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Passive Products

Fiber Products

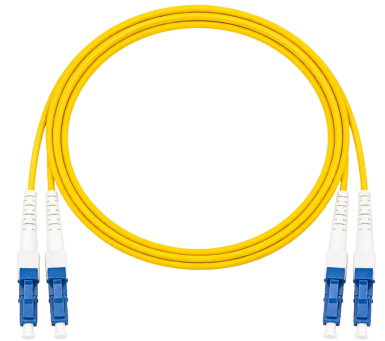
# Fiber Patch Cord Data Sheet

[www.dds-eg.com](http://www.dds-eg.com)



## SM LC-LC Patch Cord

**SM LC-LC DuPlex single-mode Fiber Optic Patch Cord (50/125μm) with LSZH Aqua Jacket, Precision Ceramic Ferrules, Low Insertion Loss, and SuPPort for 10G/40G/100G Ethernet. Ideal for Data Centers, Enterp rise Networks, SAN, and High-Speed Fiber Optic Applications.**



### Technical Specifications

| Parameter                   | Specification                         |
|-----------------------------|---------------------------------------|
| Product Type                | Duplex Fiber Optic Patch Cord         |
| Fiber Type                  | Single Mode                           |
| Fiber Grade                 | OS2                                   |
| Fiber Standard              | ITU-T G.652.D                         |
| Fiber Size                  | 9/125 μm                              |
| Configuration               | Duplex                                |
| Connector A                 | LC/UPC Duplex                         |
| Connector B                 | LC/UPC Duplex                         |
| Connector Color             | Blue / White                          |
| Fiber Cable Color           | Yellow                                |
| Ferrule Material            | Ceramic                               |
| Cable Construction          | Duplex                                |
| Operating Wavelength        | 1310 / 1550 nm                        |
| Typical Application         | 1G / 10G / 25G / 40G / 100G*          |
| Insertion Loss              | ≤ 0.30 dB                             |
| Typical Insertion Loss      | ≤ 0.20 dB                             |
| Return Loss                 | ≥ 50 dB                               |
| Fiber Attenuation @ 1310 nm | ≤ 0.36 dB/km                          |
| Fiber Attenuation @ 1550 nm | ≤ 0.22 dB/km                          |
| Operating Temperature       | -20°C to +70°C                        |
| Storage Temperature         | -40°C to +85°C                        |
| Installation Temperature    | -5°C to +50°C                         |
| Jacket Material             | LSZH                                  |
| Jacket Diameter             | Approx. 2.0 × 3.0 mm Duplex           |
| Minimum Bend Radius         | ≥ 10 × cable diameter                 |
| Connector Polish            | UPC                                   |
| Connector Durability        | ≥ 500 mating cycles                   |
| Fiber Core                  | 9 μm                                  |
| Cladding Diameter           | 125 μm                                |
| Cladding Concentricity      | ≤ 1.0 μm                              |
| Proof Test                  | ≥ 0.69 GPa                            |
| RoHS                        | Compliant                             |
| Flame Rating                | According to selected jacket material |
| Cable Direction             | Duplex                                |
| Packaging                   | Individual protective packaging       |



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### Connector Specifications

| Parameter              | Value             |
|------------------------|-------------------|
| Maximum Insertion Loss | $\leq 0.30$ dB    |
| Typical Insertion Loss | $\leq 0.20$ dB    |
| UPC Return Loss        | $\geq 50$ dB      |
| Mating Durability      | $\geq 500$ cycles |
| Connector Type         | LC Duplex         |
| Polish Type            | UPC               |

#### Construction Layers

##### 1. Optical Fiber

9/125 $\mu$ m single-mode optical fiber.

##### 2. Primary Coating

Protective optical fiber coating designed to protect the glass fiber from mechanical and environmental stress.

##### 3. Fiber Buffer

Provides additional mechanical protection.

##### 4. LSZH Outer Jacket

LSZH Yellow protective jacket for easy identification of single-mode fiber.

##### 5. Connectors

Factory-terminated LC/UPC duplex connectors provide precise optical alignment and reliable mechanical connection

### Part Numbers

| Model            | Description                      |
|------------------|----------------------------------|
| DFP-SMDXLCLC-1   | LC-LC Duplex SM Patch Cord 1 m   |
| DFP-SMDXLCLC-1.5 | LC-LC Duplex SM Patch Cord 1.5 m |
| DFP-SMDXLCLC-2   | LC-LC Duplex SM Patch Cord 2 m   |
| DFP-SMDXLCLC-3   | LC-LC Duplex SM Patch Cord 3 m   |
| DFP-SMDXLCLC-5   | LC-LC Duplex SM Patch Cord 5 m   |
| DFP-SMDXLCLC-10  | LC-LC Duplex SM Patch Cord 10 m  |
| DFP-SMDXLCLC-15  | LC-LC Duplex SM Patch Cord 15 m  |
| DFP-SMDXLCLC-20  | LC-LC Duplex SM Patch Cord 20 m  |
| DFP-SMDXLCLC-30  | LC-LC Duplex SM Patch Cord 30 m  |