

**Optical Fiber Patch Cord**

**TECHNICAL DATA SHEET**

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



## **LSZH Fiber Optic Patch Cord MM (OM1) 50/125 (LC-UPC/SC-UPC) Duplex 3.0 mm**

### **Product Description:**

The LSZH Fiber Optic Patch Cord Multimode OM1 (50/125  $\mu\text{m}$ ) LC-Connector to SC-Connector Duplex 3.0 mm is designed for short-distance, high-speed optical communication in enterprise and data center environments.

It features a hybrid LC–SC configuration, enabling flexible connectivity between high-density equipment (LC interface) and standard network devices (SC interface). The duplex structure supports simultaneous transmit and receive (Tx/Rx), making it suitable for Ethernet and LAN applications.

The OM1 multimode fiber (50/125  $\mu\text{m}$ ) is optimized for LED-based transmission systems and short-range communication links.

### **Features:**

- LC–SC hybrid design for flexible connectivity
- Duplex structure for simultaneous Tx/Rx transmission
- OM1 multimode fiber for short-range applications
- LSZH jacket for enhanced fire safety
- Suitable for legacy and enterprise network systems
- Easy installation and maintenance
- Stable performance for Ethernet and LAN applications
- Durable 3.0 mm cable construction

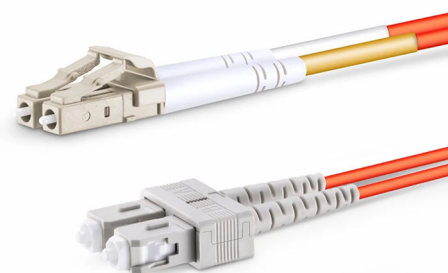


## Fiber Specifications:

Parameter	Value
Fiber Type	Multimode
Standard	OM1 (50/125 $\mu\text{m}$ )
Operating Wavelength	850 nm / 1300 nm
Attenuation @850 nm	$\leq 3.5$ dB/km
Attenuation @1300 nm	$\leq 1.0$ dB/km
Bandwidth	200 MHz·km @850 nm
Mode Field Type	Multimode step-index / graded-index
Compatibility	Backward compatible with OM2/OM3 systems (short links)

## Applications:

- Telecom backbone and optical transport systems
- Laboratory and testing equipment connections
- Data centers and structured cabling
- Optical Distribution Frames (ODF)
- CATV and measurement systems
- High-stability fiber interconnections



## 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	Short-distance high-speed links

## Environmental Conditions:

- Operating Temperature:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Storage Temperature:  $-25^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- Suitable for indoor structured cabling systems

## Safety Features:

- LSZH jacket produces **low smoke and zero halogen emissions** during fire
- Suitable for indoor environments such as offices and data centers
- Flame-retardant and environmentally safer than PVC cables
- Strong mechanical resistance against bending and pulling