

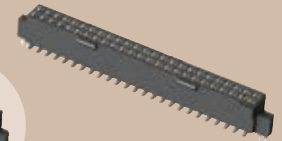
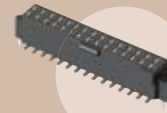


(1,27 mm) .050"

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

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 unmatting 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)

SFM Mates with:
TFM, TFSD, TFSS, FTS, FW, FTSH

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 unmatting
force (SFML)

Choice of SMT or
through-hole tails

CURRENT RATING (PER CONTACT)	
AMBIENT TEMP	TFM/SFM
20°C	5A
40°C	4.5A
60°C	3.9A
95°C	2.6A

6 POSITIONS (2x3) POWERED

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

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	04 (SFM only)	(Surface Mount)	(Through-hole)
SFM = Standard	05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Call Samtec or see SFMC Series for more sizes)	-02 = Tiger Eye™ Contact	-01, -03 = Tiger Eye™ Contact
SFML = Locking		-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)

SINGLE ROW (SURFACE MOUNT)
 (2,03) .080
 (1,27) .050 x No. of Positions + (3,94) .155 except for alignment pin option:
 (1,27) .050 x No. of Positions + (3,17) .125
 (1,27) .050 x No. of Positions + (0,38) .015
 (1,27) .050 TYP

DOUBLE ROW (SURFACE MOUNT)
 (0,58) .023
 (3,68) .145
 (0,13) .005 TYP
 (2,79) .110
 (4,19) .165

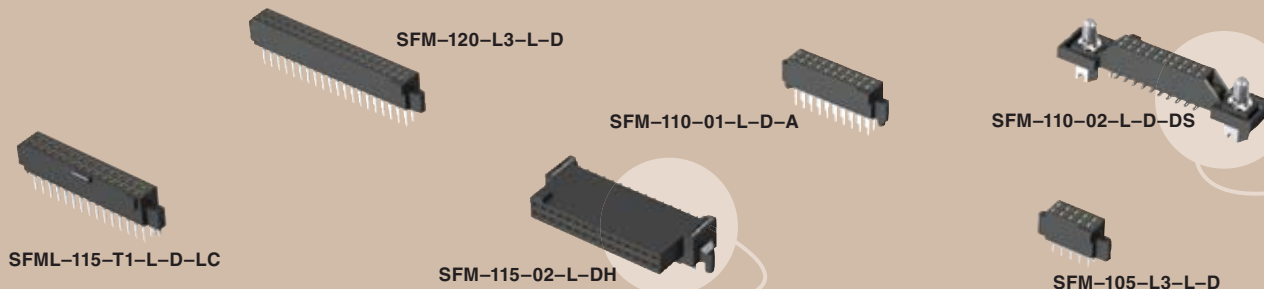
-SH (-02 only)
 (9,78) .385
 (3,12) .123
 (2,26) .089
 (3,37) .133

-DH (-02 only)
 (9,78) .385
 (4,39) .173
 (4,64) .183
 (2,26) .089

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

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

WWW.SAMTEC.COM



High reliability
Tiger Eye™
contacts

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

Mates with TFM
for coplanar and
perpendicular mating



Screw down
option

Surface mount or
Through-hole tails

COST-SAVING APPLICATIONS

See SFC Series for lower cost plating options.

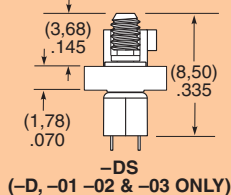
PLATING OPTION

-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)

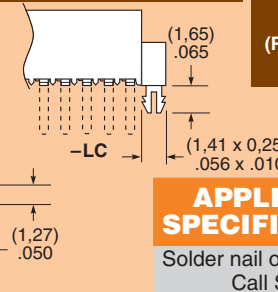
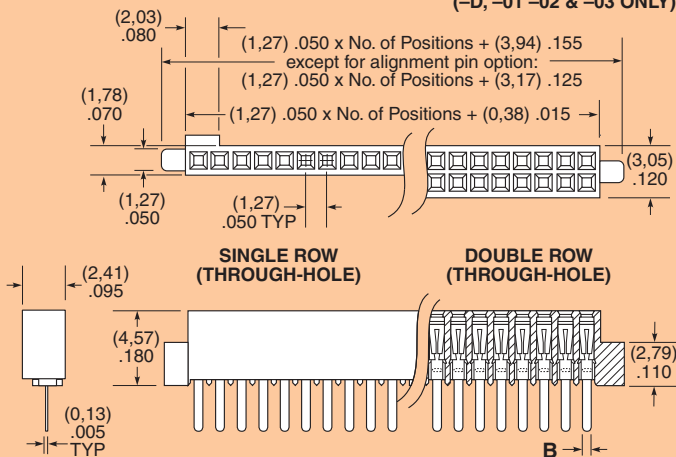
-P

= 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.

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

WWW.SAMTEC.COM

SAMTEC USA • Tel: 1-800-SAMTEC-9 or 812-944-6733 SAMTEC NORTHERN CALIFORNIA • Tel: 408-395-5900 SAMTEC SOUTHERN CALIFORNIA • Tel: 1-800-726-8329
 SAMTEC AMERICA LATINA COMERCIO EXTERIOR LTDA • Tel: (+55 31) 3786 3227 SAMTEC UNITED KINGDOM • Tel: 44 01236 739292 SAMTEC GERMANY • Tel: +49 (0) 89 / 89460-0
 SAMTEC FRANCE • Tel: 33 01 60 95 06 60 SAMTEC ITALY • Tel: 39 039 6890337 SAMTEC NORDIC/BALTIC • Tel: +46-84477280 SAMTEC BENELUX • Tel: 44 01236 739292
 SAMTEC ISRAEL • Tel: 972-3-7526600 SAMTEC INDIA • Tel: +91-80-3272 1612 SAMTEC ASIA PACIFIC • Tel: 65 6745-5955 SAMTEC JAPAN • Tel: 045-475-1385 SAMTEC CHINA • Tel: 86-21-6083 3766
 SAMTEC TAIWAN • Tel: 886-2-2735-6109 SAMTEC HONG KONG • Tel: 852-26904858 SAMTEC KOREA • Tel: 82-31-717-5685 SAMTEC ANZ • Tel: 613 9580 0683