

RUGGED TIGER EYE™ SYSTEMS

(1.27 mm) .050" PITCH

MAX
3.2
A m p s

8
G b p s

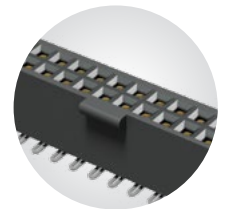
FEATURES & BENEFITS

- Screw down, locking clip, friction latching and weld tab ruggedizing options
- Shrouded, polarized and keyed
- Surface mount or through-hole tails
- High-density, four row design (FOLC/MOLC Series)
- Discrete wire assemblies available in single or double row, 28 and 30 AWG PVC or *Teflon™ Fluoropolymer (See pages 238-239). Contact asp@samtec.com for custom solutions.
- Cable components (ISDF/CC03) and tooling available: samtec.com/tooling

TIGER™
EYE
CONTACT



IDC cable assemblies with rugged strain relief (FFSD/FFMD, FFTP/FMTP)



Locking for increased unmating force (SFML/TFML)

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

KEY SPECIFICATIONS

| SERIES | STACK HEIGHTS | INSULATOR MATERIAL | CONTACT MATERIAL | PLATING | OPERATING TEMP RANGE | CURRENT RATING | VOLTAGE RATING | MAX. CYCLES | LEAD-FREE SOLDERABLE |
|---------|---------------|--------------------|-------------------------------------|----------------------------------|----------------------|--------------------------------|----------------|--|----------------------|
| SFM/TFM | 6 to 12 mm | Black LCP | BeCu (SFM) Phosphor Bronze (TFM) | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | 3.2 A per pin (2 pins powered) | 250 VAC | 10,000 with 30 μ" (0.76 μm) Au | Yes |
| SFC/TFC | 6 to 12 mm | Black LCP | Phosphor Bronze | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | 3.1 A per pin (2 pins powered) | 350 VAC | (Call Samtec for E.L.P.™ plating option) | Yes |

SERIES - **1** **NO. PINS PER ROW** - **LEAD STYLE** - **PLATING OPTION** - **ROW OPTION** - **OPTIONS**

TFM
= Standard

TFML
= Locking
(-01 & -02 lead style only)

03, 04, 06, 08
(TFM -01 & -02 only)

05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50
(Standard sizes)

Specify **LEAD STYLE** from chart

-L
= 15 μm
(0.38 μm)
Gold on post, Matte Tin on tail
(Call Samtec for E.L.P.™ plating option)

-S
= Single Row (TFM only)

-D
= Double Row

-DH*
= Double Horizontal
(TFM lead style -02 only)
(05 thru 50 positions only)
(-TR or -FR option only available)

Specify only -RA, -RE1 or -RE2

-RA
= Right-angle (Lead style -01 only)

-RE1
= Right-angle Elevated for (1.60 mm) .062" PCB (Requires TFM lead style -01, -D row and -WT)

-RE2
= Right-angle Elevated for (2.36 mm) .093" PCB (Requires TFM lead style -01, -D row and -WT)

Specify only -A, -LC, -DS or -WT
Not available with -RA, -RE1 and -RE2 unless otherwise noted.

-A
= Alignment Pin

-LC
= Locking Clip (Manual Placement required)

-DS
= Dual Screw Down for (1.60 mm) .062" PCB (05, 07, 10, 15, 20, 25, 30, 35, 40 positions only)
(TFM lead styles -01 and -02 only)
(Requires -D row option)
(Mates with SFM-DS option and SFSD/SFSDT -SS and -DS option only)
(Not available with -A, -LC, -WT, -K, -P, -XR)

-WT
= Weld Tab (TFM lead styles -01 and -02 only)
(Required callout for -RE1 & -RE2)
(Mates to SFSS/SFSD -SR and -DR option only)
(05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 positions only)

SMT lead styles only
Specify only -K or -P

-K
= Polyimide Film Pick & Place Pad

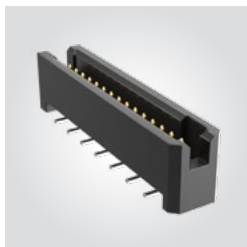
-P
= Plastic Pick & Place Pad (5 positions min.)
(Not available with 5 position with -WT)

Specify -TR or -FR last
(Not available with -DS)

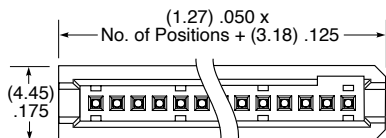
-TR
= Tape & Reel

-FR
= Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)

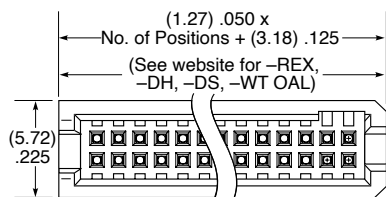
TFM
Board Mates:
SFM, SFMC
Cable Mates:
SFSD, SFSS



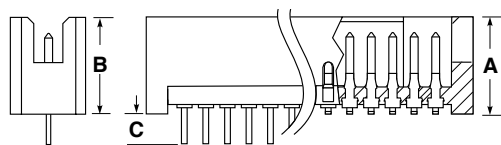
TFML
Board Mates:
SFML
Cable Mates:
SFSD, TFSD
(-T end option)



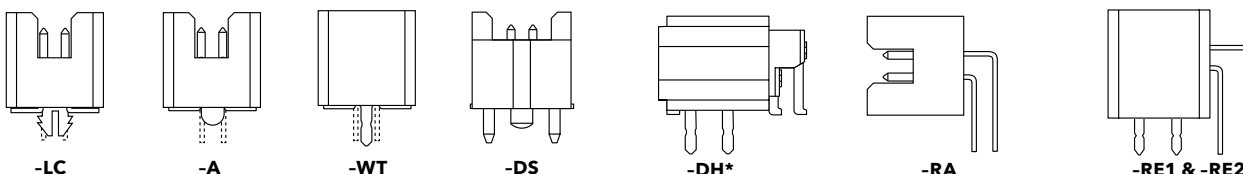
SINGLE ROW



DOUBLE ROW



THROUGH-HOLE SURFACE MOUNT



| MATED HEIGHTS* | | |
|------------------|-----|---------------|
| LEAD STYLE (SMT) | | MATED HEIGHT* |
| TFM | SFM | |
| -02 | | (6.35) .250 |
| -12 | -02 | (8.13) .320 |
| -22 | | (9.91) .390 |
| -32 | | (11.81) .465 |
| LEAD STYLE (T/H) | | MATED HEIGHT* |
| TFM | SFM | |
| -01 | | (5.97) .235 |
| -03 | | (5.97) .235 |
| -11 | | (7.75) .305 |
| -13 | -01 | (7.75) .305 |
| -21 | | (9.53) .375 |
| -23 | | (9.53) .375 |
| -31 | | (11.43) .450 |

*Processing conditions will affect mated height.

| LEAD STYLE (SMT) | A |
|------------------|--------------|
| -02 | (5.72) .225 |
| -12* | (7.49) .295 |
| -22* | (9.27) .365 |
| -32* | (11.18) .440 |

* N/A with 07, -DH or -S row option

| LEAD STYLE (T/H) | B | C |
|------------------|--------------|-------------|
| -01 | (5.59) .220 | (1.97) .078 |
| -03* | (5.59) .220 | (2.77) .109 |
| -11* | (7.37) .290 | (1.97) .078 |
| -13* | (7.37) .290 | (2.77) .109 |
| -21* | (9.14) .360 | (1.97) .078 |
| -23* | (9.14) .360 | (2.77) .109 |
| -31* | (11.05) .435 | (1.97) .078 |

* Not Available with 07 or -S row option

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

View complete specifications at: samtec.com?TFM & samtec.com?TFML

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Samtec:

[TFM-105-02-S-D](#) [TFM-150-01-S-D-RA](#) [TFM-105-02-S-D-A-P-TR](#) [TFM-120-01-S-D-RA](#) [TFM-145-01-S-D-RA](#) [TFM-105-02-S-D-A](#) [TFM-110-02-S-D-LC](#) [TFM-105-01-L-D-RA](#) [TFM-125-02-S-D-LC](#) [TFM-150-12-S-D-LC](#) [TFM-115-32-S-D-A](#) [TFM-115-01-S-D](#) [TFM-115-02-S-D-A-P-TR](#) [TFM-115-01-S-D-WT](#) [TFM-130-02-S-D-A](#) [TFM-115-32-S-D-LC](#) [TFM-120-12-S-D-A](#) [TFM-125-22-S-D-A](#) [TFM-130-32-S-D-A](#) [TFM-115-02-S-D-WT](#) [TFM-110-02-S-D-A-K-TR](#) [TFM-115-02-S-D-A](#) [TFM-130-22-S-D-A](#) [TFM-120-32-S-D-A-P-TR](#) [TFM-125-02-S-D-A-P-TR](#) [TFM-110-02-S-D-K-TR](#) [TFM-110-02-S-D-A](#) [TFM-115-22-S-D-A](#) [TFM-135-32-S-D-A](#) [TFM-110-01-S-D-RA](#) [TFM-125-01-S-D-RA](#) [TFM-120-12-S-D-A-P-TR](#) [TFM-105-12-L-D-A](#) [TFM-110-22-S-D-A-P-TR](#) [TFM-135-01-S-D-RA](#) [TFM-105-02-L-D-A](#) [TFM-105-01-S-D-RA](#) [TFM-140-01-S-D-RA](#) [TFM-115-02-S-D](#) [TFM-110-02-S-D-WT](#) [TFM-125-01-L-D-RA](#) [TFM-105-01-S-D-LC](#) [TFM-115-02-L-D-WT-P-TR](#) [TFM-105-02-S-D-LC-P](#) [TFM-110-02-S-D-WT-TR](#) [TFM-105-02-S-D-A-P](#) [TFM-140-32-L-D-LC](#) [TFM-125-12-S-D-LC](#) [TFM-104-01-L-D-WT](#) [TFM-104-02-L-DH](#) [TFM-105-02-L-D-A-K](#) [TFM-105-02-S-D-P-TR](#) [TFM-103-01-L-D-WT](#) [TFM-115-12-L-D-A](#) [TFM-115-02-S-D-LC](#) [TFM-107-01-L-D](#) [TFM-110-12-S-D-A](#) [TFM-115-02-L-D-WT-K](#) [TFM-125-01-L-D-DS](#) [TFM-115-22-S-D-A-P-TR](#) [TFM-140-11-S-D](#) [TFM-125-02-S-D-A-K-TR](#) [TFM-125-02-S-D-WT](#) [TFM-120-02-L-D-A](#) [TFM-104-02-L-D](#) [TFM-103-02-L-DH](#) [TFM-105-01-S-D](#) [TFM-105-02-L-D-K-TR](#) [TFM-105-02-L-D-P-TR](#) [TFM-107-02-S-S-WT](#) [TFM-110-02-S-D-SN](#) [TFM-140-11-S-D-LC](#) [TFM-120-03-L-D](#) [TFM-120-32-S-D-A](#) [TFM-105-02-L-D-LC](#) [TFM-110-02-S-D-WT-P-TR](#) [TFM-120-02-L-D-LC](#) [TFM-125-21-S-D](#) [TFM-150-22-S-D-A](#) [TFM-115-02-S-D-WT-K-TR](#) [TFM-130-01-S-D-RE2-WT](#) [TFM-104-01-L-D-RE2-WT](#) [TFM-105-02-L-D-WT](#) [TFM-105-32-L-D-A](#) [TFM-110-02-L-D](#) [TFM-105-02-S-D-DS](#) [TFM-105-02-S-D-K-TR](#) [TFM-110-11-L-D](#) [TFM-105-01-S-D-RE2-WT](#) [TFM-105-32-F-D-A-K-TR](#) [TFM-115-01-L-D-WT](#) [TFM-115-22-L-D-A](#) [TFM-115-01-L-D-DS](#) [TFM-120-02-S-D-LC](#) [TFM-110-02-L-D-WT-K](#) [TFM-110-11-S-D](#) [TFM-125-02-L-DH](#) [TFM-140-32-S-D-LC](#) [TFM-110-02-S-D-A-P-TR](#) [TFM-120-03-L-D-WT](#)