



**THE DATASHEET OF
SFM-120-02-H-D-A-P-TR**



RUGGED TIGER EYE™ SYSTEMS

(1.27 mm) .050" PITCH

MAX
3.7
A m p s

8
G b p s

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.

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

**TIGER™
EYE**
CONTACT



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



Locking for increased unmating force (SFML/TFML)

(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) -02 = Tiger Eye™ Contact (BeCu) -L2 = Low Insertion Force Tiger Eye™ Contact (BeCu) -T2 = Tiger Eye™ LITE Contact (Phosphor Bronze)	-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) -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)	Specify only -A, -LC or -DS (Not available with -DH, -SH) -A = Alignment Pin -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) 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 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)
SFML = Locking		05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Standard sizes)	-01, -03 = Tiger Eye™ Contact (BeCu) -L1, -L3 = Low Insertion Force Tiger Eye™ Contact (BeCu) -T1 = Tiger Eye™ LITE Contact (Phosphor Bronze)			

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



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-120-02-H-D-A-P-TR on WIN SOURCE](#)
- ⊖ [Samtec Inc. Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management