PN: FLPCG71SX-MTP-000-MTP-LS

Optical Fiber Patch Cord

TECHNICAL DATA SHEET

MTP to MTP Female OS2 12 Fiber Type B

MPO to MPO Fiber Optic Patch Cord (Singlemode)

Product Description

The MTP® to MTP® Female OS2 12 Fiber Type B Patch Cord is a high-performance single mode fiber optic assembly designed for high-density data center interconnects and long-distance transmission. It uses **OS2 9/125 µm single mode fiber** with precision-engineered MTP® connectors, ensuring low insertion loss and stable optical performance.

The **Type B polarity (cross-connect)** configuration is commonly used in parallel optics applications such as 40G/100G/400G Ethernet systems.

Product Features

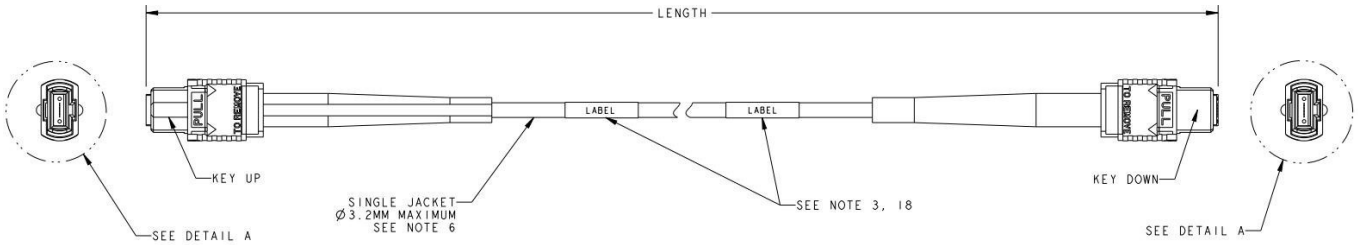
- MTP® to MTP® high-density connector system
- Female (without pins) design for safe mating
- OS2 singlemode 9/125 µm fiber
- 12-fiber ribbon structure
- Type B polarity (cross-over configuration)
- Low insertion loss & high return loss performance
- Supports long-distance transmission
- Factory pre-terminated and tested
- High reliability and repeatability
- LSZH jacket for enhanced safety
- Compliant with international standards

Applications

- Data Centers
- Cloud Computing Networks
- 40G / 100G / 400G Ethernet Systems
- Backbone Optical Networks
- Telecom Infrastructure
- Optical Distribution Frames (ODF)
- High-speed interconnection systems

Product Sketch Map

1. The patch cord



Remarks Length “LENGTH” according to customer requirements

Optical Performance

Parameter	Standard	Elite Low Loss
Insertion Loss	≤ 0.75 dB	≤ 0.35 dB
Typical Loss	≤ 0.50 dB	≤ 0.20 dB
Return Loss (UPC)	≥ 50 dB	≥ 50 dB
Return Loss (APC)	≥ 60 dB	≥ 60 dB
Test Wavelength	1310 nm / 1550 nm	

Material Characteristics

Item	Specification
Fiber Type	OS2 Singlemode 9/125 µm
Fiber Count	12 Fibers
Cable Diameter	3.0 ± 0.1 mm
Cable Jacket	LSZH / PVC
Connector Type	MTP® Female
Cable Color	Yellow
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Compliance	RoHS, IEC Standards

Environmental Performance

Test Item	Condition	Requirement
High Temperature	+85°C, 96H	ΔIL ≤ 0.2 dB
Low Temperature	-40°C, 96H	ΔIL ≤ 0.2 dB
Temperature Cycling	-40°C ↔ +85°C	ΔIL ≤ 0.2 dB
Humidity Test	95% RH, 96H	ΔIL ≤ 0.2 dB
Water Resistance	Standard Test	ΔIL ≤ 0.2 dB

Mechanical Performance

Test Item	Condition	Requirement
Durability	500 Mating Cycles	ΔIL ≤ 0.2 dB
Tensile Strength	50 N, 1 min	ΔIL ≤ 0.2 dB
Vibration	10–55 Hz	ΔIL ≤ 0.2 dB
Twist Test	±180°, 25 cycles	ΔIL ≤ 0.2 dB
Impact Test	Standard Drop	ΔIL ≤ 0.2 dB