

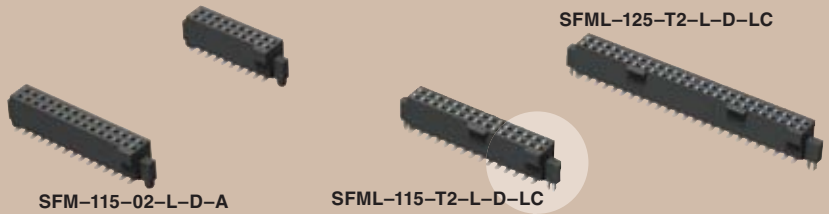


(1,27mm) .050"

SFM, SFML SERIES

SFM-110-02-L-S-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 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.;

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 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:

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 unmatting force (SFML)

SMT tails



APPLICATION SPECIFIC OPTION

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

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

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

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	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

(2,03) .080
(1,27) .050 x No. of Positions + (3,94) .155 except for alignment pin option:
(1,27) .050 x No. of Positions + (3,17) .125
(1,27) .050 x No. of Positions + (0,38) .015
(1,27) .050 TYP
(1,78) .070
(3,05) .120
(1,27) .050
(1,59) .063
(1,27) .050 DIA
(1,65) .065
(1,41 x 0,25) .056 x .010
(1,59) .063
(0,58) .023
(3,68) .145
(0,13) .005 TYP
(0,66) .026 DIA
(4,19) .165

SINGLE ROW

(2,41) .095
(4,70) .185
(3,18) .125
(0,51) .020

DOUBLE ROW

(2,79) .110
(0,13) .005 TYP
(0,66) .026 DIA
(4,19) .165

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

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