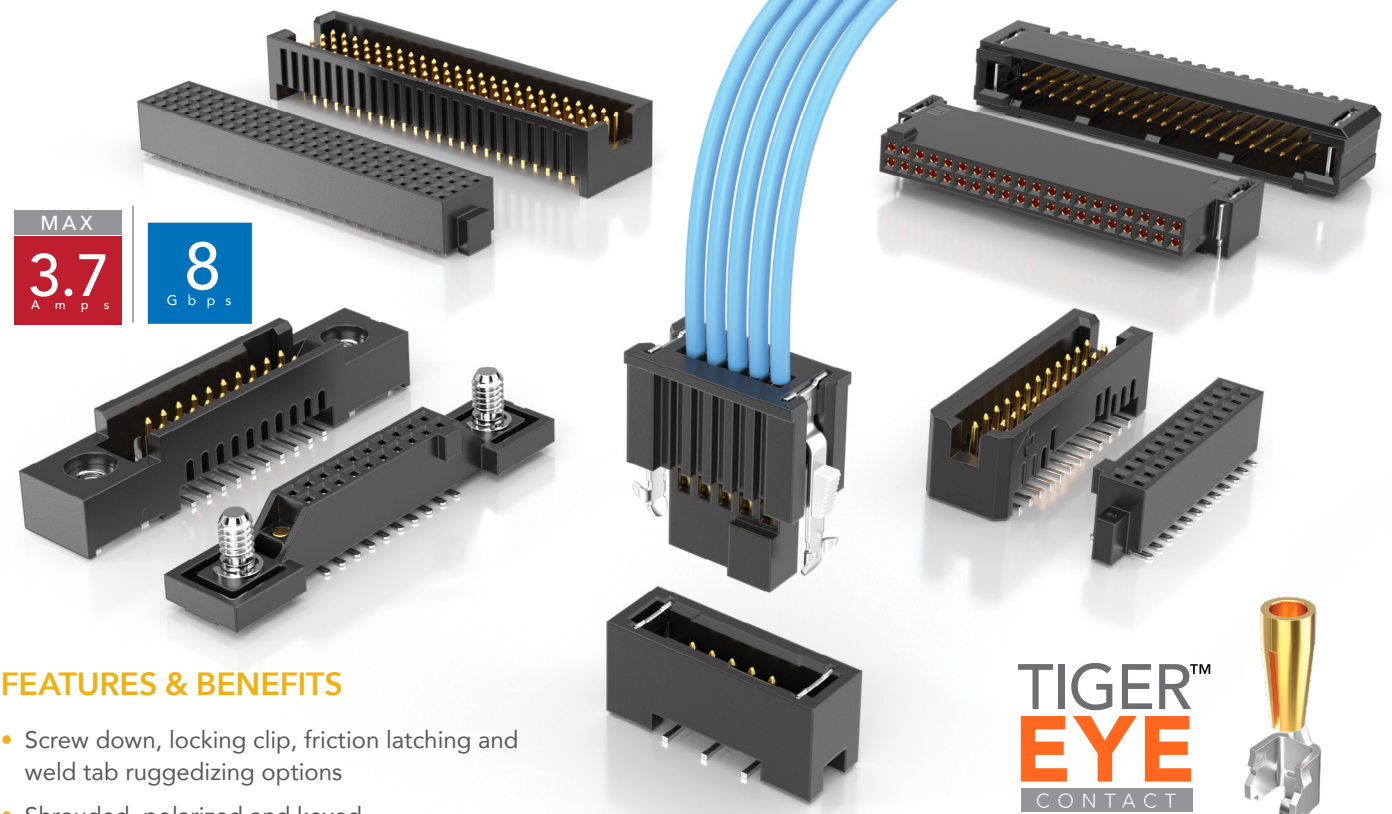
THE DATASHEET OF

TFM-120-02-S-D-A-P-TR

TIGER™ EYE SYSTEM

RUGGED TIGER EYE™ SYSTEMS

(1.27 mm) .050" PITCH

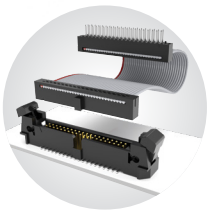


FEATURES & BENEFITS

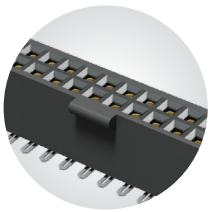
- Screw down, locking clip, friction latching and weld tab ruggedizing options
- Shrouded, polarized and keyed
- Surface mount or through-hole tails
- High-density, four row design (FOLC/MOLC Series)
- Discrete wire assemblies available in single or double row, 28 and 30 AWG PVC or *Teflon™ Fluoropolymer (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

Unless otherwise approved in writing by Samtec, all parts and components are designed and built according to Samtec's specifications which are subject to change without notice.

TIGER™ EYE SYSTEM

MAX 3.7 Amps | 8 Gbps

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

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 µ" (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)

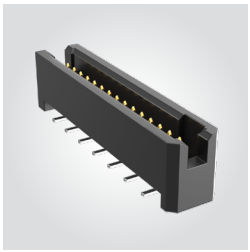
Specify –TR or -FR last (Not available with –DS)

–TR
= Tape & Reel

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

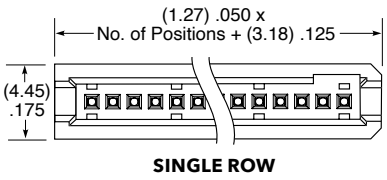
TFM
Board Mates:
SFM, SFMC
Cable Mates:
SFSD, SFSS

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

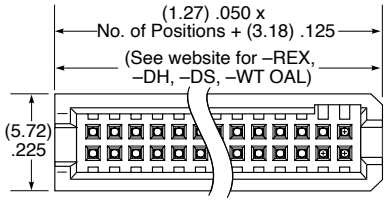


MATED HEIGHTS*		
LEAD STYLE (SMT)		MATED HEIGHT*
TFM	SFM	
-02	-02	(6.35) .250
-12		(8.13) .320
-22		(9.91) .390
-32		(11.81) .465
LEAD STYLE (T/H)		MATED HEIGHT*
TFM	SFM	
-01	-01	(5.97) .235
-03		(5.97) .235
-11		(7.75) .305
-13		(7.75) .305
-21		(9.53) .375
-23		(9.53) .375
-31		(11.43) .450

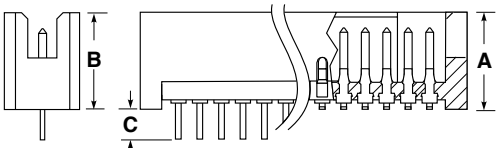
*Processing conditions will affect mated height.



SINGLE ROW



DOUBLE ROW



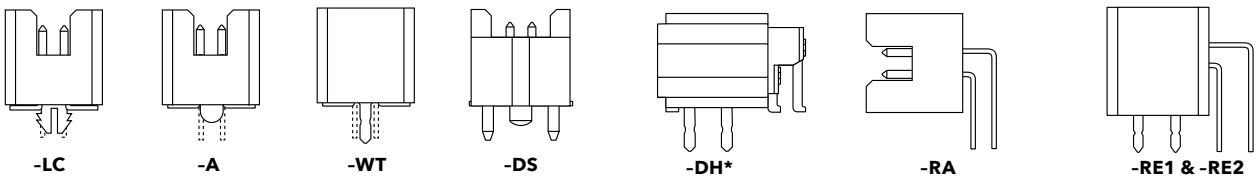
THROUGH-HOLE SURFACE MOUNT

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**

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Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View TFM-120-02-S-D-A-P-TR on WIN SOURCE
- Samtec Inc. Information

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- Shortage Management
- Alternative Solution
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