

Optical Fiber Patch Cord

TECHNICAL DATA SHEET

LSZH Fiber Optic Patch Cord MM (OM1) 50/125 (FC-UPC/FC-UPC) Duplex 3.0 mm



LSZH Fiber Optic Patch Cord MM (OM1) 50/125 (FC-UPC/FC-UPC) Duplex 3.0 mm

Product Description:

The Fiber Optic Patch Cord Multimode OM1 (50/125 μm) FC–FC Duplex is designed for short-distance optical communication in telecom, industrial, and laboratory environments.

It features FC connectors on both ends with a **threaded screw-type coupling**, ensuring high mechanical stability and resistance to vibration. The duplex configuration includes two fibers, enabling simultaneous transmit and receive (Tx/Rx), making it suitable for bidirectional communication systems.



OM1 multimode fiber is optimized for LED-based transmission in short-range applications.

Features:

- FC–FC threaded connectors for secure and stable connection
- Duplex design for simultaneous Tx/Rx communication
- OM1 multimode fiber for short-distance applications
- High resistance to vibration and mechanical stress
- Optional LSZH jacket for enhanced fire safety
- Reliable and consistent optical performance
- Durable construction with long service life
- Easy installation and maintenance

Construction:

Parameter	Details
Fiber Type	Multimode (MM)
Fiber Standard	OM1 (50/125 μm)
Cable Structure	Duplex (2 Fibers – Zipcord)
Cable Diameter	2.0 mm / 3.0 mm (optional)
Outer Jacket	LSZH or PVC (optional)
Connector A	FC/UPC
Connector B	FC/UPC
Ferrule Material	Zirconia Ceramic
Strength Member	Aramid Yarn (Kevlar)

Applications:

- LAN (Local Area Networks)
- Data centers (short-distance interconnections)
- Industrial and legacy systems
- Optical Distribution Frames (ODF)
- Laboratory and testing equipment
- Duplex communication systems

Fiber Specifications:

Parameter	Value
Fiber Type	Multimode
Standard	OM1 (50/125 μm)
Operating Wavelength	850 nm / 1300 nm
Attenuation @850 nm	≤ 3.5 dB/km
Attenuation @1300 nm	≤ 1.0 dB/km
Bandwidth	200 MHz·km @850 nm
Mode Type	Graded-index multimode

Optical Performance:

Parameter	Value
Insertion Loss	≤ 0.3 dB
Return Loss	≥ 35 dB
Repeatability	≤ 0.1 dB
Durability	≥ 1000 mating cycles

Environmental Conditions:

- Operating Temperature: -20°C to +70°C
- Storage Temperature: -25°C to +70°C
- Indoor use only