SofeTEK Optical Fiber Connector

**FC Optical Fiber Connector**

The FC connector is used extensively in the telecommunications market, where long singlemode optical fiber cables can run upwards of 50km. In these extreme situations the connector needs to have extremely low loss and accurate geometry.

The SofeTEK FC Optical Fiber connector comprises of a nickel plated brass body and a ceramic ferrule/spring/crimp barrel assembly plus a crimp over sleeve and rubber boot. These connectors are suitable for 900μm and 2 and 3mm cables. The connector is precision made and manufactured to demanding specifications. The combination of a ceramic ferrule and a precision nickel plated brass housing provides consistent long-term mechanical and optical performance.

The SofeTEK FC connector is available in Singlemode PC and APC versions as well as multimode. SofeTEK has 15 years experience in manufacturing fiber optic connectors and cable assemblies. From Biconic and SMA through ST, SC to today’s Small Form Factor connectors like the LC, MU or MTRJ. If you have a fiber network, no matter what the technology, SofeTEK can offer you a solution to your problem.

SofeTEK has full ISO9001 on all of its manufacturing facilities, so you can be confident you are using the very best in cable, connectors and manufacturing.

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**Ordering information**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No</th>
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</thead>
<tbody>
<tr>
<td>FC SM Connector 0.9mm Blue Boots</td>
<td>FCSM09BU</td>
</tr>
<tr>
<td>FC SM Connector 2.0mm Blue Boots</td>
<td>FCSM20BU</td>
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<td>FC SM Connector 3.0mm Blue Boots</td>
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<tr>
<td>FC MM Connector 0.9mm Black Boots</td>
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The FC connector is a widely used connector. It can be seen in every area of the communications environment, from a telecoms distribution room to a local area network closet the FC has set the standard for optical fiber connectors.

The SofeTEK FC connectors are manufactured using the highest quality components. The connectors exceed all areas of standards covering optical fiber connectors.

Versions Available:
2mm Patch
3mm Patch
900 mm

Termination Procedures
Prep cable end, Epoxy-Crimp-Polish

Product Packaging
Standard packaging: 100pcs Bulk packed
Special packaging available by request

Colours
900 mm Boot, Blue, Black
2 and 3 mm Boot, Blue, Black

Intermateability
Optically and mechanically compatible with all equivalent connectors.
Compliant with IEC 61754-13.

Optical Performance
Singlemode
Insertion loss: Max. 0.3 dB Typical 0.2 dB
Return Loss: UPC > 50dB Typical 55 dB
APC > 60dB Typical 65 dB

Multimode
Insertion loss: Max. 0.3 dB Typical 0.12dB (IEC 874-1 method)

Mechanical
Capillary diameter tolerance:
SM—126 ±0.5μm
MM—127 ±/- 0.5μm
Ferrule Diameter:2.5mm ± .001
Pre-radiused, PC-end finish for Physical Contact ferrule to ferrule. R 10 to 25mm
Tensile Strength Cable retention: >50 N (2 & 3mm boot versions only)

Vibration (Mated Pair):
(IEC 61300-2-1)
10-55 Hz, 1.5mm P to P
=0.3dB Change

Mating Durability:
(IEC 61300-2-2)
1000 mating cycles
Clean every 25 cycles
< 0.2 dB Change

High Temperature:
(IEC 61300-2-18)
75°C for 96 hours
=0.2dB Change

Damp Heat:
(IEC 61300-2-19)
60°C at 95% RH, 96 hours
=0.2dB Change

Temperature Cycling
(IEC 61300-2-48)
-40 to +75°C, 40 cycles
=0.2dB Change

Operating Temperature
-40°C to +85°C