

## Optical Fiber Patch Cord

### TECHNICAL DATA SHEET

# LSZH Fiber Optic Patch Cord MM (OM2) 50/125 (SC-UPC/FC-UPC) Duplex 3.0 mm



## **LSZH Fiber Optic Patch Cord MM (OM2) 50/125 SC-UPC/FC-UPC Duplex 3.0 mm**

### **Product Description:**

The LSZH Fiber Optic Patch Cord Multimode OM2 (50/125  $\mu\text{m}$ ) SC-UPC to FC-UPC Duplex 3.0 mm is designed for reliable short- to medium-distance optical communication in enterprise networks, telecom systems, and industrial environments.



It combines **SC connectors with push-pull locking** and **FC connectors with threaded screw coupling**, making it suitable for hybrid network environments that require stable and secure fiber connections.

The duplex structure supports simultaneous transmit and receive (Tx/Rx), ensuring efficient bidirectional communication. OM2 multimode fiber provides higher bandwidth and improved transmission performance compared to OM1.

### **Features:**

- SC–FC hybrid connectivity for flexible integration
- Duplex design for simultaneous Tx/Rx communication
- OM2 multimode fiber with improved bandwidth over OM1
- LSZH jacket for enhanced fire safety
- Low insertion loss and stable optical performance
- Durable 3.0 mm cable construction
- FC threaded connector ensures vibration-resistant connection

## Construction:

Parameter	Details
Fiber Type	Multimode (MM)
Fiber Standard	OM2 (50/125 $\mu\text{m}$ )
Cable Structure	Duplex (Zipcord – 2 Fibers)
Cable Diameter	3.0 mm
Outer Jacket	LSZH (Low Smoke Zero Halogen)
Connector A	SC/UPC
Connector B	FC/UPC
Ferrule Material	Zirconia Ceramic
Strength Member	Aramid Yarn (Kevlar)

## Applications:

- Data centers and server rooms
- LAN (Local Area Networks)
- Telecom and communication systems
- Patch panels and ODF systems
- Industrial fiber networks
- Hybrid network infrastructure integration

**Fiber Specifications:**

Parameter	Value
Fiber Type	Multimode
Standard	OM2 (50/125 $\mu\text{m}$ )
Operating Wavelength	850 nm / 1300 nm
Attenuation @850 nm	$\leq 3.0$ dB/km
Attenuation @1300 nm	$\leq 1.0$ dB/km
Bandwidth	500 MHz $\cdot$ km @850 nm
Mode Type	Graded-index multimode
Compatibility	Backward compatible with OM1 systems

**Optical Performance:**

Parameter	Value
Insertion Loss	$\leq 0.3$ dB
Return Loss	$\geq 35$ dB
Repeatability	$\leq 0.1$ dB
Durability	$\geq 1000$ mating cycles
Transmission Type	Duplex (Tx/Rx)

**Environmental Conditions:**

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