

(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

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

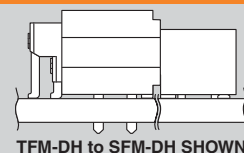
(1.27 mm x 1.27 mm)
.050" x .050"
micro pitch

10 YEAR MFG
WITH 30 μ " GOLD
EXTENDED LIFE
PRODUCT

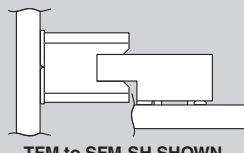
HIGH MATING
CYCLES

Surface mount or
through-hole tails

APPLICATIONS



TFM-DH to SFM-DH SHOWN



TFM to SFM-SH SHOWN

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.

TYPE STRIP

1

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

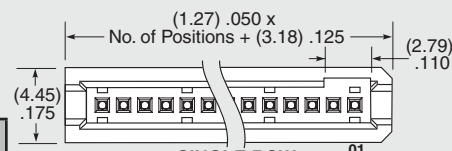
-L
= 15 μ " (0.38 μ m)
Gold on post,
Matte Tin on tail
(Call Samtec for
E.L.P.™ plating option)

OTHER SOLUTIONS

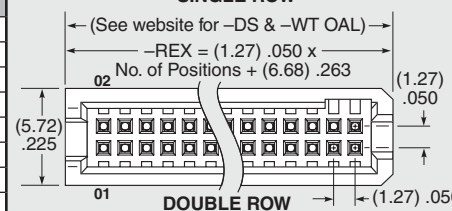
• Lower cost plating options.
See TFC Series.

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

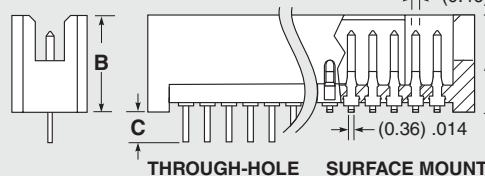
* Not Available with 07 or -S row option



SINGLE ROW



DOUBLE ROW

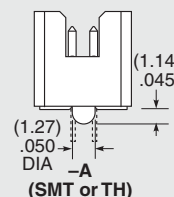


THROUGH-HOLE

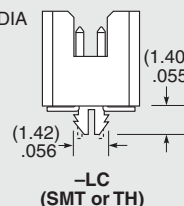
SURFACE MOUNT

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

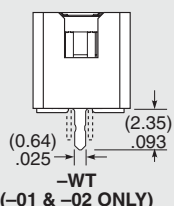
* N/A with 07, -DH or -S row option



-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.

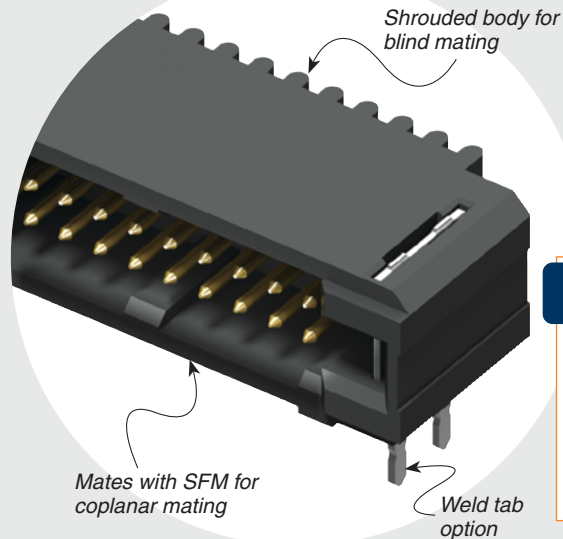
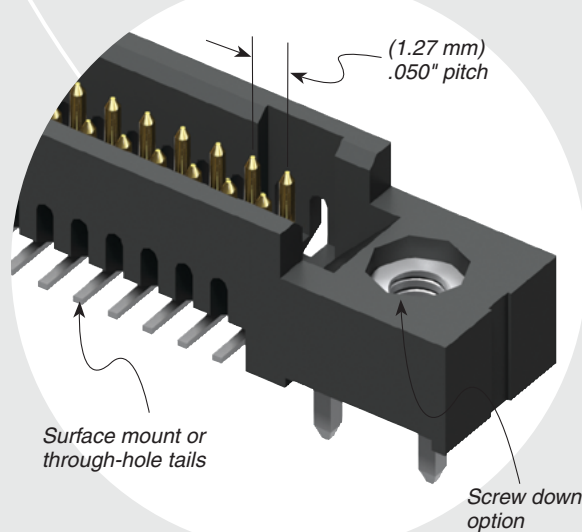
WWW.SAMTEC.COM

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

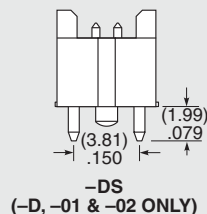
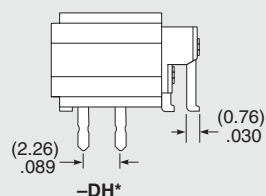
= Single Row
(TFM only)

-D

= Double Row

-DH*

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



Specify only -RA, -RE1 or -RE2

-RA

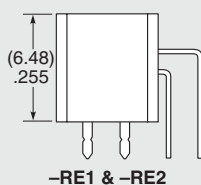
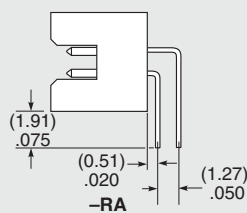
= Right-angle
(Lead style -01 only)

-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)



OPTION

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)

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

* Notes:

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

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[TFM-105-22-F-D-A-K-TR](#)