

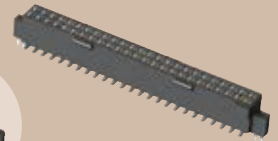
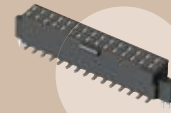


(1,27 mm) .050"

SFM, SFML SERIES

SFM-110-02-L-D-A

SFML-125-T2-L-D-LC



SFM-125-02-L-SH

SFML-115-T2-L-D-LC

SMT & THROUGH-HOLE 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" (1,27 µm) Ni



Voltage Rating:

350 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 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" (0,76 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)

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

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



Low insertion force
 Tiger Eye™ contacts available

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

Locking feature
 increases unmatting
 force (SFML)

Choice of SMT or
 through-hole tails

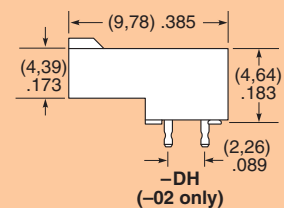
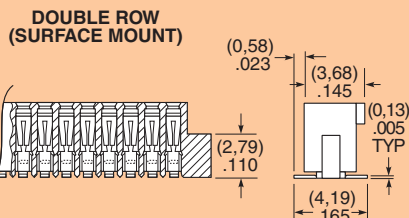
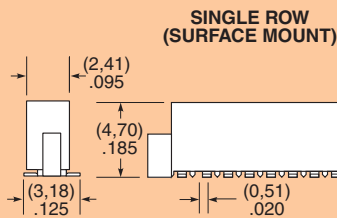
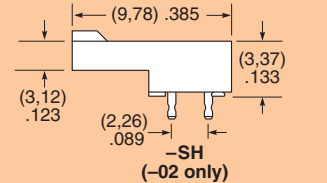
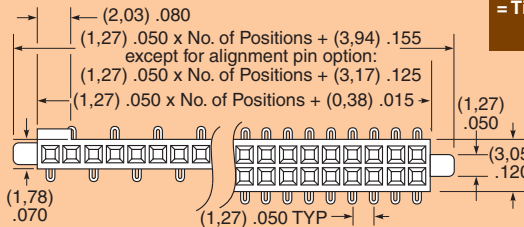
- Passes 10 Year MFG
- Locking option
- Locking clip option
- Screw Down option

| CURRENT RATING (PER CONTACT) | |
|------------------------------|---------|
| AMBIENT TEMP | TFM/SFM |
| 20°C | 5A |
| 40°C | 4.5A |
| 60°C | 3.9A |
| 95°C | 2.6A |

6 POSITIONS (2x3) POWERED

EXTENDED LIFE PRODUCT
 10 year Mixed Flowing Gas with 30µ" Gold
 1,000 cycles when mated with TFM

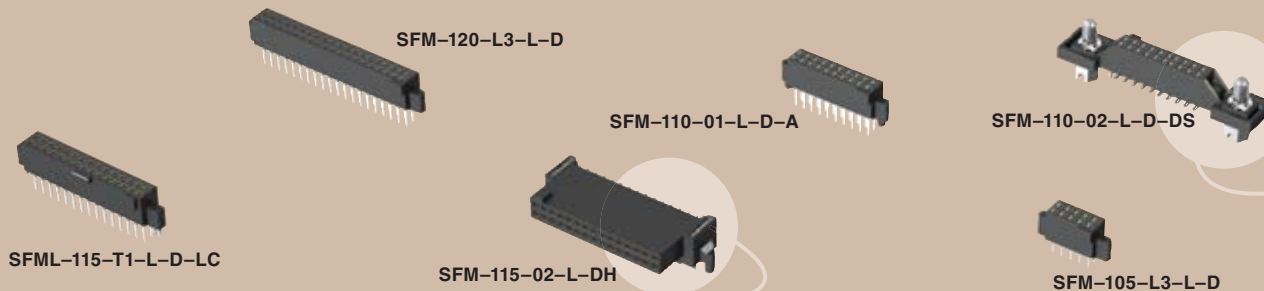
| TYPE STRIP | NO. PINS PER ROW | LEAD STYLE |
|----------------|--------------------------------------------------------------------------------------------|---------------------------------------------------|
| 1 | 04 (SFM only) | (Surface Mount) (Through-hole) |
| SFM = Standard | 05, 07, 10, 15,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



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



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

COST-SAVING APPLICATIONS

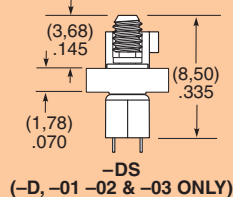
See SFC Series for lower cost plating options.

PLATING OPTION

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

Note: Other Gold plating options available.
Contact Samtec.

| 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
(1,60mm) .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)

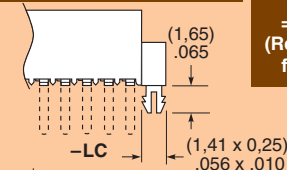
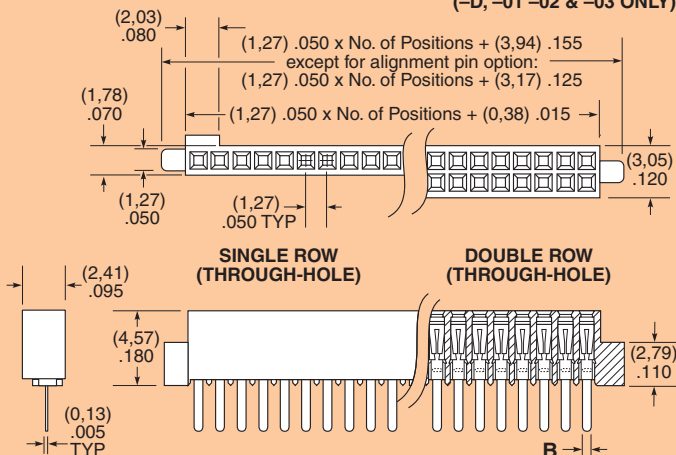
Specify only
-K or **-P**
(Lead styles -02,
-L2, -T2 only)

-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**)



APPLICATION SPECIFIC OPTION

Solder nail option available.
Call Samtec.

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