

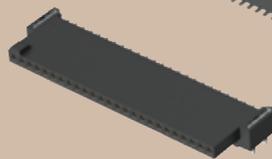


(1,27 mm) .050"

SFM, SFML SERIES

SFM-110-02-L-D-A

SFML-125-T2-L-D-LC



SFML-115-T2-L-D-LC

SFM-125-02-L-SH

# SMT & THROUGH-HOLE TIGER EYE™ SOCKET

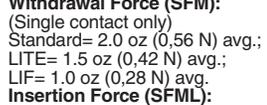
## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?SFM](http://www.samtec.com?SFM) or [www.samtec.com?SFML](http://www.samtec.com?SFML)

**Insulator Material:**  
Black Liquid Crystal Polymer  
**Plating:**  
Au or Sn over 50µ" (1,27 µm) Ni  
**Current Rating (SFM/TFM):**  
3.2 A per pin  
(1 pin powered per row)  
**Voltage Rating:**  
250 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  
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)

**RECOGNITIONS**  
For complete scope of recognitions see [www.samtec.com/quality](http://www.samtec.com/quality)



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

**SFML Mates with:**  
TFML



Low insertion force  
Tiger Eye™ contacts available

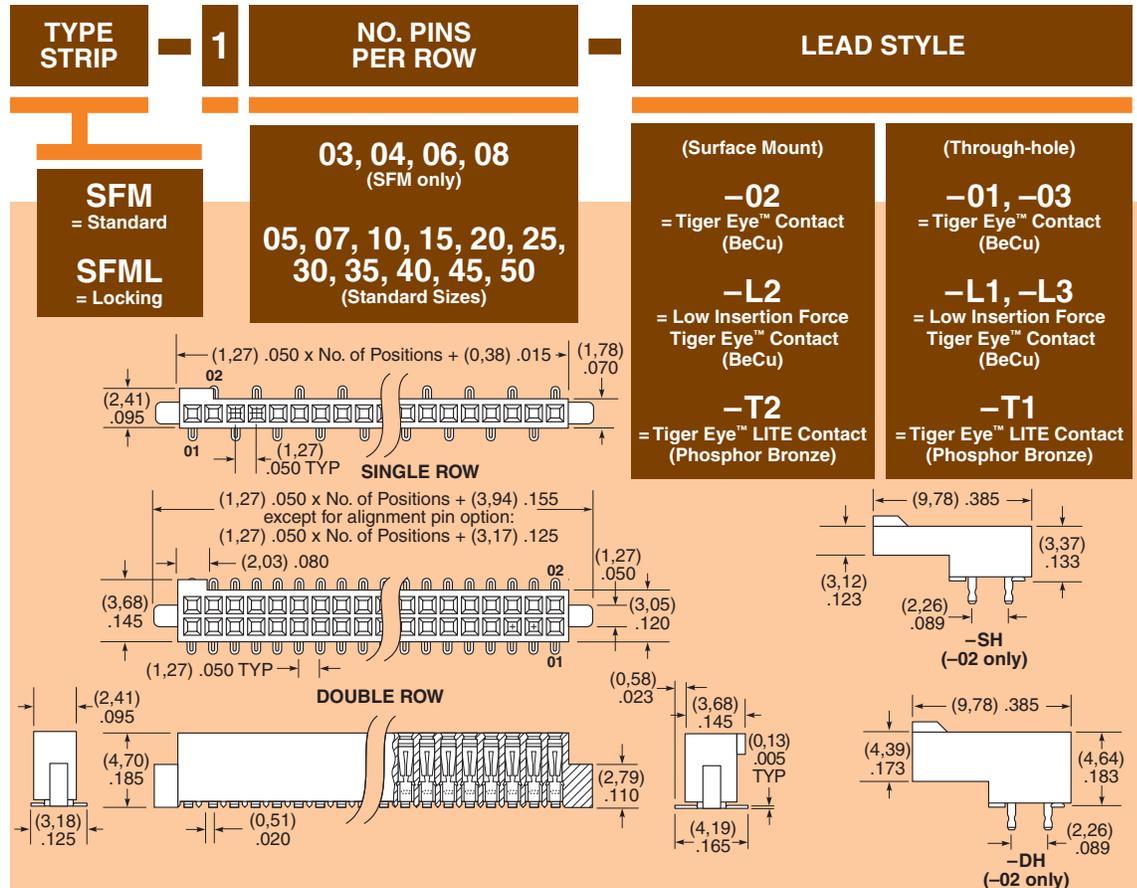
(1,27 mm x 1,27 mm)  
.050" x .050" micro pitch

Locking feature  
increases un mating  
force (SFML)

Choice of SMT or  
through-hole tails

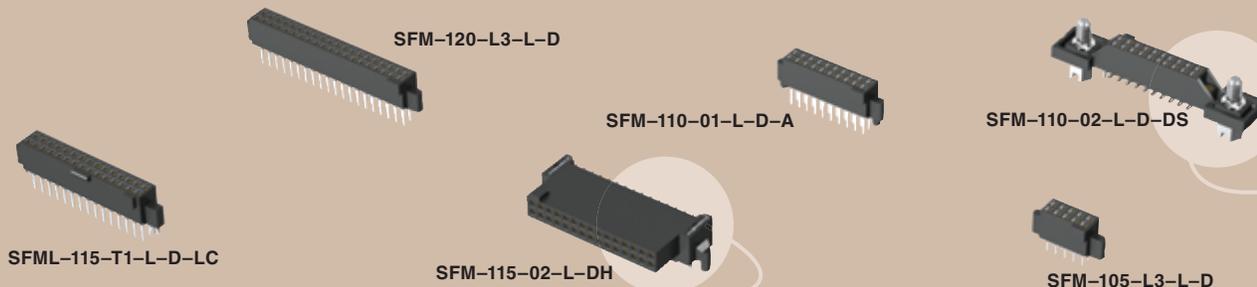


**Note:** Some sizes, styles and options are non-standard, non-returnable.



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

[WWW.SAMTEC.COM](http://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

Surface mount or  
Through-hole tails

Screw down  
option

**ALSO AVAILABLE**  
(MOQ Required)

- Solder nail option
  - Other sizes
  - Other platings
- Contact Samtec.

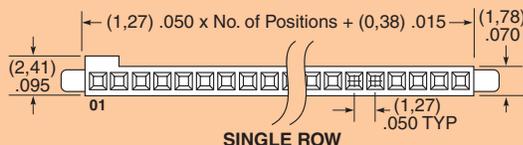
### OTHER SOLUTIONS

See SFC Series for lower cost plating options.

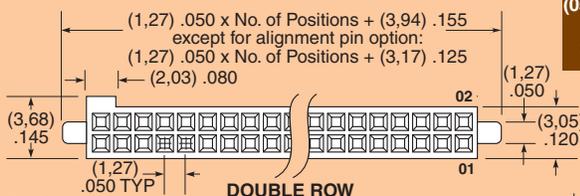
### PLATING OPTION

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

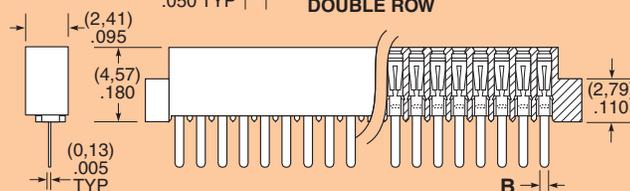
LEAD STYLE	A	B
-01, -L1, -T1	(3,05) .120	(0,51) .020
-03, -L3	(1,91) .075	(0,41) .016



SINGLE ROW



DOUBLE ROW



### 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)

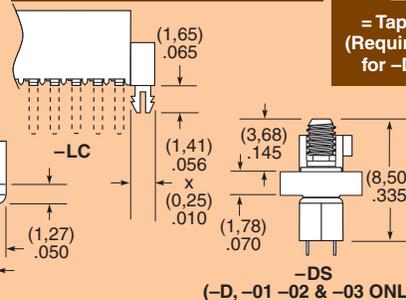
Specify only  
-K or -P  
(Lead styles -02,  
-L2, -T2 only)

**-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)



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

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