



**THE DATASHEET OF
TFML-105-02-L-D-P**



RUGGED TIGER EYE™ SYSTEMS

(1.27 mm) .050" PITCH



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
- Severe Environment Testing qualified (SFM/TFM); aligns with MIL-DTL-55302. Visit samtec.com/set

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

**TIGER™
EYE**
CONTACT



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



Locking for increased unmating force (SFML/TFML)

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	3.7A per pin (2 pins powered)	275 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

(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)

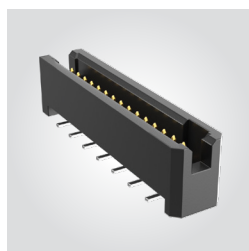
Specify -TR or -FR last
(Not available with -DS)

-TR
= Tape & Reel

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

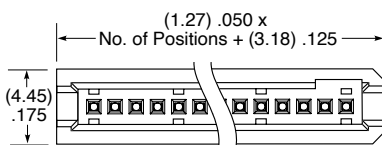
TFM

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

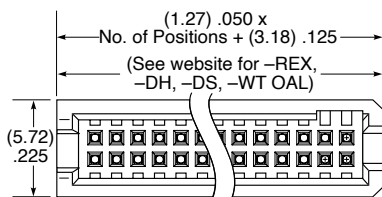


TFML

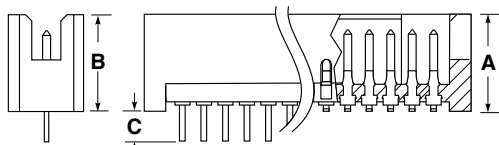
Board Mates:
SFML
Cable Mates:
SFSD, TFSD, TFSD (-T end option)



SINGLE ROW



DOUBLE ROW



THROUGH-HOLE SURFACE MOUNT

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

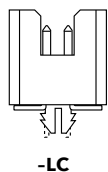
*Processing conditions will affect mated height.

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

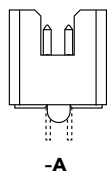
* N/A with 07, -DH or -S row option

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

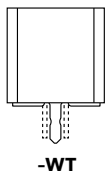
* Not Available with 07 or -S row option



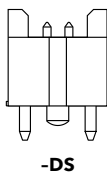
-LC



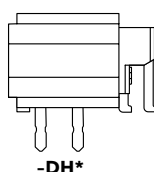
-A



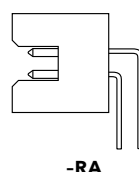
-WT



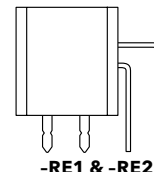
-DS



-DH*



-RA



-RE1 & -RE2

Notes:


Severe Environment Testing qualified (TFM); aligns with MIL-DTL-55302. Visit samtec.com/set

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

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

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View TFML-105-02-L-D-P on WIN SOURCE](#)

 [Samtec Inc. Information](#)

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