



**THE DATASHEET OF
SFM-109-02-L-D-A**



RUGGED TIGER EYE™ SYSTEMS

(1.27 mm) .050" PITCH



FEATURES & BENEFITS

- Screw down, locking clip, friction latching and weld tab ruggedizing options
- Shrouded, polarized and keyed
- Surface mount or through-hole tails
- High-density, four row design (FOLC/MOLC Series)
- Discrete wire assemblies available in single or double row, 28 and 30 AWG PVC or *Teflon™ Fluoropolymer (See pages 238-239). Contact asp@samtec.com for custom solutions.
- Cable components (ISDF/CC03) and tooling available: samtec.com/tooling
- Severe Environment Testing qualified (SFM/TFM); aligns with MIL-DTL-55302. Visit samtec.com/set

*Teflon™ is a trademark of The Chemours Company FC, LLC used under license by Samtec.

**TIGER™
EYE**
CONTACT



IDC cable assemblies with rugged strain relief (FFSD/FFMD, FFTP/FMTP)



Locking for increased unmating force (SFML/TFML)

KEY SPECIFICATIONS

| SERIES | STACK HEIGHTS | INSULATOR MATERIAL | CONTACT MATERIAL | PLATING | OPERATING TEMP RANGE | CURRENT RATING | VOLTAGE RATING | MAX. CYCLES | LEAD-FREE SOLDERABLE |
|---------|---------------|--------------------|-------------------------------------|----------------------------------|----------------------|--------------------------------|----------------|--|----------------------|
| SFM/TFM | 6 to 12 mm | Black LCP | BeCu (SFM) Phosphor Bronze (TFM) | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | 3.7A per pin (2 pins powered) | 275 VAC | 10,000 with 30 μ" (0.76 μm) Au | Yes |
| SFC/TFC | 6 to 12 mm | Black LCP | Phosphor Bronze | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | 3.1 A per pin (2 pins powered) | 350 VAC | (Call Samtec for E.L.P.™ plating option) | Yes |

(1.27 mm) .050" PITCH • SMT/THROUGH-HOLE SOCKET

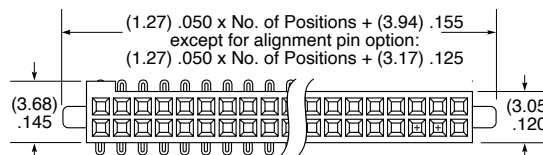
| SERIES | 1 | NO. PINS PER ROW | LEAD STYLE | PLATING OPTION | ROW OPTION | OPTIONS |
|--------------------------|---|---|---|--|--|---|
| SFM = Standard | | 03, 04, 06, 08 (SFM only) | (Surface Mount) (Through-hole) | -L = 10 μm (0.25 μm) Gold on contact, Matte Tin on tail (Call Samtec for E.L.P.™ plating option) | -S = Single Row (SFM only) | Specify only -A, -LC or -DS (Not available with -DH, -SH) |
| SFML = Locking | | 05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Standard sizes) | -02 = Tiger Eye™ Contact (BeCu) | -01, -03 = Tiger Eye™ Contact (BeCu) | -D = Double Row | Specify only -K or -P (Lead styles -02, -L2, -T2 only) |
| | | | -L2 = Low Insertion Force Tiger Eye™ Contact (BeCu) | -L1, -L3 = Low Insertion Force Tiger Eye™ Contact (BeCu) | -SH = Single Horizontal (05 thru 30 positions only) (SFM only) (Lead style -02 only) | -A = Alignment Pin |
| | | | -T2 = Tiger Eye™ LITE Contact (Phosphor Bronze) | -T1 = Tiger Eye™ LITE Contact (Phosphor Bronze) | -DH = Double Horizontal (05 thru 30 positions only) (SFM only) (Lead style -02 only) | -LC = Locking Clip (Manual placement required) |
| | | | | | | -DS = Dual Screw Down for (1.60 mm) .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) (Not available with -A, -LC, -K, -P, -XR) |
| | | | | | | -K = Polyimide film Pick & Place Pad (Not available with -DH, -SH) |
| | | | | | | -P = Plastic Pick & Place Pad (Not available with -DH, -SH) |
| | | | | | | Specify -TR or -FR last; Required for -DH & -SH. (Lead styles -02, -L2 & -T2 only) |
| | | | | | | -TR = Tape & Reel |
| | | | | | | -FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) |

SFM
Board Mates:
TFM
Cable Mates:
TFSD, TFSS

SFML
Board Mates:
TFML
Cable Mates:
TFSD

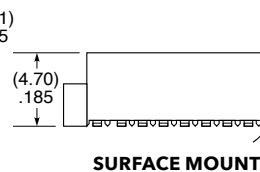


SINGLE ROW



DOUBLE ROW

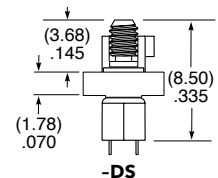
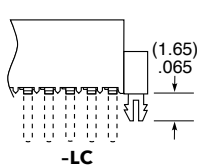
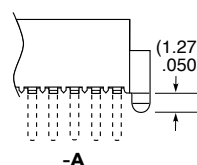
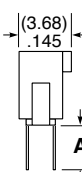
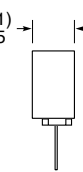
| LEAD STYLE | A | B |
|---------------|-------------|-------------|
| -01, -L1, -T1 | (3.05) .120 | (0.51) .020 |
| -03, -L3 | (1.91) .075 | (0.41) .016 |



SURFACE MOUNT



THROUGH-HOLE




Notes:
Severe Environment Testing qualified (SFM); aligns with MIL-DTL-55302. Visit samtec.com/set

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

View complete specifications at: samtec.com?SFM & samtec.com?SFML

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View SFM-109-02-L-D-A on WIN SOURCE](#)

 [Samtec Inc. Information](#)

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-  Shortage Management
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