

## 6000 Series Duplex LC Fiber Buccaneer

The 6000 Series Fiber connectors are built to withstand the harshest of environments. Rated IP66, IP68 and IP69K when mated, the connectors also feature a secure, yet easy to operate 30 degree locking mechanism. This tamperproof lock also prevents accidental un-mating. IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks Duplex LC-Type Interface, the connector also features EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1.



- Sealed to IP66 IP68 and IP69K when Mated
- IP68 Rating Tested at 1.054kg/sq cm (15lb/sq in) 10m Depth for 2 Weeks
- Duplex LC-Type Interface
- Cabled Versions: 0S1, 0M1, 0M3
- Cable Range from 5 to 450M
- Diameter Over Coupling Ring 32.0mm
- Flex, Flex In-Line & Rear Panel
- Secure, Proven Locking System
- 30° Twist Locking - Tamperproof Lock Prevents Accidental Un-Mating
- All Plastic Body Version; UL94-V0 Rated, UV Stable, Halogen Free
- Light-Weight, Self-Extinguishing Material Suitable for Long-Term Outdoor use.
- Sealing Caps available to Maintain IP68 Rating
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

# 6000 Series Duplex LC Fiber Buccaneer



|   |  |   |
|---|--|---|
| <p><b>Duplex LC Fiber</b></p>  <p>PXF6050XXX</p> | <ul style="list-style-type: none"> <li>○ Patchcords with IP68 Connectors</li> <li>○ Available in 5 - 450m Lengths</li> <li>○ Supplied with LC Fiber Plug</li> <li>○ 0S1, 0M1 or 0M3 Cable Options</li> </ul> |  |
|---|--|---|

|   |  |   |
|---|--|---|
| <p><b>Duplex LC Fiber</b></p>  <p>PXF6051XXX</p> | <ul style="list-style-type: none"> <li>○ Patchcords with IP68 Connectors</li> <li>○ Available in 5 - 450m Lengths</li> <li>○ Supplied with LC Fiber Plug</li> <li>○ 0S1, 0M1 or 0M3 Cable Options</li> </ul> |  |
|---|--|---|

|   |  |  |
|---|--|--|
| <p><b>Duplex LC Fiber</b></p>  <p>PXF6054XXX</p> | <ul style="list-style-type: none"> <li>○ Patchcords with IP68 Connectors</li> <li>○ Available in 5 - 450m Lengths</li> <li>○ Supplied with LC Fiber Plug</li> <li>○ 0S1, 0M1 or 0M3 Cable Options</li> </ul> |  |
|---|--|--|

|   |  |   |
|---|--|---|
| <p><b>Duplex LC Fiber</b></p>  <p>PXF6055XXX</p> | <ul style="list-style-type: none"> <li>○ Patchcords with IP68 Connectors</li> <li>○ Available in 5 - 450m Lengths</li> <li>○ Supplied with LC Fiber Plug</li> <li>○ 0S1, 0M1 or 0M3 Cable Options</li> </ul> |  |
|---|--|---|

|   |   |   |
|---|---|---|
| <p><b>Rear Panel Mounting Connector</b></p>  <p>PXF6052XXX</p> | <ul style="list-style-type: none"> <li>○ LC Fiber Adapter</li> <li>○ Leaded with LC Connector</li> <li>○ Socket Variant Mates with PXF6050 Type Connectors</li> </ul> |  |
|---|---|---|



# 6000 Series Duplex LC Fiber Buccaneer

|   |  |   |
|---|--|---|
| <p><b>Flex Cable Connector</b></p>  <p>PXF6050X</p>            | <ul style="list-style-type: none"> <li>⬡ Mates with Flex In-Line or Panel Mounting versions PXF6051, PXF6053</li> <li>⬡ 30° Turn Locking Ring</li> <li>⬡ Supplied without LC Connectors</li> </ul> |    |
| <p><b>In-Line Flex Cable Connector</b></p>  <p>PXF6051X</p>    | <ul style="list-style-type: none"> <li>⬡ Mates with Flex Cable Connector PXF6050</li> <li>⬡ For In-Line Connection</li> <li>⬡ Supplied without LC Connectors</li> </ul>                            |    |
| <p><b>Rear Panel Mounting Connector</b></p>  <p>PXF6052X</p> | <ul style="list-style-type: none"> <li>⬡ Mates with Flex Cable Connector PXF6050</li> <li>⬡ Rear Panel Mounting</li> <li>⬡ Single Hole Fixing</li> <li>⬡ Supplied without LC Connectors</li> </ul> |  |

# 6000 Series Duplex LC Fiber Buccaneer

|   |  |   |
|---|--|---|
| <p><b>Sealing Caps</b></p>  <p>PXP6081<br/>PXP6083</p> | <ul style="list-style-type: none"> <li>⬡ Sealing Caps to Maintain IP Rating</li> <li>⬡ PXP6081 for Cable Connectors PXF6050</li> <li>⬡ PXP6083 for Front Panel Mount Connectors PXF6052 &amp; PXF6051 with 30° Twist Lock</li> </ul> |  <p>PXP6081</p> <p>PXP6083</p> |
|---|--|---|

| Part No. | Description   |
|----------|---|
| PXP6081  | Sealing Cap for Flex Cable Connectors (PXF6050)                   |
| PXP6083  | Sealing Cap for Front Panel Mounting Connector (PXF6052, PXF6051) |

# 6000 Series Duplex LC Fiber Buccaneer

## Cables & Connectors:

### Mechanical

**Sealing:** IP69K, DIN40050-9  
IP68, EN60529:1992+A2:2013  
(10m depth for 2 weeks)  
IP66, EN60529:1992+A2:2013

**Panel Mount Nut:** 1.0 - 1.1NM (91lb.in)

**Operating Temperature:** -25°C to +70°C

**Salt Mist:** EN60068-2-52 Test Kb Salt Mist  
(Cyclic) Marine Severity Level 1

### Optical

**IEC 61753-1:**

**Max Insertion Loss:** 0.2db } single mode

**AVG Insertion Loss:** 0.1db } single mode

### Material

**Flex and panel types:** Polyamide

**Body Mouldings:** UL94v-0

**Flammability Rating:** To EN 500021:1999

**UV Resistance:**

**Cable Outer Jacket:** Polyethylene for UV and Weather Resistance

**O Rings:** Silicone

**Panel Sealing O Ring:** Silicone

**RoHS** Compliant

## Fiber Specification - SECTION OSI:

### Item:

**Fiber Type:**

**Mode Field Diameter:**

**Cladding Diameter:**

**Core Concentricity Error:**

**Cladding Non-Circularity:**

**Coating Diameter:**

**Coating-Cladding Concentricity Error:**

**Cut-Off Wavelength:**

**Uncabled Fiber Macrobending Loss:**

**Min. Proof Stress:**

**Dynamic Fatigue Parameter:**

**Chromatic Dispersion Coefficient:**

**Other Parameters Meet Standard:**

### Detail:

/

Wavelength

Range of Nominal Values

Tolerance

Nominal

Tolerance

Nominal

Tolerance

Radius(mm)

Number of Turns

Max. at 1550nm(dB)

Max. at 1625 nm (dB)

λ0min

λ0max

S0max

ITU-T G.657

### Specification:

G.657A2 (OS1)

1310mm

8.6µm -9.5µm

±0.4 µm

125.0µm

±0.7 µm

≤0.5µm

≤1%

245µm

±10µm

≤12.5µm

≤1260 nm

|      |     |     |
|------|-----|-----|
| 15   | 10  | 7.5 |
| 10   | 1   | 1   |
| 0.03 | 0.1 | 0.5 |
| 0.1  | 0.2 | 1.0 |

0.69 GPa

≥20

1300 nm

1324 nm

0.092 ps/nm<sup>2</sup> ×km

### Cable Construction:



# 6000 Series Duplex LC Fiber Buccaneer

## Optical Cable Specification:

### Structure Parameter

|                                       |  |  |     |     |
|---------------------------------------|--|--|-----|-----|
| <b>Tight Buffer:</b>                  | Material                               | Polyolefin (POE)                                   |     |     |
|                                       | Outer Diameter                         | 0.85mm±0.05mm                                      |     |     |
| <b>Strength Member:</b>               | Material                               | Aramid Yarn  |     |     |
|                                       |  |  |     |     |
| <b>Outer Sheath:</b>                  | Sheath Material                        | Polyolefin (POE)                                   |     |     |
|                                       | Sheath Color                           | Yellow (Pantone 136C) Chromatic Aberration E: ≤4.0 |     |     |
|                                       | Min. Sheath Thickness                  | 0.3mm  |     |     |
|                                       | Dimension                              | 2.0mm±0.1mm  |     |     |
| <b>Transmission Performance</b>       |  |  |     |     |
| <b>Attenuation Coefficient:</b>       | Wavelength 1310nm~1625nm               | ≤0.4 dB/km   |     |     |
|                                       | Maximum at 1383 nm ±3 nm               | ≤0.4 dB/km   |     |     |
|                                       | Wavelength 1550nm                      | ≤0.3 dB/km   |     |     |
| <b>Macrobending Loss:</b>             | Radius(mm)                             | 15   | 10  | 7.5 |
|                                       | Number of Turns                        | 10   | 1   | 1   |
|                                       | Max. at 1550 nm(dB)                    | 0.03   | 0.1 | 0.5 |
|                                       | Max. at 1625 nm (dB)                   | 0.1  | 0.2 | 1.0 |
|                                       |  |  |     |     |
| <b>Other Performances</b>             |  |  |     |     |
| <b>Min. Bending Radius of Work:</b>   | 10mm                                   |  |     |     |
| <b>Other Parameter Meet Standard:</b> | IEC60794-2-50, YD/T1258.2, ITU-T G.657 |  |     |     |

# 6000 Series Duplex LC Fiber Buccaneer

## Fiber Specification - SECTION OMI:

| Item:   | Detail:                             | Specification:      |
|---|-------------------------------------|---------------------|
| Fiber Type:                                   | /                                   | 62.5/125(A1b) (OM1) |
| Core Diameter:                                | Normal Value                        | 62.5 μm             |
|   | Tolerance                           | ±3 μm               |
| Cladding Diameter:                            | Nominal                             | 125.0μm             |
|   | Tolerance                           | ±2 μm               |
| Core-Cladding Concentricity Error:            |                                     | ≤3μm                |
| Cladding Non-Circularity:                     |                                     | ≤2%                 |
| Core Non-Circularity:                         |                                     | ≤6%                 |
| Primary Coating Diameter (Uncoloured):        | Nominal                             | 245μm               |
|   | Tolerance                           | ±10μm               |
| Primary Coating-Cladding Concentricity Error: |                                     | ≤12.5μm             |
| Uncabled Fiber Macrobending Loss:             | Radius(mm)                          | 37.5                |
|   | Number of Turns                     | 100                 |
|   | At Wavelengths 850 nm & 1300nm (dB) | 0.5                 |
| Min. Proof Stress:                            |                                     | 0.69 GPa            |
| Dynamic Fatigue Parameter:                    |                                     | ≥20                 |
| Minimum Modal Bandwidth- Length:              | Wavelength 850 nm                   | 200 MHzkm           |
| Product for Overfilled Launch:                | Wavelength 1300 nm                  | 500 MHzkm           |
| Other Parameters Meet Standard:               | IEC 60793-2-10                      |                     |

### Cable Construction:



## Optical Cable Specification:

### Structure Parameter

|                  |                       |   |
|------------------|-----------------------|---|
| Tight Buffer:    | Material              | Polyolefin (POE)                                  |
|                  | Outer Diameter        | 0.85mm±0.05mm                                     |
| Strength Member: | Material              | Aramid Yarn                                       |
|                  | Sheath Material       | Polyolefin (POE)                                  |
| Outer Sheath:    | Sheath Color          | Orange(Pantone 164C) Chromatic Aberration E: ≤4.0 |
|                  | Min. Sheath Thickness | 0.3mm   |
|                  | Dimension             | 2.0mm±0.1mm                                       |

### Transmission Performance

|                          |                   |            |
|--------------------------|-------------------|------------|
| Attenuation Coefficient: | Wavelength 850m   | ≤3.5 dB/km |
|                          | Wavelength 1300nm | ≤1.5 dB/km |

### Other Performances

|                                |                           |
|--------------------------------|---------------------------|
| Min. Bending Radius of Work:   | 30mm                      |
| Other Parameter Meet Standard: | IEC60794-2-50, YD/T1258.2 |

# 6000 Series Duplex LC Fiber Buccaneer

## Fiber Specification - SECTION OM3:

| Item:                                  | Detail:  | Specification:  |
|--|--|---|
| Fiber Type:                            | /  | 50/125(OM3)   |
| Core Diameter:                         | Normal value                                     | 50 $\mu\text{m}$                                      |
|  | Tolerance  | $\pm 2.5 \mu\text{m}$                                 |
| Cladding Diameter:                     | Nominal  | 125.0 $\mu\text{m}$                                   |
|  | Tolerance  | $\pm 2 \mu\text{m}$                                   |
| Core-Cladding Concentricity Error:     |  | $\leq 3 \mu\text{m}$                                  |
| Cladding Non-Circularity:              |  | $\leq 2\%$  |
| Core Non-Circularity:                  |  | $\leq 6\%$  |
| Primary Coating Diameter (Uncoloured): | Nominal  | 245 $\mu\text{m}$                                     |
| Primary Coating-Cladding               | Tolerance  | $\pm 10 \mu\text{m}$                                  |
| Concentricity Error:                   |  | $\leq 12.5 \mu\text{m}$                               |
| Uncabled Fiber Macrobending Loss:      | Radius(mm)                                       | 15      7.5   |
|  | Number of turns                                  | 2      2  |
|  | Max. at 850 nm (dB)                              | 0.1      0.2  |
|  | Max. at 1300 nm (dB)                             | 0.3      0.5  |
|  | Overfilled Launch Bandwidth at 850nm             | 1500 MHz. km  |
|  | Overfilled Launch Bandwidth at 1300nm            | 500 MHz. km   |
|  | Effective Laser Launch Bandwidth at 850nm        | 2000 MHz. km  |
| Min. Mode Bandwidth:                   |  | 0.69 GPa  |
| Min. Proof Stress:                     |  | $\leq 20$   |
| Dynamic Fatigue Parameter:             | $\lambda 0_{\text{min}}$                         | 1295 nm   |
|  | $\lambda 0_{\text{max}}$                         | 1340 nm   |
| Chromatic Dispersion Coefficient:      | S0max (from 1295nm $\leq \lambda 0 \leq$ 1310nm) | 0.105 ps/nm <sup>2</sup> × km                         |
|  | S0max (from 1310nm $\leq \lambda 0 \leq$ 1340nm) | 0.000375 (1590- $\lambda 0$ ) ps/nm <sup>2</sup> × km |
| Other Parameters Meet Standard:        | IEC 60793-2-10                                   |   |

## Cable Construction:



## Optical Cable Specification:

### Structure Parameter

|                  |                       |   |
|------------------|-----------------------|---|
| Tight Buffer:    | Material              | Polyolefin (POE)  |
|                  | Outer Diameter        | 0.85mm $\pm$ 0.05mm                                     |
| Strength Member: | Material              | Aramid Yarn   |
|                  | Sheath Material       | Polyolefin (POE)  |
| Outer Sheath:    | Sheath Color          | Aqua (Pantone 3248C) Chromatic Sberration E: $\leq 4.0$ |
|                  | Min. Sheath Thickness | 0.3mm   |
|                  | Dimension             | 2.0mm $\pm$ 0.1mm                                       |

### Transmission Performance

|                          |                      |                  |
|--------------------------|----------------------|------------------|
| Attenuation Coefficient: | Wavelength 850m      | $\leq 3.5$ dB/km |
|                          | Wavelength 1300nm    | $\leq 1.5$ dB/km |
| Macrobending Loss:       | Radius (mm)          | 15      7.5      |
|                          | Number of Turns      | 2      2         |
|                          | Max. at 850 nm (dB)  | 0.1      0.2     |
|                          | Max. at 1300 nm (dB) | 0.3      0.5     |

### Other Performances

|                                |                           |
|--------------------------------|---------------------------|
| Min. Bending Radius of Work:   | 10mm                      |
| Other Parameter Meet Standard: | IEC60794-2-50, YD/T1258.2 |



# 6000 Series Duplex LC Fiber Buccaneer

| PXF605 x           | X                     | XX  |
|--------------------|-----------------------|---|
| <b>Body Styles</b> | <b>Cable Type</b>     | <b>Contact Type</b>                                   |
| PXF6050            | A = OM3 (Multimode)   | <b>Blank</b> = No cable                               |
| PXF6051            | B = OM1 (Multimode)   | <b>AA</b> = 1<br>(1M on Chassis Version Only PXF6052) |
| PXF6052            | C = OS1 (Single Mode) | <b>AA</b> = 5   |
| PXF6054            |                       | <b>AB</b> = 10  |
| PXF6055            |                       | <b>AC</b> = 15  |
|                    |                       | <b>AD</b> = 25  |
|                    |                       | <b>AE</b> = 50  |
|                    |                       | <b>AF</b> = 100                                       |
|                    |                       | <b>AG</b> = 150                                       |
|                    |                       | <b>AH</b> = 200                                       |
|                    |                       | <b>AJ</b> = 300                                       |
|                    |                       | <b>AK</b> = 450                                       |

**Example:**

PXF6050A = Flex connector, for OM3 (Multimode) no cable supplied

PXF6050AAA = Flex connector, OM3 multimode cable, 5 metre length to LC type connector

PXF6052BAA = Panel mount connector, OM1 multi mode cable, 1 metre length to LC type connector

**Fiber Assignment:**



Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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