# TIGER™ EYE SYSTEM

# RUGGED TIGER EYE™ SYSTEMS
## (1.27 mm) .050" PITCH

MAX **3.2** Amps | **8** Gbps
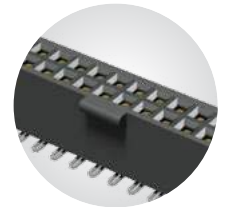
# TIGER™ EYE CONTACT

## 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

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 |

# TIGER™ EYE SYSTEM

MAX **3.2** Amps  **8** Gbps

## (1.27 mm) .050" • SMT/THROUGH-HOLE HEADER

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

**SERIES**

**TFM** = Standard

**TFML** = Locking (–01 & –02 lead style only)

**NO. PINS PER ROW**

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

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

**LEAD STYLE**

Specify LEAD STYLE from chart

**PLATING OPTION**

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

**ROW 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 available)

**OPTIONS**

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)

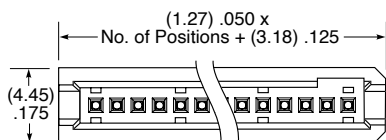Specify –TR or -FR last (Not available with –DS)

**–TR** = Tape & Reel

**–FR** = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)
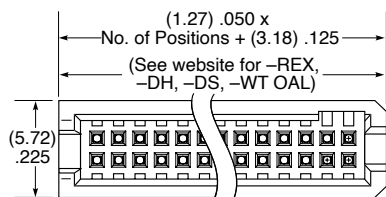
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**TFM**
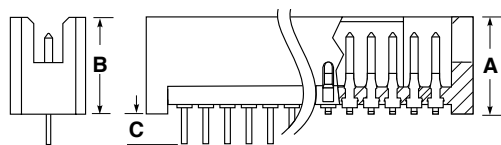Board Mates: SFM, SFMC
Cable Mates: SFSD, SFSS

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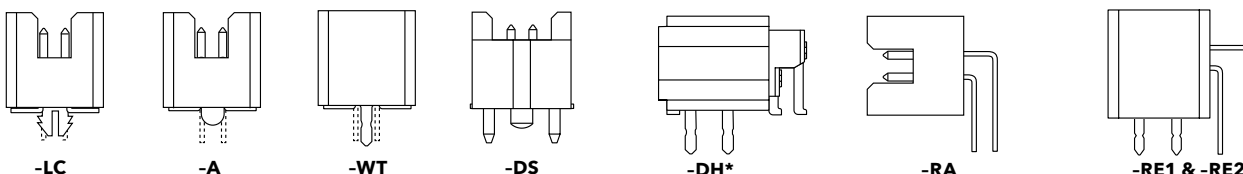Board Mates: SFML
Cable Mates: SFSD, TFSD (-T end option)

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### MATED HEIGHTS*

| LEAD STYLE (SMT) | | MATED HEIGHT* |
|---|---|---|
| TFM | SFM | |
| -02 | -02 | (6.35) .250 |
| -12 | | (8.13) .320 |
| -22 | | (9.91) .390 |
| -32 | | (11.81) .465 |

| LEAD STYLE (T/H) | | MATED HEIGHT* |
|---|---|---|
| TFM | SFM | |
| -01 | -01 | (5.97) .235 |
| -03 | | (5.97) .235 |
| -11 | | (7.75) .305 |
| -13 | | (7.75) .305 |
| -21 | | (9.53) .375 |
| -23 | | (9.53) .375 |
| -31 | | (11.43) .450 |

*Processing conditions will affect mated height.

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(1.27) .050 x No. of Positions + (3.18) .125

(4.45) .175

**SINGLE ROW**

(1.27) .050 x No. of Positions + (3.18) .125
(See website for –REX, –DH, –DS, –WT OAL)

(5.72) .225

**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**

B   A   C

**–LC**   **–A**   **–WT**   **–DS**   **-DH***   **–RA**   **–RE1 & -RE2**

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

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