



(1,27mm) .050"

SFM, SFML SERIES

SFM-110-02-L-S-LC

SFM-110-T2-L-D-LC

SFM-115-02-L-D-A

SFML-125-T2-L-D-LC

SMT 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 Contact 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.;

LIF= 1.4oz (0,39N) avg.

Withdrawal Force (SFM):

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

LITE= 1.5oz (0,42N) avg.;

LIF= 1.0oz (0,28N) 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 un-

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" (0,76µm) Au

RoHS Compliant:

Yes

Processing:

Lead-Free Solderable: Yes

SMT Lead Coplanarity:

(0,10mm) .004" max (05-25)

(0,15mm) .006" max (30-50)

Note:

Other Gold plating options available. Contact Samtec.

Note:

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

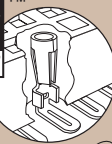
SFM Mates with:
TFM, TFSD, TFSS, FTS (LIF), FW (LIF), FTSH (LIF)

SFML Mates with:
TFML, TFSD (-XL option), TFSDT (-XL option)



High reliability Tiger Eye™ contacts

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



Locking feature increases unmating force (SFML)

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

1,27mm SFM/TFM	Rated @ 3dB Insertion Loss
6,35mm Stack Height	
Single-Ended Signaling	6.0 GHz / 12 Gbps
Differential Pair Signaling	7.0 GHz / 14 Gbps

Performance data for other stack heights and complete test data available at www.samtec.com?SFM or contact sig@samtec.com



APPLICATION SPECIFIC OPTION

Solder nail option for (2,36mm) .093" thick board available. Call Samtec.

Choice of alignment pin or locking clip options

COST-SAVING APPLICATIONS



Lower cost Phosphor Bronze contact (-T2) 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					
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 -L2 = Low Insertion Force Tiger Eye™ Contact -T2 = 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	Specify only -A, -LC, or -SN -A = Alignment Pin -LC = Locking Clip (Manual placement required) -SN = Solder Nail (-S row N/A) Specify only -K or -P -K = Polyimide film Pick & Place Pad -P = Plastic Pick & Place Pad Specify -TR last -TR = Tape & Reel

• Passes 10 Year MFG
• Locking option
• Locking clip option
• Weld tab option
• Solder nail option for up to 25Gs

SINGLE ROW
Dimensions: (2,41) .095, (4,70) .185, (3,18) .125, (0,51) .020, (2,79) .110

DOUBLE ROW
Dimensions: (0,58) .023, (3,68) .145, (0,13) .005 TYP, (4,19) .165, (0,66) .026 DIA, (1,59) .063

-A OPTION
Dimensions: (1,27) .050, (1,59) .063, (1,27) .050 DIA

-LC OPTION
Dimensions: (1,41 x 0,25) .056 x .010, (1,59) .063

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

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