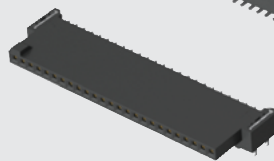


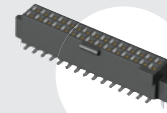


SFM-110-02-L-D-A

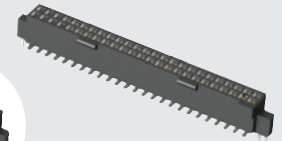
SFML-125-T2-L-D-LC



SFM-125-02-L-SH



SFML-115-T2-L-D-LC



(1,27 mm) .050"

# 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.  
**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)



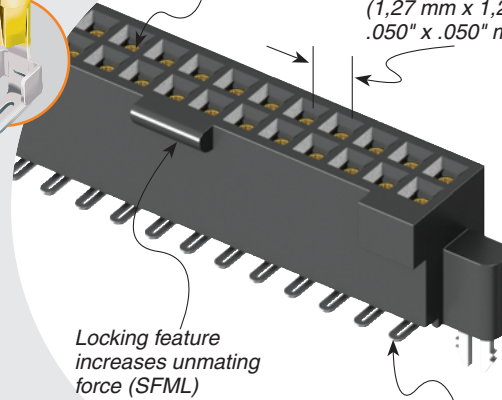
SFM Mates with:  
TFM, TFSD, TFSS

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 unmating  
force (SFML)



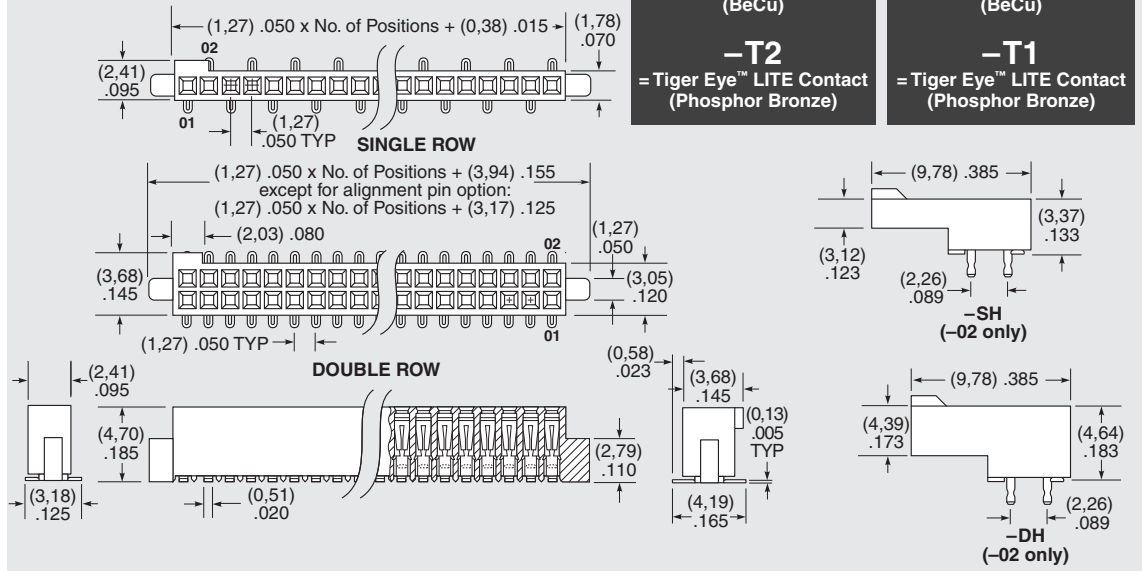
10 year Mixed Flowing Gas with 30µ" Gold  
Call Samtec for maximum mated cycles



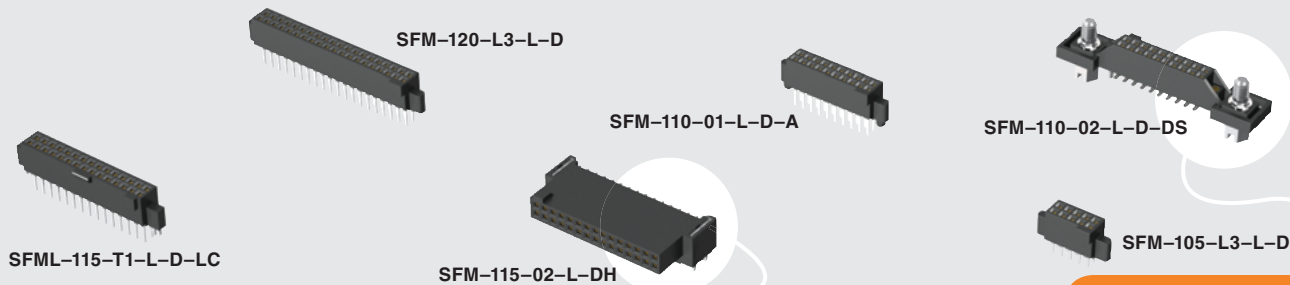
- Passes 10 Year MFG
- Locking option
- Locking clip option
- Screw Down option

Choice of SMT or  
through-hole tails

TYPE STRIP	NO. PINS PER ROW	LEAD STYLE
1		
SFM = Standard	03, 04, 06, 08 (SFM only)	(Surface Mount) -02 = Tiger Eye™ Contact (BeCu)
SFML = Locking	05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Standard sizes)	(Through-hole) -01, -03 = Tiger Eye™ Contact (BeCu)
		-L2 = Low Insertion Force Tiger Eye™ Contact (BeCu)
		-T2 = Tiger Eye™ LITE Contact (Phosphor Bronze)
		-L1, -L3 = Low Insertion Force Tiger Eye™ Contact (BeCu)
		-T1 = Tiger Eye™ LITE Contact (Phosphor Bronze)



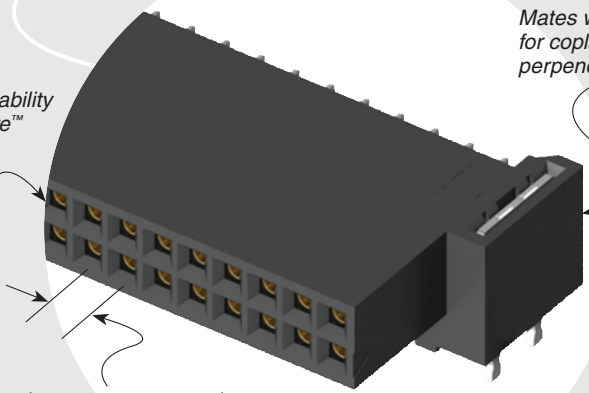
**Note:** Some sizes, styles and options are non-standard, non-returnable.



**SFM, SFML SERIES**

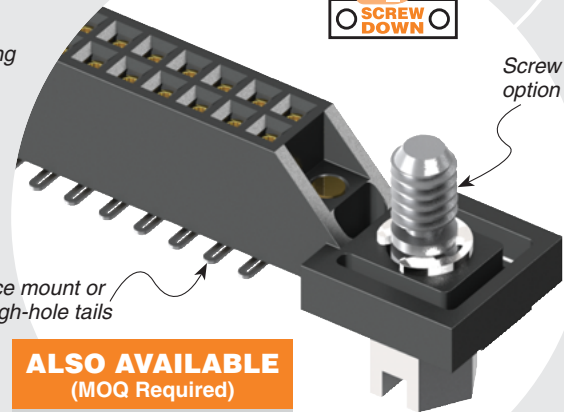


High reliability Tiger Eye™ contacts



(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

**ALSO AVAILABLE (MOQ Required)**

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

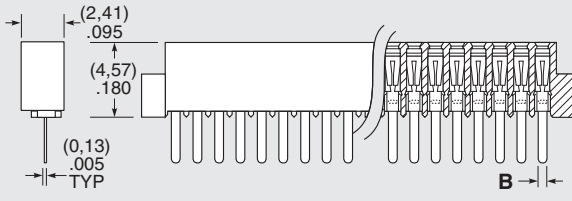
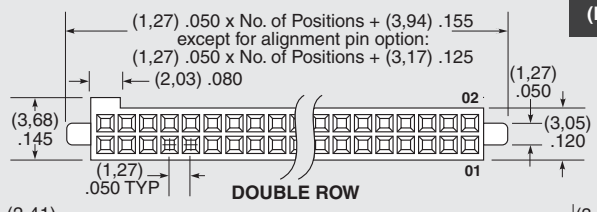
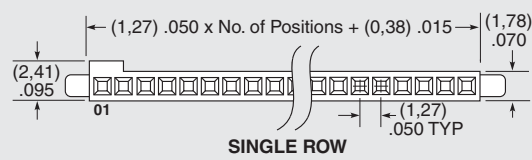
**OTHER SOLUTIONS**

- Lower cost plating options. See SFC Series.

**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



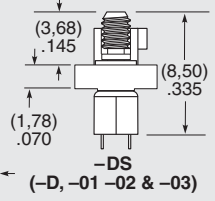
**ROW OPTION**

**-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 (1,60 mm) .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) (Not available with -A, -LC, -K, -P, -TR)

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)

