



(1,27mm) .050"

SFM, SFML SERIES

SFM-110-L3-L-S-LC

SFM-120-01-L-D-A

SFML-125-T1-L-D-LC

SFM-105-L3-L-D-LC

# 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

### Contact Material:

Tiger Eye™ = BeCu

Tiger Eye™ LITE = Phosphor Bronze

### Plating:

Au or Sn over 50µ" (1,27µm) Ni

### Voltage Rating:

350 VAC mated with TFM

### Operating Temp Range:

-55°C to +125°C

### Contact Resistance:

15 mΩ max

### Insertion Depth:

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

### Wiping Distance:

(0,38mm) .015"

### Normal Force:

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

### Insertion Force (SFM):

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

### Withdrawal Force (SFM):

(Single contact only) Standard= 2.0oz (0,56N) avg.; LITE= 1.5oz (0,42N) avg.

### Insertion Force (SFML):

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

### Unmating Force (SFML):

Withdrawal force per contact (Single contact only)= 1.5oz (0,42N) 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" (0,76µm) Au

### RoHS Compliant:

Yes

### Processing:

#### Max Processing Temp:

230°C for 60 seconds, or 260°C for 20 seconds 3x

#### Lead-Free Solderable:

Yes

#### Note:

Other Gold plating options available. Contact Samtec.

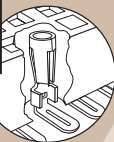
#### Note:

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



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

**SFML Mates with:** TFML



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

Low insertion force contacts available

High reliability Tiger Eye™ contacts

Through-hole tails

Choice of alignment pin or locking clip options



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

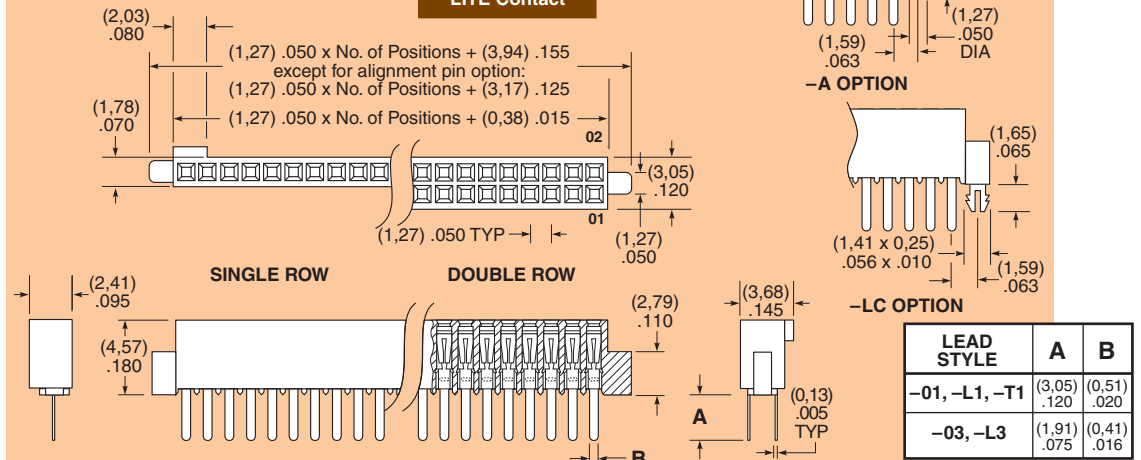


## COST-SAVING APPLICATIONS



Lower cost Phosphor Bronze contact (-T1) for applications where Beryllium Copper is not needed. See SFC Series for lower cost plating options.

TYPE STRIP	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	ROW OPTION	OPTION
1	05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Call Samtec or see SFMC Series for more sizes)	-01, -03 = Tiger Eye™ Contact -L1, -L3 = Low Insertion Force Tiger Eye™ Contact -T1 = Tiger Eye™ LITE Contact	-L = 10µ" (0,25µm) Gold on contact, Matte Tin on tail -S = 30µ" (0,76µm) Gold on contact, Matte Tin on tail	-S = Single Row (SFM only) -D = Double Row	-A = Alignment Pin (N/A with -LC) -LC = Locking Clip (N/A with -A)



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

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