

## LC – LC G.657.A1 LSZH 2.0mm Duplex Single Mode Fiber Patch Cord



### Description

The BlueOptics® SFP3131BUXMY Fiber Patch Cord is a high performance, cost effective cable for interconnection between two single mode fiber devices, like SFP+ modules.

All BlueOptics® Fiber Patch Cords come with high return loss and low insertion loss.

BlueOptics® single mode Fiber Patch Cords are compliant to Telcordia GR-326-Core.

BlueOptics® Fiber Patch cords are available in many different variants to fit your needs:

- Multi Mode or Single Mode
- LC, SC, ST or E2000® Connector
- Different Connectors on each side
- PC or APC Polish
- Simplex or Duplex

### Applications

- ✓ Backbone Systems
- ✓ In House Cabling
- ✓ Fiber to the Desk

### Features

- ✓ 2x Duplex LC Connector
- ✓ PC or APC Polish
- ✓ High Quality Ceramic Zirconia Ferrule
- ✓ Brand-name Fiber
- ✓ Fiber 9/125µm SM OS2 G.652.D Round Cable
- ✓ Yellow LSZH Coating
- ✓ Insertion Loss:  $\leq 0.2\text{dB}$
- ✓ Return Loss:  $\geq 30\text{dB}$
- ✓ Brand-name Connector
- ✓ Highest Connector Quality: Up 1500 mating cycles
- ✓ Interferometer Tested
- ✓ Single Packed
- ✓ Test Report

## Warnings

**Laser Safety:** Even small radiation emitted by laser devices can be dangerous to human eyes and lead to permanent eye injuries. Be sure to avoid eye contact with direct or indirect radiation.

## Warranty

Every BlueOptics® fiber patch cord comes with a 25 year replacement warranty and lifetime support. For a warranty inquiry, please contact your CBO sales representative.

This warranty only covers the first user of the equipment.

## Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by CBO before they become applicable to any particular order or contract. In accordance with the CBO policy of continuous improvement specifications may change without notice.

The publication of information in this data sheet does not imply freedom from patent or other protective rights of CBO or others.

Further details are available from any CBO sales representative.

## Installation

Before installation attach an ESD-preventive wrist to ensure not to damage your hardware.

Remove the dust caps of the connector.

Put the LC connector into the LC socket of your hardware until you hear a “click” sound.

You can now use your connection.

*If you got problems with the connection:*

- Please make sure the connector is clean. If not, use a tissue and anhydrous alcohol to clean it accurate.

## Order Information

| Part No.       | Length    | Polish |
|----------------|-----------|--------|
| SFP3131BU0.5MK | 0.5 Meter | PC     |
| SFP3131BU1MK   | 1 Meter   | PC     |
| SFP3131BU2MK   | 2 Meter   | PC     |
| SFP3131BU3MK   | 3 Meter   | PC     |
| SFP3131BU5MK   | 5 Meter   | PC     |
| SFP3131BU7.5MK | 7.5 Meter | PC     |
| SFP3131BU10MK  | 10 Meter  | PC     |
| SFP3131BU15MK  | 15 Meter  | PC     |
| SFP3131BU20MK  | 20 Meter  | PC     |
| SFP3131BU30MK  | 30 Meter  | PC     |
| SFP3131BU50MK  | 50 Meter  | PC     |
| SFP3131BU0.5MM | 0.5 Meter | APC    |
| SFP3131BU1MM   | 1 Meter   | APC    |
| SFP3131BU2MM   | 2 Meter   | APC    |
| SFP3131BU3MM   | 3 Meter   | APC    |
| SFP3131BU5MM   | 5 Meter   | APC    |
| SFP3131BU7.5MM | 7.5 Meter | APC    |
| SFP3131BU10MM  | 10 Meter  | APC    |
| SFP3131BU15MM  | 15 Meter  | APC    |
| SFP3131BU20MM  | 20 Meter  | APC    |
| SFP3131BU30MM  | 30 Meter  | APC    |
| SFP3131BU50MM  | 50 Meter  | APC    |

## Regulatory Compliance

| Feature               | Standard                 | Co. |
|-----------------------|--------------------------|-----|
| Smoke Density Purpose | IEC-61034                | ✓   |
| Halogen Acid Content  | IEC-754-1                | ✓   |
| Flame Resistance      | IEC 60332-1, IEC 60332-3 | ✓   |
| Component Recognition | IEC/EN 60950, UL         | ✓   |
| RoHS                  | 2002/95/EC               | ✓   |
| WEEE                  | 2002/96/EG               | ✓   |

### 1. LC/UPC Geometrical Parameter

| Parameter        | Standard                 |         |
|------------------|--------------------------|---------|
|                  | Minimum                  | Maximum |
| Radius(mm)       | 7                        | 25      |
| Apex offset (um) | 0                        | 50      |
| Fiber Height(nm) | -0.02*R3 +1.3R2 -31R+325 | 100     |

### 2. LC/APC Geometrical Parameter

| Parameter        | Standard |          |         |
|------------------|----------|----------|---------|
|                  | Minimum  | Standard | Maximum |
| Angel(°)         | 7.5      | 8        | 8.5     |
| Radius(mm)       | 5        |          | 12      |
| Apex offset (um) | 0        |          | 50      |
| Fiber Height(nm) | -100     |          | 100     |

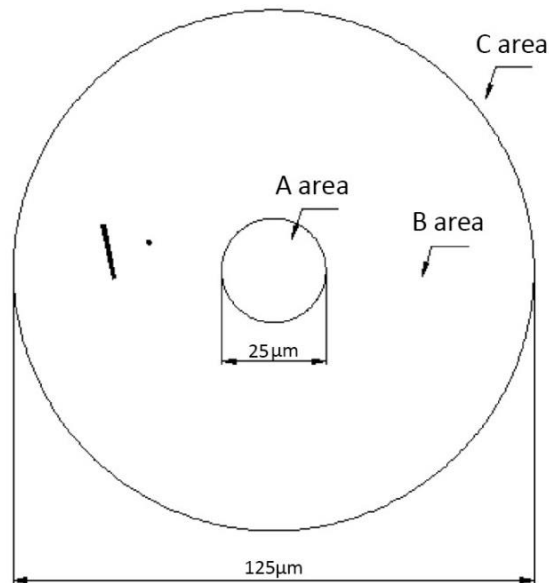
### 3. Mechanical Specifications

| Parameter                |              | Standard |
|--------------------------|--------------|----------|
| Maximum Tensile Load (N) |              | 200      |
| Minimum Bend Radius(mm)  |              | 30       |
|                          | Storage      |          |
|                          | Installation |          |
|                          | Operating    |          |

### 4. Reliability Performance

| Item | Content                                             | Standard Clause     | Conclusion |
|------|-----------------------------------------------------|---------------------|------------|
| 1    | New Device Performance                              | GR-326-Core 4.4.1   | OK         |
| 2    | High Temperature Aging                              | GR-326-Core 4.4.2.1 | OK         |
| 3    | Temperature Cycle                                   | GR-326-Core 4.4.2.2 | OK         |
| 4    | Damp-heat Aging                                     | GR-326-Core 4.4.2.3 | OK         |
| 5    | Damp & Hot/ Condensation Cycle                      | GR-326-Core 4.4.2.4 | OK         |
| 6    | Drying (Not test Item)                              | GR-326-Core 4.4.2.5 | N/A        |
| 7    | Temperature Cycle after Condensation                | GR-326-Core 4.4.2.6 | OK         |
| 8    | Vibration                                           | GR-326-Core 4.4.3.1 | OK         |
| 9    | Buckling                                            | GR-326-Core 4.4.3.2 | OK         |
| 10   | Twist                                               | GR-326-Core 4.4.3.3 | OK         |
| 11   | Tensile                                             | GR-326-Core 4.4.3.4 | OK         |
| 12   | Transmission Performance with Loading               | GR-326-Core 4.4.3.5 | OK         |
| 13   | Impact                                              | GR-326-Core 4.4.3.7 | OK         |
| 14   | Durability                                          | GR-326-Core 4.4.3.8 | OK         |
| 15   | Device test after environmental and mechanical test | GR-326-Core 4.4.3.9 | OK         |
| 16   | Salt Spray                                          | GR-326-Core 4.4.4.4 | OK         |
| 17   | 85°C water soak                                     | GR-326-Core 4.4.4.5 | OK         |

## 5. Quality assurance



| Area A (0~25µm):                                                                                                   | Area B (25~125µm):                                                                                                                                                                                                                                          | Area C (125~250µm):                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>- No any scratch, chips / black dot</li> <li>- No cleanable dust</li> </ul> | <ul style="list-style-type: none"> <li>- White slight scratch width = 1µm, no limit of length, Acceptable Quantity=2</li> <li>- No black scratches</li> <li>- Chips /black dot diameter ≤2µm, Acceptable Quantity≤2</li> <li>- No cleanable dust</li> </ul> | <ul style="list-style-type: none"> <li>- White slight scratch width ≤2µm, no limit of length, Acceptable Quantity≤3</li> <li>- No black scratch</li> <li>- Chips /black dot diameter ≤5µm, Acceptable Quantity≤3</li> <li>- No cleanable dust</li> <li>- No flaw for ceramic ferrule</li> </ul> |