

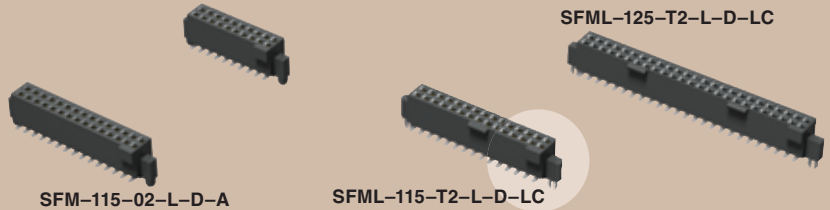


(1,27mm) .050"

SFM, SFML SERIES

SFM-110-02-L-D-A

SFML-125-T2-L-D-LC



SFM-115-02-L-D-A

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" (1,27µm) 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 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)

Choice of alignment pin or locking clip options

SMT tails

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

TYPE STRIP	NO. PINS PER ROW	LEAD STYLE								
1	05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Call Samtec or see SFMC Series for more sizes)	<table border="1"> <tr> <th>(Surface Mount)</th> <th>(Through-hole)</th> </tr> <tr> <td>-02 = Tiger Eye™ Contact</td> <td>-01, -03 = Tiger Eye™ Contact</td> </tr> <tr> <td>-L2 = Low Insertion Force Tiger Eye™ Contact</td> <td>-L1, -L3 = Low Insertion Force Tiger Eye™ Contact</td> </tr> <tr> <td>-T2 = Tiger Eye™ LITE Contact</td> <td>-T1 = Tiger Eye™ LITE Contact</td> </tr> </table>	(Surface Mount)	(Through-hole)	-02 = Tiger Eye™ Contact	-01, -03 = Tiger Eye™ Contact	-L2 = Low Insertion Force Tiger Eye™ Contact	-L1, -L3 = Low Insertion Force Tiger Eye™ Contact	-T2 = Tiger Eye™ LITE Contact	-T1 = Tiger Eye™ LITE Contact
(Surface Mount)	(Through-hole)									
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-T2 = Tiger Eye™ LITE Contact	-T1 = Tiger Eye™ LITE Contact									

SINGLE ROW (SURFACE MOUNT)
 (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

DOUBLE ROW (SURFACE MOUNT)
 (0,58) .023
 (3,68) .145
 (0,13) .005 TYP
 (2,79) .110
 (4,19) .165

-SH (-02 only)
 (9,78) .385
 (3,12) .123
 (2,26) .089

-DH (-02 only)
 (9,78) .385
 (4,39) .173
 (4,64) .183
 (2,26) .089

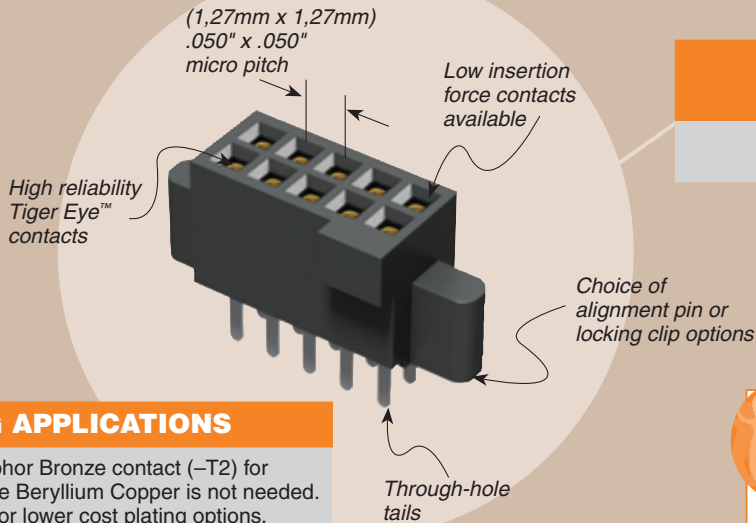
Due to technical progress, all designs, specifications and components are subject to change without notice.

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RUGGEDIZED
 by
SAMTEC

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



APPLICATION SPECIFIC OPTION

Solder nail option available. Call Samtec.

E.L.P.
 EXTENDED LIFE PRODUCT

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

COST-SAVING APPLICATIONS

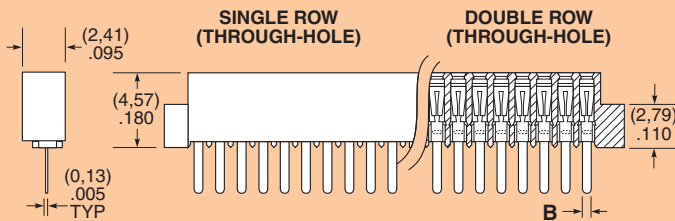
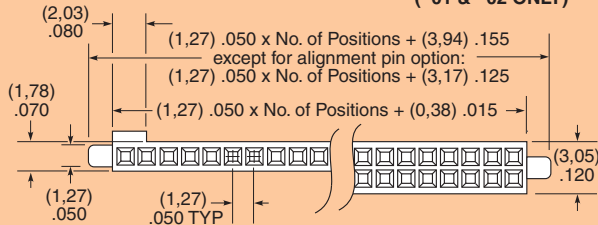
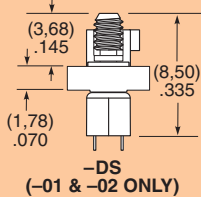
TIGER EYE™
LITE

Lower cost Phosphor Bronze contact (-T2) for applications where Beryllium Copper is not needed. See SFC Series for lower cost plating options.

PLATING OPTION

-L
 = 10µ" (0,25µm) 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
 (5, 7, 10, 15,
 20, 25, 30 only)
 (SFM only)
 (Lead style -02 only)

-DH
 = Double Horizontal
 (5, 7, 10, 15,
 20, 25, 30 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
 (Lead styles -01 & -02 only)
 (Not available with SFML)
 (Mates with TFM-DS option)

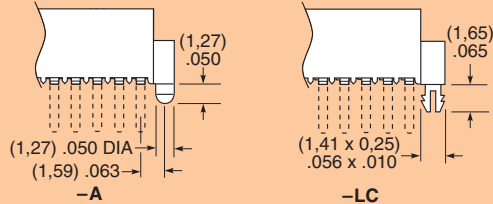
Specify only
 -K or -P
 (Lead styles -02,
 -L2, -T2 only)

-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)



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