



(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 unmating
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	



ELP
EXTENDED LIFE PRODUCT

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

TYPE
STRIP

1

NO. PINS
PER ROW

LEAD STYLE

SFM
= Standard

SFML
= Locking

05, 07, 10, 15, 20, 25,
30, 35, 40, 45, 50
(Call Samtec or see
SFM Series for more sizes)

(Surface Mount)

-02
= Tiger Eye™ Contact

-L2
= Low Insertion Force
Tiger Eye™ Contact

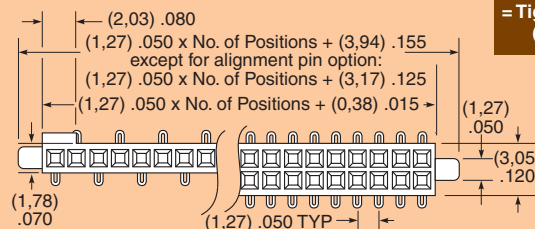
-T2
= Tiger Eye™ LITE Contact
(Phosphor Bronze)

(Through-hole)

-01, -03
= Tiger Eye™ Contact

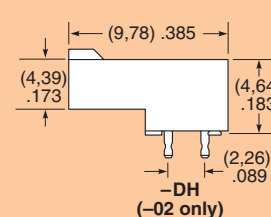
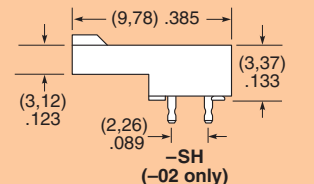
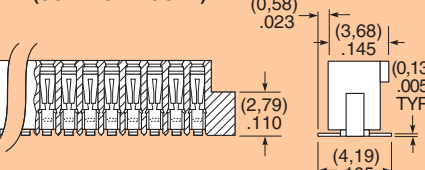
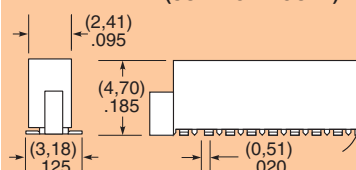
-L1, -L3
= Low Insertion Force
Tiger Eye™ Contact

-T1
= Tiger Eye™ LITE Contact
(Phosphor Bronze)



SINGLE ROW
(SURFACE MOUNT)

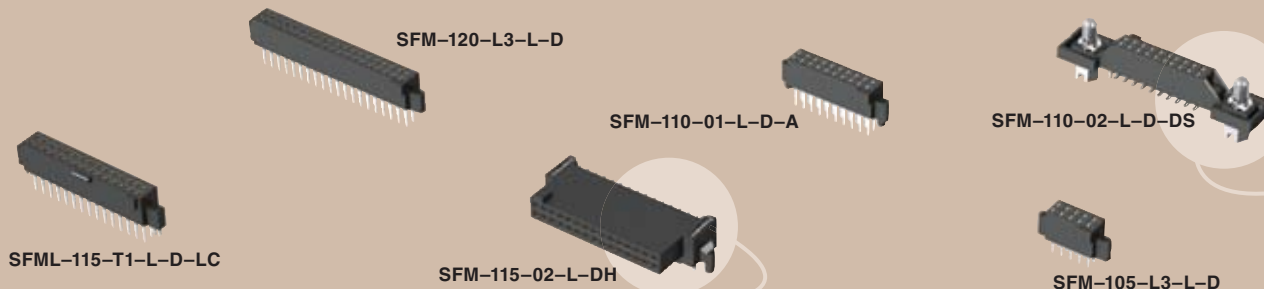
DOUBLE ROW
(SURFACE MOUNT)



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WWW.SAMTEC.COM

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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.

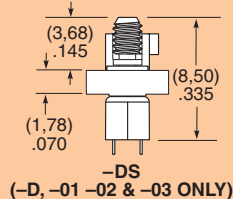
PLATING OPTION

-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



(-D, -01 -02 & -03 ONLY)

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)

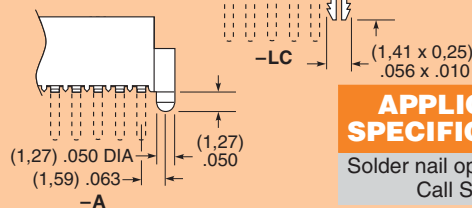
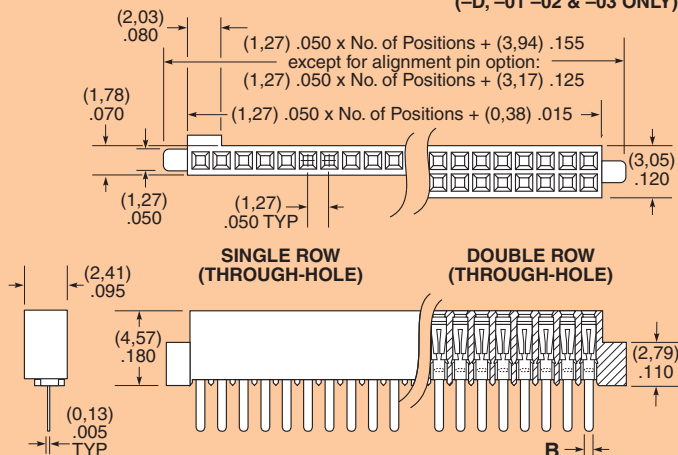
-P

= 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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