

# SC Fiber Optic Connectors

## PANDUIT® SPECIFICATION SHEET

### specifications

SC field polish connectors are TIA/EIA-604 FOCIS-3 compliant. SC simplex and duplex connectors are field terminable. The fibers shall terminate in 2.5mm ceramic ferrules with non-optical disconnect functionality and an average insertion loss of 0.1dB (multimode) and 0.15dB (singlemode) per mated pair.



### technical information

|                                |                                                                                           |
|--------------------------------|-------------------------------------------------------------------------------------------|
| <b>Standards requirements:</b> | TIA/EIA-604 FOCIS-3 compliant; exceeds TIA/EIA-568-B.3 requirements                       |
| <b>Fiber compatibility:</b>    | 62.5/125µm OM1, 50/125µm OM2, 10Gig™ 50/125µm laser optimized OM3/OM4 and 9/125µm OS1/OS2 |
| <b>Fiber cable type:</b>       | 900µm tight-buffered cable recommended                                                    |
| <b>Fiber cable size:</b>       | 3.0mm or 1.6mm – 2.0mm jacketed cable                                                     |
| <b>Ferrule type:</b>           | Zirconia ceramic ferrule                                                                  |
| <b>Insertion loss:</b>         | 0.1dB average (multimode), 0.15dB (singlemode)                                            |
| <b>Return loss:</b>            | >20dB (multimode), >40dB (singlemode)                                                     |

### key features and benefits

|                                                                    |                                                                                                                          |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Free floating housing</b>                                       | Ensures complete latching even when inserted by the boot; valuable in high-density spacing applications                  |
| <b>Pre-assembled inner inner housing</b>                           | Fewer parts simplifies assembly and reduces installer error for lower installed cost                                     |
| <b>Full length adhesive fill tube</b>                              | Prevents adhesive from entering internal cavity of connector to reduce installer error                                   |
| <b>Non-optical disconnect</b>                                      | Maintains data transmission under tensile loads for jacketed cable for network reliability                               |
| <b>Anaerobic adhesive field installation</b>                       | Simplifies and reduces installation time by 50% compared to heat cured epoxy terminations; curing oven/time not required |
| <b>High temperature thermoplastic design</b>                       | Allows use of high glass transition temperature epoxies with cure temperatures up to 150°C (302°F)                       |
| <b>Simplex available with 900µm and 3.0mm or 1.6 – 2.0mm boots</b> | One connector part number for both fiber types for easier ordering and stocking                                          |
| <b>Standard 2.5mm ceramic ferrules</b>                             | Provide the highest durability for repeated matings                                                                      |

### applications

Panduit SC Fiber Optic Connectors are used for equipment cross-connects or interconnects in backbone, horizontal and work area applications. SC connectors are recommended by TIA/EIA-568-B.3 at the wall outlet and the

telecommunications closet. Multimode connectors provide a robust and easy to terminate solution for lower cost fiber-to-the-desk applications. Singlemode connectors provide added bandwidth capacity for data hungry applications.

\*MTP is a registered trademark of US Conec Ltd.

**www.panduit.com**

#### SC Simplex Fiber Optic Connectors for 900µm Buffered Fiber and 3.0mm Jacketed Cable

|                                 |         |
|---------------------------------|---------|
| <b>Multimode (black boots):</b> | FSCM5BL |
| <b>Multimode (black boots):</b> | FSCMBL  |
| <b>Multimode (red boots):</b>   | FSCMRD  |
| <b>Singlemode (blue boots):</b> | FSCSBU  |

#### SC Simplex Fiber Optic Connectors for 900µm Buffered Fiber and 1.6mm – 2.0mm Jacketed Cable

|                                 |            |
|---------------------------------|------------|
| <b>Multimode (black boots):</b> | FSCM2.05BL |
| <b>Multimode (black boots):</b> | FSCM2.0BL  |
| <b>Multimode (red boots):</b>   | FSCM2.0RD  |
| <b>Singlemode (blue boots):</b> | FSCS2.0BU  |

#### SC Duplex Fiber Optic Connectors for 3.0mm Jacketed Cable

|                                |          |
|--------------------------------|----------|
| <b>Multimode (black boots)</b> | FSCDM5BL |
| <b>Multimode (black/red):</b>  | FSCDM    |

#### SC Fiber Optic Adapters

|                              |            |
|------------------------------|------------|
| <b>Duplex MM:</b>            | FADSCFI-L  |
| <b>Duplex MM:</b>            | FADSCBL-L  |
| <b>Duplex 10Gig™ (zirc):</b> | FADSCZAI-L |
| <b>Simplex SM (zirc):</b>    | FASCSZBI-L |
| <b>Simplex APC (zirc):</b>   | FASCSZAG-L |

L = Bag of 50 adapters; 100 per carton.

#### Mini-Com® SC Adapter Modules

|                              |            |
|------------------------------|------------|
| <b>Duplex MM:</b>            | CMDEISCEI  |
| <b>Duplex MM:</b>            | CMDBLSCBL  |
| <b>Duplex 10Gig™ (zirc):</b> | CMSBUSCZBU |
| <b>Simplex SM (zirc):</b>    | CMSBUSCZBU |
| <b>Simplex APC (zirc):</b>   | CMSAGSCZBL |

#### Opticom® SC Fiber Adapter Panels

|                              |             |
|------------------------------|-------------|
| <b>6 duplex MM:</b>          | FAP6WEIDSC  |
| <b>6 duplex MM:</b>          | FAP6WBLDSC  |
| <b>6 duplex 10Gig™:</b>      | FAP6WAQDSCZ |
| <b>6 duplex SM (zirc):</b>   | FAP6WBUDSCZ |
| <b>12 simplex SM (zirc):</b> | FAP12WBUSCZ |

#### Opticom® QuickNet™ Pre-Terminated MTP® Cassettes

|                             |          |
|-----------------------------|----------|
| <b>12 SC to MTP® (12f):</b> | FC^12-3S |
| <b>6 SC to MTP® (12f):</b>  | FC^12-3  |

#### Opti-Core® Fiber Optic Patch Cords

|                               |          |
|-------------------------------|----------|
| <b>Duplex SC to SC:</b>       | F^D3-3M‡ |
| <b>Simplex SC to SC:</b>      | F^S3-3M‡ |
| <b>Simplex SC to pigtail:</b> | F^B3-NM‡ |

#### SC Termination Tooling

|                           |            |
|---------------------------|------------|
| <b>Termination kit:</b>   | FJKITG     |
| <b>Refurbishment kit:</b> | FJKITG-RFB |

#### Additional Components for Singlemode

|                             |           |
|-----------------------------|-----------|
| <b>1µm diamond film:</b>    | FPP1-V    |
| <b>0.05µm lapping film:</b> | FLCFPLF-X |

#### HD Connector Removal Tool

|                       |       |
|-----------------------|-------|
| <b>For LC and SC:</b> | PCRT1 |
|-----------------------|-------|

Substitute for module color:

|                         |                |
|-------------------------|----------------|
| EI = Electric Ivory     | BU = Blue      |
| IG = International Gray | WH = White     |
| TG = Technical Gray     | BL = Black     |
| AW = Arctic White       | IW = Off White |
| EW = European White     |                |

^Substitute for fiber type:

X (OM3/OM4 – 10Gig™ 50/125µm), 5 (OM2 – 50/125µm), 6 (OM1 – 62.5/125µm) or 9 (OS1/OS2 – 9/125µm).

‡Substitute for length in meters: 1, 2, 3, 5 or 10 for patch cords, and 1, 2 or 3 for pigtails; singlemode patch cords are also available in 12, 15, 25 or 30 meter lengths. Contact Customer Service for other available lengths.

# SC Fiber Optic Connectors

## performance information

| Test Parameter                                          | Description                                                                                                                         | Result                                                |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Qualification test suite (TIA/EIA-568-B.3 requirements) | Complete testing protocol per TIA/EIA-568-B.3 using TIA/EIA FOTPs that include mechanical, environmental and optical test sequences | Compliant; exceeds TIA/EIA-568-B.3 requirements       |
| Connector intermatability                               | Dimensional and material compliance to TIA/EIA standards                                                                            | All connectors are FOCIS compliant with TIA/EIA-604-3 |

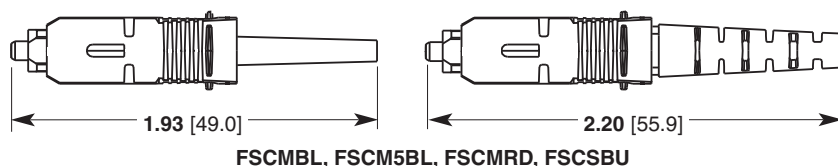
## selection information

| Part Number | Connector Type | Cable Type                                               | Fiber      | Ferrule          | Housing Color  | Boot Color    | Average Insertion Loss* | Return Loss |
|-------------|----------------|----------------------------------------------------------|------------|------------------|----------------|---------------|-------------------------|-------------|
| FSCM5BL     | Simplex        | 900 micron buffered fiber and 3.0mm jacketed cable       | Multimode  | Zirconia Ceramic | Black          | Black         | 0.1dB                   | >20         |
| FSCM2.05BL  | Simplex        | 900 micron buffered fiber and 1.6 – 2.0mm jacketed cable |            |                  |                |               |                         |             |
| FSCDM5BL    | Duplex         | 3.0mm jacketed cable                                     |            |                  |                |               |                         |             |
| FSCMBL      | Simplex        | 900µm buffered fiber and 3.0mm jacketed cable            |            |                  |                |               |                         |             |
| FSCMRD      | Simplex        | 900µm buffered fiber and 3.0mm jacketed cable            |            |                  | Electric Ivory | Red           |                         |             |
| FSCM2.0BL   | Simplex        | 900µm buffered fiber and 1.6mm – 2.0mm jacketed cable    |            |                  |                | Black         |                         |             |
| FSCM2.0RD   | Simplex        | 900µm buffered fiber and 1.6mm – 2.0mm jacketed cable    |            |                  |                | Red           |                         |             |
| FSCDM       | Duplex         | 3.0mm jacketed cable                                     |            |                  |                | Red and Black |                         |             |
| FSCSBU      | Simplex        | 900µm buffered fiber and 3.0mm jacketed cable            | Singlemode | Zirconia Ceramic | Blue           | Blue          | 0.15dB                  | >40         |
| FSCS2.0BU   | Simplex        | 900µm buffered fiber and 1.6mm – 2.0mm jacketed cable    |            |                  |                |               |                         |             |

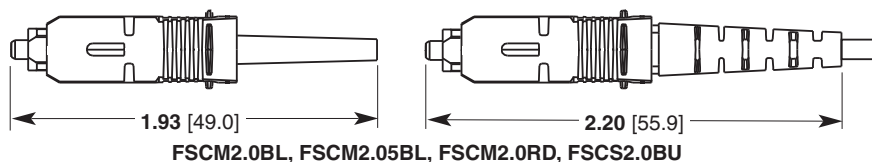
\*All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.

### SC Simplex Connectors

For 900µm Fiber and 3.0mm Jacketed Cable

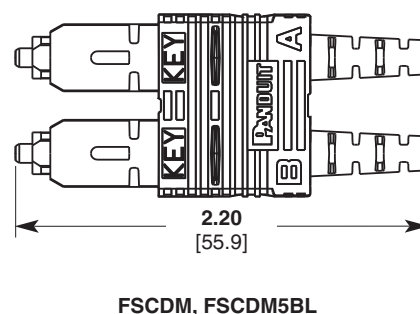


For 900µm Fiber and 1.6mm – 2.0mm Jacketed Cable



### SC Duplex Connector

For 3.0mm Jacketed Cable



Dimensions are in inches [Dimensions in brackets are in millimeters].

### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA  
Markham, Ontario  
cs-cdn@panduit.com  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
cs-emea@panduit.com  
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.  
Republic of Singapore  
cs-ap@panduit.com  
Phone: 65.6305.7575

PANDUIT JAPAN  
Tokyo, Japan  
cs-japan@panduit.com  
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA  
Jalisco, Mexico  
cs-la@panduit.com  
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.  
Victoria, Australia  
cs-aus@panduit.com  
Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to [www.panduit.com/warranty](http://www.panduit.com/warranty)

For more information

Visit us at [www.panduit.com](http://www.panduit.com)

Contact Customer Service by email: [cs@panduit.com](mailto:cs@panduit.com)  
or by phone: 800-777-3300 and reference FBSP15

**PANDUIT®**

©2010 Panduit Corp.  
ALL RIGHTS RESERVED.

WW-FBSP15  
10/2010