



(1,27 mm) .050"

SFM, SFML SERIES

SFM-110-02-L-D-A

SFML-125-T2-L-D-LC



SFM-125-02-L-SH

SFML-115-T2-L-D-LC



SMT & THROUGH-HOLE TIGER EYE™ SOCKET

SPECIFICATIONS

For complete specifications and recommended PCB layouts see www.samtec.com?SFM or www.samtec.com?SFML

Insulator Material:

Black Liquid Crystal Polymer
Contact Material:
 Tiger Eye™ = BeCu
 Tiger Eye™ LITE = Phosphor Bronze
Plating:

Au or Sn over 50µ" (1,27 µm) Ni

Voltage Rating:

350 VAC mated with TFM

Operating Temp Range:

-55°C to +125°C

Contact Resistance:

15 mΩ max

Insertion Depth:

(3,05 mm) .120" to (4,06 mm) .160"

Wiping Distance:

(0,38 mm) .015"

Normal Force:

Standard= 132 g (1,29 N) avg.; LIF= 90 g (0,88 N) avg.

Insertion Force (SFM):

(Single contact only)
 Standard= 2.5 oz (0,69 N) avg.; LITE= 2.0 oz (0,56 N) avg.;

LIF= 1.4 oz (0,39 N) avg.

Withdrawal Force (SFM):

(Single contact only)
 Standard= 2.0 oz (0,56 N) avg.;

LITE= 1.5 oz (0,42 N) avg.;

LIF= 1.0 oz (0,28 N) avg.

Insertion Force (SFML):

(Single contact only)
 2.5 oz (0,69 N) avg.

Unmating Force (SFML):

Withdrawal force per contact (Single contact only)= 1.5 oz (0,42 N) average; Incremental unmating force with friction locks: 10-20 pins/row (One Lock) increases withdrawal force by 4 x average; 25 & 30 pins/row (Two Locks) increases withdrawal force by 3 x average; 35-50 pins/row (Three Locks) increases withdrawal force by 1.7 x average

Max Cycles:

10,000 with 30µ" (0,76 µm) Au (Call Samtec for E.L.P. plating option)

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)

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

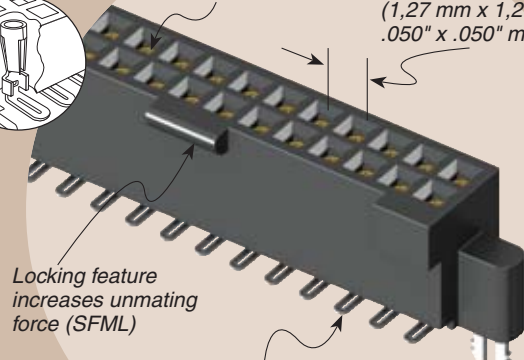
SFM Mates with:
 TFM, TFSD, TFSS, FTS (LIF), FW (LIF), FTSH (LIF)

SFML Mates with:
 TFML, TFSD (-XL option), TFSDT (-XL option)



Low insertion force Tiger Eye™ contacts available

(1,27 mm x 1,27 mm) .050" x .050" micro pitch



Locking feature increases un mating force (SFML)

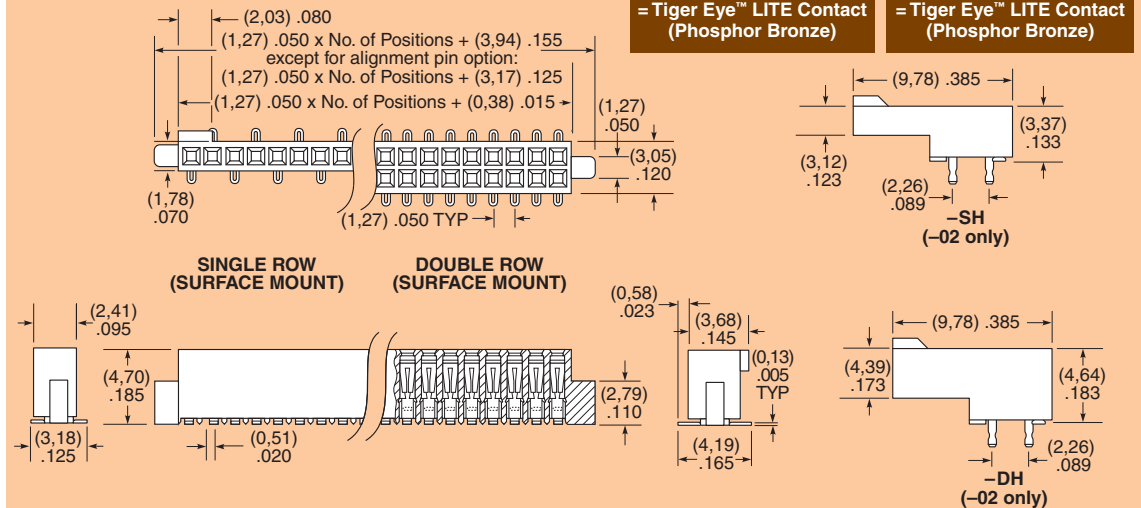
Choice of SMT or through-hole tails

• Passes 10 Year MFG
 • Locking option
 • Locking clip option
 • Screw Down option

CURRENT RATING	
AMBIENT TEMP	TFM/SFM
20°C	5A
40°C	4.5A
60°C	3.9A
95°C	2.6A
6 POSITIONS (2x3) POWERED	

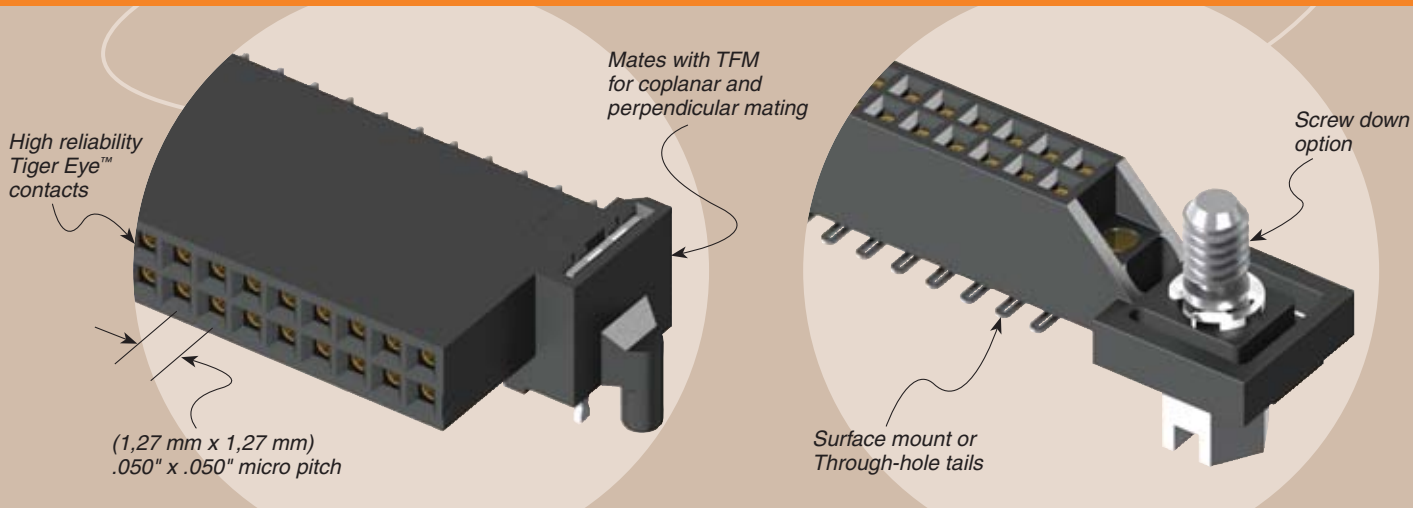
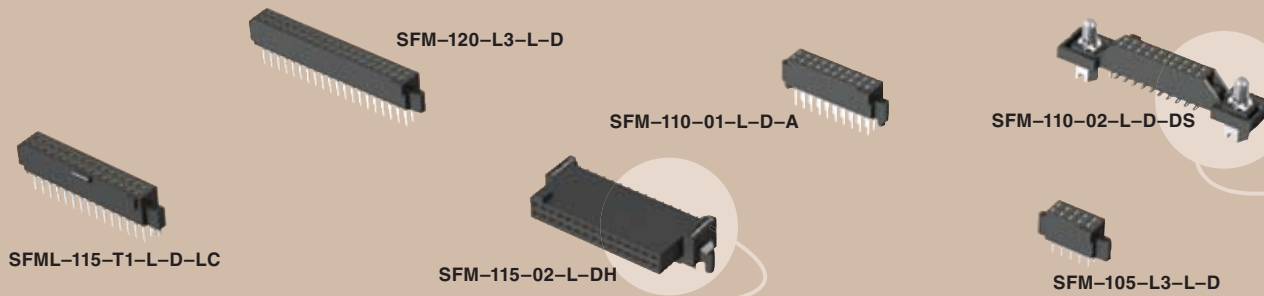
EXTENDED LIFE PRODUCT
 10 year Mixed Flowing Gas with 30µ" Gold
 1,000 cycles when mated with TFM

TYPE STRIP	NO. PINS PER ROW	LEAD STYLE								
1	05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Call Samtec or see SFMC Series for more sizes)	<table border="1"> <thead> <tr> <th>(Surface Mount)</th> <th>(Through-hole)</th> </tr> </thead> <tbody> <tr> <td>-02 = Tiger Eye™ Contact</td> <td>-01, -03 = Tiger Eye™ Contact</td> </tr> <tr> <td>-L2 = Low Insertion Force Tiger Eye™ Contact</td> <td>-L1, -L3 = Low Insertion Force Tiger Eye™ Contact</td> </tr> <tr> <td>-T2 = Tiger Eye™ LITE Contact (Phosphor Bronze)</td> <td>-T1 = Tiger Eye™ LITE Contact (Phosphor Bronze)</td> </tr> </tbody> </table>	(Surface Mount)	(Through-hole)	-02 = Tiger Eye™ Contact	-01, -03 = Tiger Eye™ Contact	-L2 = Low Insertion Force Tiger Eye™ Contact	-L1, -L3 = Low Insertion Force Tiger Eye™ Contact	-T2 = Tiger Eye™ LITE Contact (Phosphor Bronze)	-T1 = Tiger Eye™ LITE Contact (Phosphor Bronze)
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Due to technical progress, all designs, specifications and components are subject to change without notice.

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(1,27 mm x 1,27 mm)
.050" x .050" micro pitch

Surface mount or
Through-hole tails

COST-SAVING APPLICATIONS

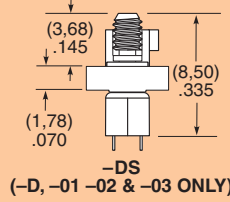
See SFC Series for lower cost plating options.

PLATING OPTION

-L
= 10µ" (0,25 µm) Gold on contact, Matte Tin on tail
(Call Samtec for E.L.P. plating option)

Note: Other Gold plating options available. Contact Samtec.

LEAD STYLE	A	B
-01, -L1, -T1	(3,05) .120	(0,51) .020
-03, -L3	(1,91) .075	(0,41) .016



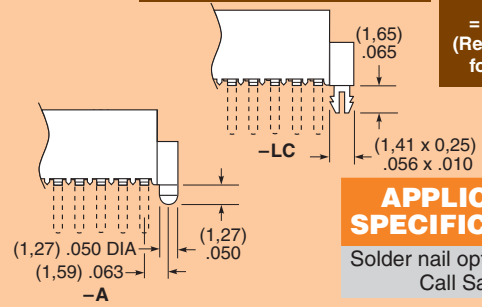
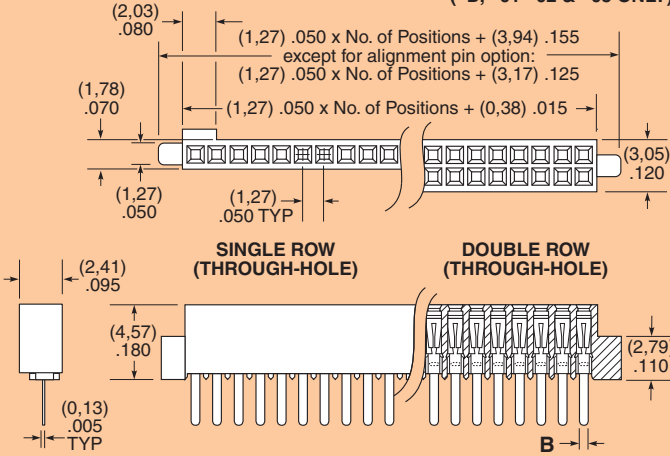
ROW OPTION

- S**
= Single Row (SFM only)
- D**
= Double Row
- SH**
= Single Horizontal (05 thru 30 positions only) (SFM only) (Lead style -02 only)
- DH**
= Double Horizontal (05 thru 30 positions only) (SFM only) (Lead style -02 only)

OPTION

- Specify only **-A, -LC** or **-DS** (Not available with **-DH, -SH**)
- A**
= Alignment Pin (Available with all Lead Styles)
- LC**
= Locking Clip (Available with all lead styles) (Manual placement required)
- DS**
= Dual Screw Down for (1,60mm) .062" PCB (05 thru 40 positions only) (Lead styles -01, -02 & -03 only) (Requires **-D** row option) (Not available with SFML) (Mates with TFM-DS option)

- Specify only **-K** or **-P** (Lead styles -02, -L2, -T2 only)
- K**
= Polyimide film Pick & Place Pad (Not available with **-DH, -SH**)
- P**
= Plastic Pick & Place Pad (Not available with **-DH, -SH**)
- Specify **-TR** last (Lead styles -02, -L2, -T2 only)
- TR**
= Tape & Reel (Required callout for **-DH, -SH**)



APPLICATION SPECIFIC OPTION

Solder nail option available. Call Samtec.

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