

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 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) 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 (Call Samtec for E.L.P.™ plating option)

**TIGER™
EYE**
CONTACT



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



Locking for increased unmating force (SFML/TFML)

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

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

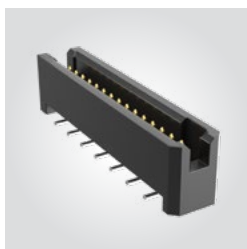
Specify -TR or -FR last (Not available with -DS)

-TR
= Tape & Reel

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

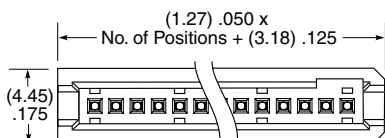
TFM

Board Mates: SFM, SFMC
Cable Mates: SFSD

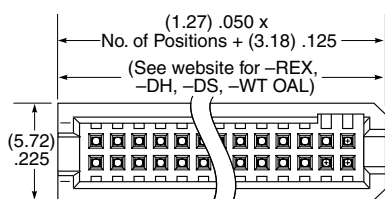


TFML

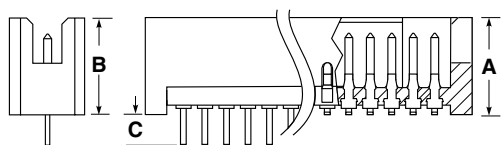
Board Mates: SFML



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](#)