

(1.27 mm) .050"

SMT & THROUGH-HOLE HEADER

SPECIFICATIONS

For complete specifications and recommended PCB layouts see www.samtec.com?TFM or www.samtec.com?TFML

Insulator Material:
Black Liquid Crystal Polymer
Terminal Material:
Phosphor Bronze
Plating:
Au or Sn over 50 μ " (1.27 μ m) Ni

Current Rating (TFM/SFM):
3.2 A per pin
(2 pins powered)
Voltage Rating:
250 VAC mated with SFM
Operating Temp Range:
-55 °C to +125 °C
RoHS Compliant:
Yes

PROCESSING

Lead-Free Solderable:
Yes

SMT Lead Coplanarity:
(0.10 mm) .004" max (05-25)
(0.15 mm) .006" max (30-50)*
*(.004" stencil solution may be available; contact IPG@samtec.com)

RECOGNITIONS

For complete scope of recognitions see www.samtec.com/quality



FILE NO. E111594

MATED HEIGHTS

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

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

TFM Board Mates:
SFM, SFMC

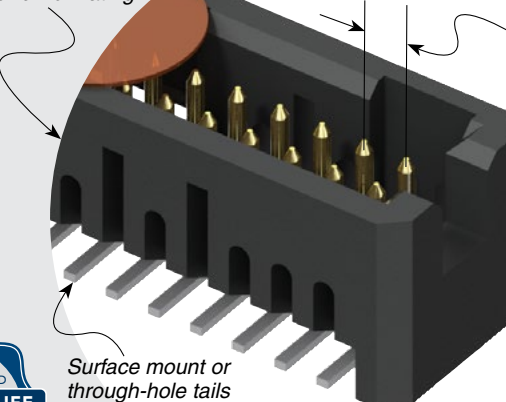
TFM Cable Mates:
SFSD

TFML Board Mates:
SFML

TFM-DH Board Mates:
SFM (-DH), SFMC

TFM-DH Cable Mates:
SFSDX (-S, -D, -SR, -DR)

Shrouded body for blind mating



(1.27 mm x 1.27 mm)
.050" x .050"
micro pitch

Surface mount or through-hole tails

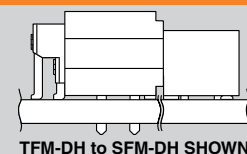


HIGH-SPEED CHANNEL PERFORMANCE

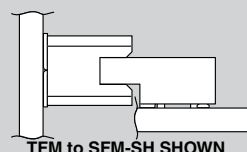
Rating based on Samtec reference channel. For full SI performance data visit Samtec.com or contact SIG@samtec.com

8
Gbps

APPLICATIONS



TFM-DH to SFM-DH SHOWN



TFM to SFM-SH SHOWN

TYPE STRIP

1

NO. PINS PER ROW

LEAD STYLE

PLATING OPTION

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

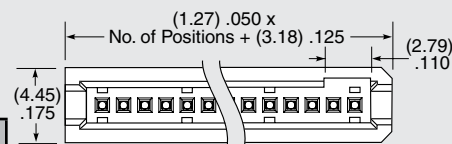
-L
= 15 μ " (0.38 μ m)
Gold on post,
Matte Tin on tail
(Call Samtec for
E.L.P.™ plating option)

OTHER SOLUTIONS

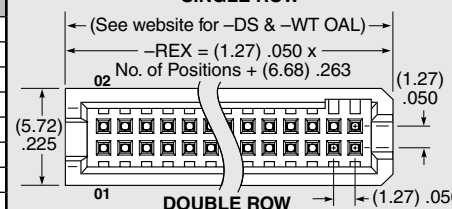
- Lower cost plating options. See TFC Series.

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

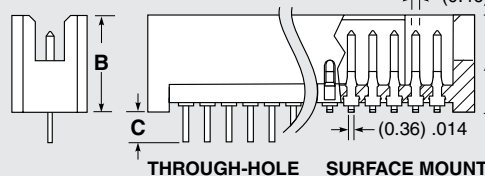
* Not Available with 07 or -S row option



SINGLE ROW



DOUBLE ROW

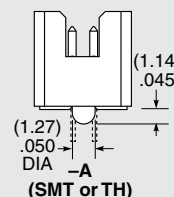


THROUGH-HOLE

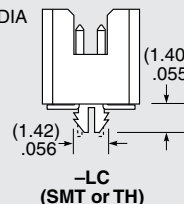
SURFACE MOUNT

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

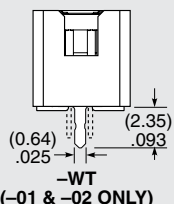
* N/A with 07, -DH or -S row option



-A (SMT or TH)



-LC (SMT or TH)



-WT (-01 & -02 ONLY)

Due to technical progress, all designs, specifications and components are subject to change without notice.

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All parts within this catalog are built to Samtec's specifications.

Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.



TFM, TFML SERIES



RUGGEDIZED
BY SAMTEC

- Passes 10 Year MFG
- Locking option
- Locking clip option
- Weld tab option
- Screw down option

ROW OPTION

-S

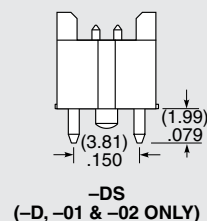
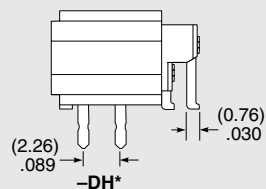
= Single Row
(TFM only)

-D

= Double Row

-DH*

= Double Horizontal
(TFM lead style -02 only)
(05 thru 50 positions only)
(-TR option only available)



OPTION

Specify only -RA, -RE1 or -RE2

-RA

= Right-angle
(Lead style -01 only)

-RE1

= Right-angle Elevated for (1.58 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)

Note: The recommended -REX PCB board layout is different from the -RA. Contact IPG@samtec.com before designing your board for specifications.



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, -TR)

-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)

*** Note:**
Weld tab is standard on -DH option.
No need to specify -WT.

SMT lead styles only
Specify only -K or -P

-K

= Polyimide Film Pick & Place Pad

-P

= Plastic Pick & Place Pad
(5 positions minimum)
(Not available with
5 position with -WT)

Specify -TR last

-TR

= Tape & Reel
(Not available with -DS)

ALSO AVAILABLE (MOQ Required)

- Solder nail option
- Other sizes
- Other platings

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Mouser Electronics

Authorized Distributor

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