



# THE DATASHEET OF SFSD-05-30-H-20.00-S

**(1.27 mm) .050" PITCH • DISCRETE WIRE ASSEMBLY/COMPONENTS**

| SERIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | POSITIONS PER ROW                                                           | WIRE GAUGE                                                                                                 | PLATING OPTION                                                        | ASSEMBLED LENGTH                                                                                                                        | END OPTION                                                                                                                                                                                                                                                                                                             | END 2 OPTION                                                                                                                                                                                                                                                                               |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
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| <b>SFSD</b><br>= Double Row PVC Cable<br><br><b>SFSDT</b><br>= Double Row Blue *Teflon™ Fluoropolymer Cable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>-03, -04, -05, -07, -10, -15, -20, -25, -40, -50</b><br>(Standard sizes) | <b>-28</b><br>= 28 AWG<br><br><b>-28C</b><br>= Color Coded Cable (SFSD only)<br><br><b>-30</b><br>= 30 AWG | <b>-G</b><br>= 10 μm (0.25 μm) Gold on contact, Gold Flash on balance | <b>-"XX.XX"</b><br>= Assembled Length in Inches (76.20 mm)<br>03.00" min. for -S end option (82.60 mm)<br>03.25" min. for -D end option | <b>-S</b><br>= Single Ended<br><br><b>-D</b><br>= Double Ended For -(X) specify "S" for single ended and "D" for double ended.<br><br><b>-(X)R</b><br>= Retention Latch (TFM-WT option required for mating)<br><br><b>-(X)S</b><br>= Screw Down (Not available in -03, -04 & -50 positions) (Mates with TFM-DS option) | Requires -D, -DS, -DR (End 1 Notch Up)<br><br><b>-NUS</b><br>= Notch up, straight (Pin 1 to Pin N-1)<br><br><b>-NDS</b><br>= Notch down, straight (Pin 1 to Pin 2)<br><br><b>-NUS</b><br>= Notch up, crossed (Pin 1 to Pin N)<br><br><b>-NDX</b><br>= Notch down, crossed (Pin 1 to Pin 1) |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| <div><div><div><b>SFSD(T)</b><br/>Board Mates:<br/>TFM, TFML, TFC<br/>(-SR &amp; -DR requires -WT option)</div><div><b>SPECIFICATIONS</b><br/><br/><b>Insulator Material:</b><br/>Black LCP<br/><b>Contact Material:</b><br/>BeCu<br/><b>Plating:</b><br/>Au over 50 μ" (1.27 μm) Ni<br/><b>Current Rating:</b><br/>2.9 A per pin<br/>(2 pins powered)<br/><b>Operating Temp Range:</b><br/>-10 °C to +80 °C (PVC)<br/>-40 °C to +125 °C (*Teflon™ Fluoropolymer)<br/><b>Voltage Rating:</b><br/>280 VAC (PVC)<br/>313 VAC (*Teflon™ Fluoropolymer)<br/><b>Wire:</b><br/>28 or 30 AWG</div></div><div><table><tr><th colspan="2">-28C CABLE COLOR CODING</th></tr><tr><th>PIN</th><th>COLOR</th></tr><tr><td>1</td><td>BROWN</td></tr><tr><td>2</td><td>RED</td></tr><tr><td>3</td><td>ORANGE</td></tr><tr><td>4</td><td>YELLOW</td></tr><tr><td>5</td><td>GREEN</td></tr><tr><td>6</td><td>VIOLET</td></tr><tr><td>7</td><td>GRAY</td></tr><tr><td>8</td><td>WHITE</td></tr><tr><td>9</td><td>BLACK</td></tr><tr><td>10</td><td>BLUE</td></tr><tr><td>ETC</td><td>REPEAT</td></tr></table><div></div></div><div><div></div><div><p>No. of Positions<br/>x (1.27) .050<br/>+ (0.38) .015</p><p>End 1 Notch (Always Up)</p><p>(11.18) .440</p><p>End 2 notch location determined by part number</p><p>Assembled Length ± (3.18) .125</p></div><div><p>-SR</p><p>-D-NUS</p><p>SFSD OR SFSDT</p></div></div></div> |                                                                             |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            | -28C CABLE COLOR CODING |  | PIN | COLOR | 1 | BROWN | 2 | RED | 3 | ORANGE | 4 | YELLOW | 5 | GREEN | 6 | VIOLET | 7 | GRAY | 8 | WHITE | 9 | BLACK | 10 | BLUE | ETC | REPEAT |
| -28C CABLE COLOR CODING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                             |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| PIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | COLOR                                                                       |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BROWN                                                                       |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RED                                                                         |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ORANGE                                                                      |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | YELLOW                                                                      |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | GREEN                                                                       |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | VIOLET                                                                      |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | GRAY                                                                        |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | WHITE                                                                       |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BLACK                                                                       |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BLUE                                                                        |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |
| ETC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | REPEAT                                                                      |                                                                                                            |                                                                       |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |                         |  |     |       |   |       |   |     |   |        |   |        |   |       |   |        |   |      |   |       |   |       |    |      |     |        |

\*Teflon™ is a trademark of The Chemours Company FC, LLC used under license by Samtec.

**Notes:**  
Teflon™ Fluoropolymer cable is intended for crimp only. Contact Samtec for solderable cable applications.

For wiring option information refer to drawings on web.

View complete specifications at: [samtec.com?SFSD](http://samtec.com?SFSD) & [samtec.com?SFSDT](http://samtec.com?SFSDT)

| ISDF         | POSITIONS PER ROW                                                           | ROW OPTION                | OPTION                                                                | SERIES                                                                                                                                  | WIRE GAUGE                     | 01 | PLATING                                                                                  |
|--------------|-----------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----|------------------------------------------------------------------------------------------|
|              | <b>-03, -04, -05, -07, -10, -15, -20, -25, -40, -50</b><br>(Standard sizes) | <b>-D</b><br>= Double Row | <b>-M</b><br>= Metal Retention Latch<br><br><b>-S</b><br>= Screw Down | <b>CC03R</b><br>= Contact, Full Reel (35,000 Parts per Reel)<br><br><b>CC03M</b><br>= Contact, Mini Reel (1,000 - 5,000 Parts per Reel) | <b>-2830</b><br>= 28 to 30 AWG |    | <b>-GF</b><br>= Gold flash contact<br><br><b>-G</b><br>= 10 μm (0.25 μm) Gold on contact |
| <div> </div> |                                                                             |                           |                                                                       |                                                                                                                                         |                                |    |                                                                                          |

**TOOLING**

Hand Tool: CAT-HT-203-2830-12

Mini Applicator: CAT-MC-203-2830-XX-01

Clamp for mounting hand tool: CAT-HT-MNT-01

Extraction Tool: CAT-EX-169-01

**Note:**  
Some lengths, styles and options are non-standard, non-returnable.

View complete specifications at: [samtec.com?ISDF](http://samtec.com?ISDF), [samtec.com?CC03R](http://samtec.com?CC03R) & [samtec.com?CC03M](http://samtec.com?CC03M)

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