	3500nm
	Max.DH.All:	-300nm	300nm
	DH.Adj:	-300nm	300nm
	DH.Ave Fiber:	-300nm	300nm
Core Dip	MM	-200nm	300nm
	SM	N/A	N/A
	Ferrule height	7.9mm	8.05mm

## END-FACE QUALTY (SM)

Zone	Range (µm)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

## END-FACE QUALTY (MM)

Zone	Range (µm)	Scratches	Defects	Reference
A: Core	0 to 65	None	None	
B: Cladding	65 to 115	None	None	
C: Adhesive	115 to 135	None	None	IEC 61300-3-35:2015
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

## MECHANICAL CHARACTERISTICS

Test	Conditions	Reference
Endurance	500 matings	IEC 61300-2-2
Vibration	Frequency: 10 to 55Hz, Amplitude: 0.75mm	IEC 61300-2-1
Cable retention	100N (patch cable); 5N (pigtail)	IEC 61300-2-4
Strength of coupling mechanism	80N for 2 to 3mm cable	IEC 61300-2-6
Cable torsion	15N for 2 to 3mm cable	IEC 61300-2-5
Fall	10 drops, 1m drop height	IEC 61300-2-12
Static lateral load	1N for 1h (patch cable); 0.2N for 5min (pigtail)	IEC 61300-2-42
Cold	-25°C, 96h duration	IEC 61300-2-17
Dry heat	+70°C, 96h duration	IEC 61300-2-18
Change of temperature	-25°C to +70°C, 12 cycles	IEC 61300-2-22
Humidity	+40°C at 93%, 96h duration	IEC 61300-2-19

## ORDER INFOMATION

PRODUCT	PART NUMBER
Pigtail MTRJ 2.0mm duplex pigtail, SM 9/125um (900um Jacket)/ (2mm Jacket)	F-PT-MTRJ9-0.9mm/2mm
Pigtail MTRJ 2.0mm duplex pigtail, MM 50/125um (900um Jacket)/ (2mm Jacket)	F-PT-MTRJ5-0.9mm/2mm