



PN: FLPCG71SX-MPO-000-MPO-LS

Optical Fiber Patch Cord

TECHNICAL DATA SHEET

**LSZH Fiber Optic Patch Cord SM
(G.657A1) MPO to MPO**



MPO to MPO Fiber Optic Patch Cord (Singlemode)

Product Description

The MPO to MPO Fiber Optic Patch Cord (Singlemode) is a high-density optical connectivity solution designed for data centers, telecommunications networks, and high-speed backbone infrastructures. Utilizing OS2 9/125 μ m singlemode fiber and MPO connectors, it supports long-distance transmission with minimal signal loss and excellent optical performance.



Suitable for 40G, 100G, 200G, and 400G Ethernet applications, this patch cord is factory-terminated, tested, and available in various fiber counts, lengths, and polarity configurations.

Product Features

- High-density MPO to MPO connectivity
- OS2 9/125 μ m singlemode fiber
- Supports long-distance optical transmission
- Low insertion loss and high return loss
- Available in 8, 12, 16, and 24 fiber configurations
- Supports 40G/100G/200G/400G Ethernet networks
- Type A, Type B, and Type C polarity options
- Male and Female connector options
- LSZH or PVC jacket available
- Factory tested for optical performance
- RoHS compliant

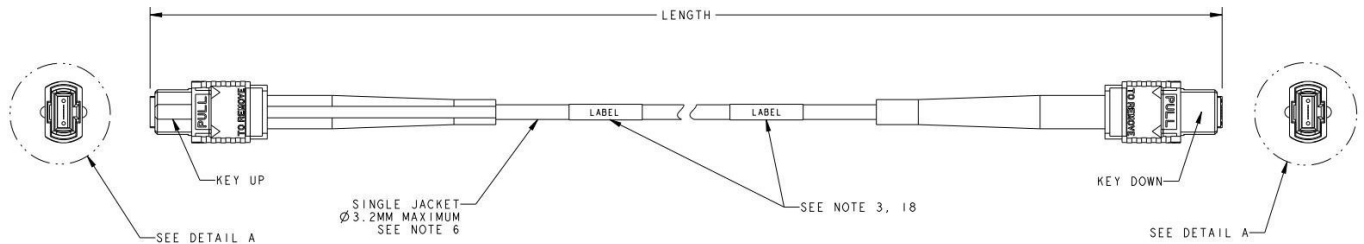
Applications

- Data Centers
- Telecom Networks
- Cloud Computing Infrastructure
- High-Speed Backbone Networks
- Storage Area Networks (SAN)
- Optical Distribution Frames (ODF)
- CATV Networks
- Enterprise Networks



Product Sketch Map

1. The patch cord



Remarks Length "LENGTH" according to customer requirements

Optical Performance

Parameter	Standard Loss	Elite Low Loss
Maximum Insertion Loss	≤ 0.75 dB	≤ 0.35 dB
Typical Insertion 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 (9/125μm)
Fiber Count	8 / 12 / 16 / 24 Fibers
Cable Diameter	3.0 ± 0.1 mm
Cable Jacket	LSZH / PVC
Connector Type	MPO
Cable Color	Yellow
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Compliance	RoHS, IEC

Environmental Performance

Test Item	Test Condition	Requirement
High Temperature	+85°C, 96 Hours	$\Delta IL \leq 0.2 \text{ dB}$
Low Temperature	-40°C, 96 Hours	$\Delta IL \leq 0.2 \text{ dB}$
Temperature Cycling	-40°C to +85°C	$\Delta IL \leq 0.2 \text{ dB}$
Humidity Test	95% RH, 96 Hours	$\Delta IL \leq 0.2 \text{ dB}$
Water Resistance	Standard Test	$\Delta IL \leq 0.2 \text{ dB}$

Mechanical Performance

Test Item	Test Condition	Requirement
Durability	500 Mating Cycles	$\Delta IL \leq 0.2 \text{ dB}$
Tensile Strength	50N, 1 Minute	$\Delta IL \leq 0.2 \text{ dB}$
Vibration	10–55Hz	$\Delta IL \leq 0.2 \text{ dB}$
Twist Test	$\pm 180^\circ$, 25 Cycles	$\Delta IL \leq 0.2 \text{ dB}$
Impact Test	Standard Drop Test	$\Delta IL \leq 0.2 \text{ dB}$