

# 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® wire; contact [asp@samtec.com](mailto:asp@samtec.com) for custom solutions
- Cable components (ISDF/CC03) and tooling available

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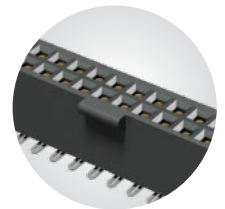
## KEY SPECIFICATIONS (TFM/SFM)

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

**TIGER™  
EYE**  
CONTACT



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



Locking for increased unmating force (SFML/TFML)

**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  
Elevated for  
(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)

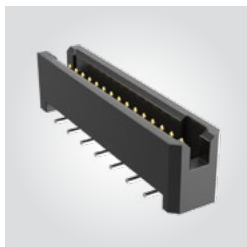
Specify -TR or -FR last  
(Not available with -DS)

**-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

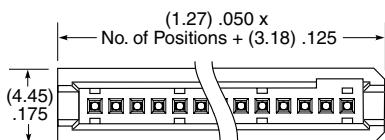


**TFML**

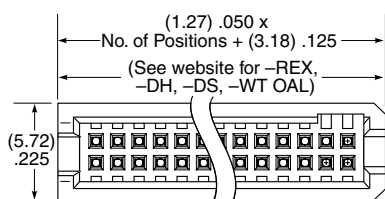
**Board Mates:**  
SFML

| 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.



**SINGLE ROW**



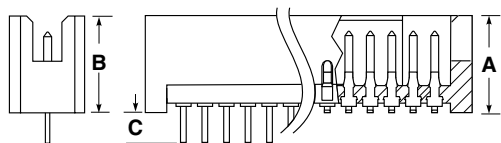
**DOUBLE ROW**

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

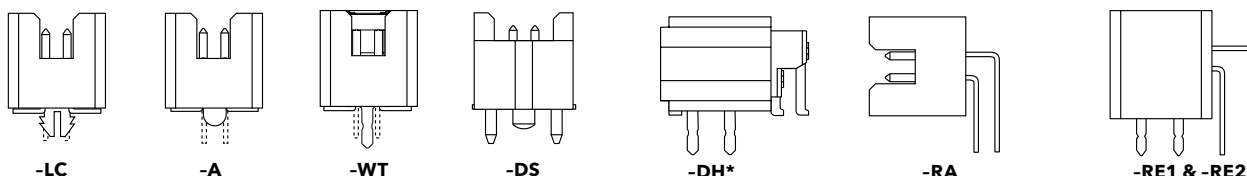
\* N/A with 07, -DH or -S row option

| 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



**THROUGH-HOLE SURFACE MOUNT**



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

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

# Mouser Electronics

Authorized Distributor

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[TFM-110-01-L-D-RE1-WT](#)