

# 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)
- Wire to board assemblies available in single or double row, 28 and 30 AWG PVC or \*Teflon™ Fluoropolymer (See pages 254-255). Contact [asp@samtec.com](mailto:asp@samtec.com) for custom solutions.
- Cable components (ISDF/CC03) and tooling available: [samtec.com/tooling](http://samtec.com/tooling)
- Severe Environment Testing qualified (SFM/TFM); aligns with MIL-DTL-55302. Visit [samtec.com/set](http://samtec.com/set)

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

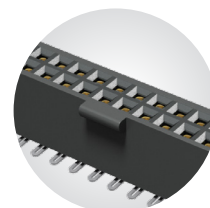
## KEY SPECIFICATIONS

| 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)<br>Phosphor Bronze (TFM) | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C    | 3.7 A per pin (2 pins powered) | 250 VAC/<br>354 VDC | 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    | 2.9 A per pin (2 pins powered) | 275 VAC/<br>389 VDC | (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 • COST-EFFECTIVE HEADER/SOCKET**

| SFC | 1 | NO. PINS PER ROW                                                     | LEAD STYLE                                                                                              | PLATING OPTION                                                                                                                            | D | OPTIONS                                                                                                                                                                                                                                                                                             |
|-----|---|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |   | 04, 05, 10, 15,<br>20, 25, 30, 35,<br>40, 45, 50<br>(Standard sizes) | <b>-T1</b><br>= Through-hole<br>Tiger Eye™ LITE<br><br><b>-T2</b><br>= Surface Mount<br>Tiger Eye™ LITE | <b>-F</b><br>= Gold flash on contact,<br>Matte Tin on tail<br><br><b>-L</b><br>= 10 μ" (0.25 μm)<br>Gold on contact,<br>Matte Tin on tail |   | <b>-A</b><br>= Alignment Pin<br><br><b>-K</b><br>= (4.00 mm) .157" DIA Polyimide film<br>Pick & Place Pad<br><br><b>-TR</b><br>= Tape & Reel<br>(-T2 only)<br><br><b>-FR</b><br>= Full Reel Tape & Reel<br>(must order max. quantity per reel;<br>contact Samtec for quantity breaks)<br>(-T2 only) |

**SFC**  
Board Mates:  
TFC  
Cable Mates:  
TFSD, TFSDT





$(1.27) .050 \times \text{No. of Positions} + (3.94) .155$   
 except for alignment pin option:  
 $(1.27) .050 \times \text{No. of Positions} + (3.17) .125$

$(3.68) .145$   
 $(3.05) .120$

$(4.57) .180$   
 $(2.79) .110$

$(1.27) .050$

**-A OPTION**

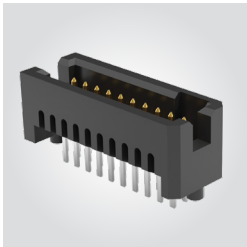
$(3.05) .120$   
**-T1**

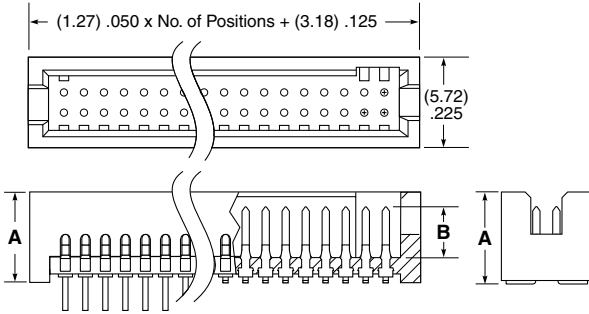
$(4.19) .165$   
**-T2**

View complete specifications at: [samtec.com?SFC](http://samtec.com?SFC)

| TFC | 1 | NO. PINS PER ROW                                                                                                       | LEAD STYLE                                                        | PLATING OPTION                                                                                                                         | D | OPTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----|---|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |   | 03, 04, 06, 08<br>(Lead Style -01 & -02 only)<br><br>05, 07, 10, 15, 20, 25,<br>30, 35, 40, 45, 50<br>(Standard sizes) | <b>-X1</b><br>= Through-hole<br><br><b>-X2</b><br>= Surface Mount | <b>-F</b><br>= Gold flash on<br>post, Matte Tin<br>on tail<br><br><b>-L</b><br>= 15 μ" (0.38 μm)<br>Gold on post,<br>Matte Tin on tail |   | <b>-RA</b><br>= Right-angle<br>(-01 only)<br><br><b>-A</b><br>= Alignment Pin<br><br><b>-LC</b><br>= Locking Clip<br>(Manual Placement required)<br>(not available with -RA)<br><br><b>-K</b><br>= (6.75 mm) .266" DIA<br>Polyimide film Pick & Place Pad<br>(not available with -RA)<br><br><b>-P</b><br>= Plastic Pick & Place Pad<br>(5 positions min.)<br>(not available with -RA)<br><br><b>-TR</b><br>= Tape & Reel<br>(-X2 only)<br>(not available with -RA)<br><br><b>-FR</b><br>= Full Reel Tape & Reel<br>(must order max. quantity per reel;<br>contact Samtec for quantity breaks)<br>(-X2 only)<br>(not available with -RA) |

**TFC**  
Board Mates:  
SFC  
Cable Mates:  
SFSD, SFSDT





$(1.27) .050 \times \text{No. of Positions} + (3.18) .125$

$(5.72) .225$

$A$   
 $B$

$A$

| SMT LEAD STYLE | A            | B           |
|----------------|--------------|-------------|
| -02            | (5.72) .225  | (3.38) .133 |
| -12            | (7.49) .295  |             |
| -22            | (9.27) .365  | (3.30) .130 |
| -32            | (11.18) .440 |             |

| TH LEAD STYLE | A            | B           |
|---------------|--------------|-------------|
| -01           | (5.59) .220  | (3.38) .133 |
| -11           | (7.37) .290  |             |
| -21           | (9.14) .360  | (3.30) .130 |
| -31           | (11.05) .435 |             |

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

View complete specifications at: [samtec.com?TFC](http://samtec.com?TFC)