



**THE DATASHEET OF  
SFM-105-02-S-D**

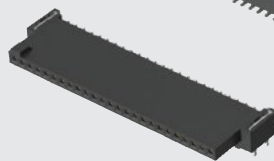




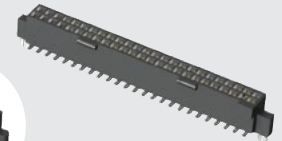
**TIGER EYE**  
SYSTEM

SFM-110-02-L-D-A

SFML-125-T2-L-D-LC



SFML-115-T2-L-D-LC



(1.27 mm) .050"

# SMT & THROUGH-HOLE TIGER EYE™ SOCKET

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?SFM](http://www.samtec.com?SFM) or [www.samtec.com?SFML](http://www.samtec.com?SFML)

**Insulator Material:**  
Black Liquid Crystal Polymer  
**Plating:**  
Au or Sn over 50 μm (1.27 μm) Ni  
**Current Rating (SFM/TFM):**  
3.2 A per pin  
(2 pins powered)  
**Voltage Rating:**  
250 VAC mated with TFM  
**Operating Temp Range:**  
-55 °C to +125 °C  
**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.  
**Max Cycles:**  
10,000 with 30 μm (0.76 μm) Au  
(Call Samtec for E.L.P.™  
plating option)  
**RoHS Compliant:**  
Yes

**SFM Board Mates:**

TFM

**SFM Cable Mates:**

TFSD, TFSS

**SFML Board Mates:**

TFML



Low insertion force  
Tiger Eye™ contacts available

(1.27 mm x 1.27 mm)  
.050" x .050" micro pitch

Locking feature  
increases unmating  
force (SFML)

Choice of SMT or  
through-hole tails

**RUGGEDIZED**  
BY SAMTEC

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

**HIGH-SPEED CHANNEL PERFORMANCE**

Rating based on Samtec reference channel. For full SI performance data visit [Samtec.com](http://Samtec.com) or contact [SIG@samtec.com](mailto:SIG@samtec.com)

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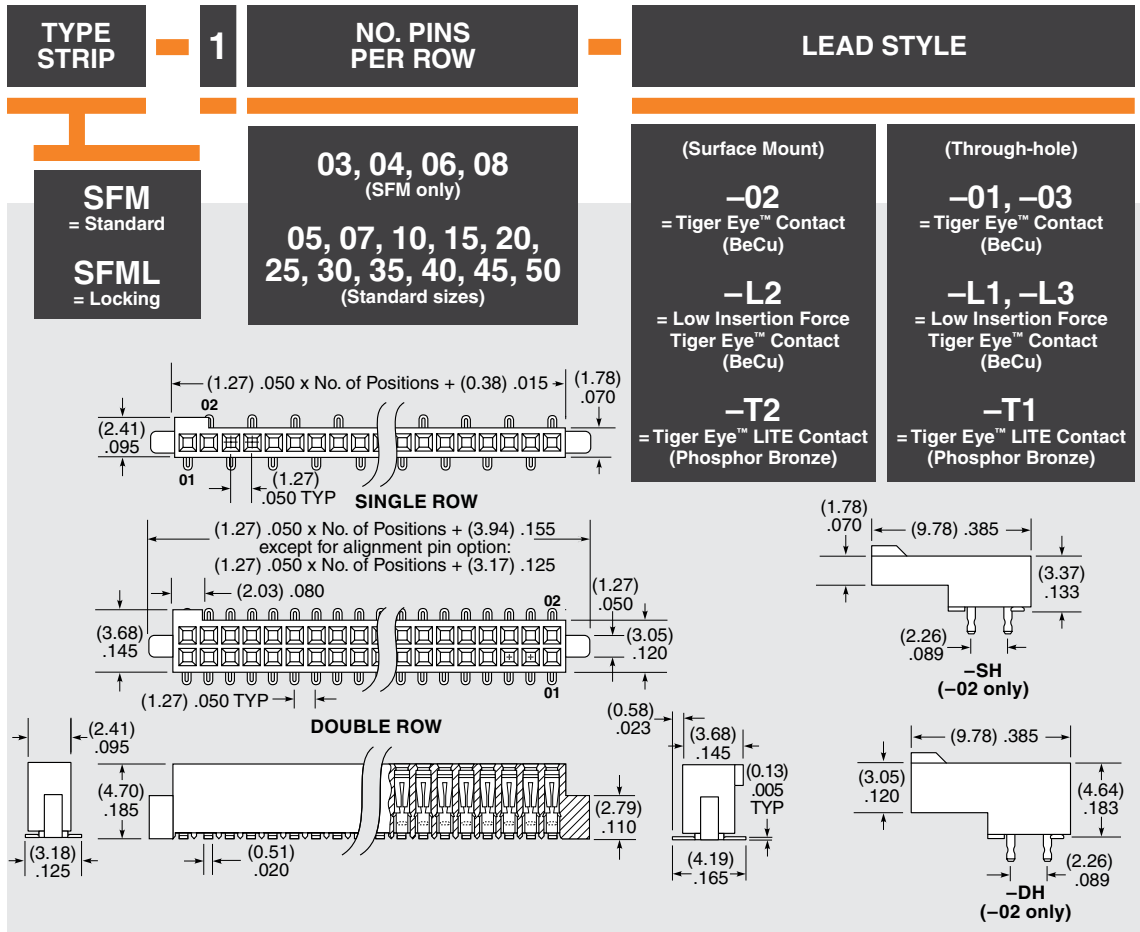
Gbps

## PROCESSING

**Lead-Free Solderable:**  
Yes  
**SMT Lead Coplanarity:**  
(0.10 mm) .004" max (05-25)  
(0.15 mm) .006" max (30-50)\*  
\*(.004" stencil solution  
may be available; contact  
IPG@samtec.com)

## RECOGNITIONS

For complete scope of recognitions see [www.samtec.com/quality](http://www.samtec.com/quality)

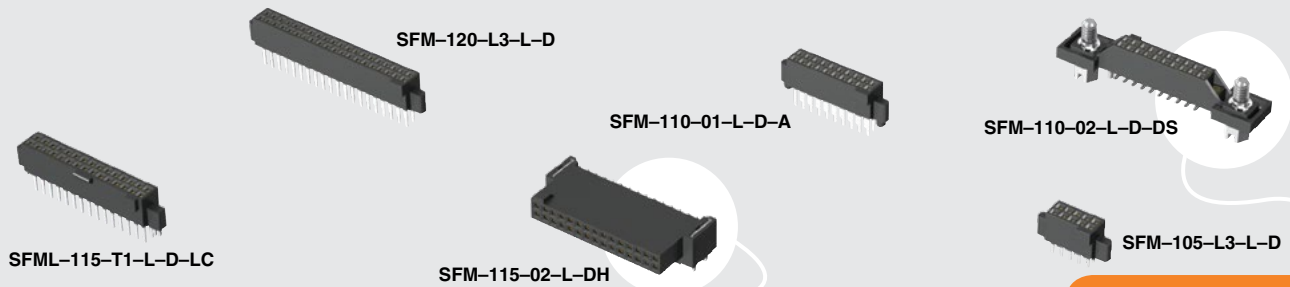


**Note:**  
Some sizes, styles and options are non-standard, non-returnable.

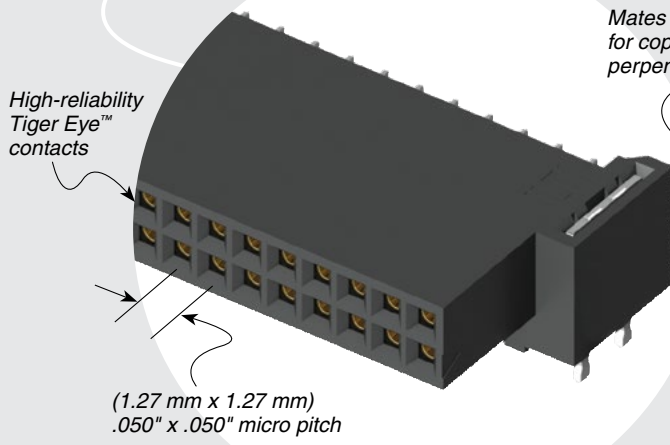
Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)

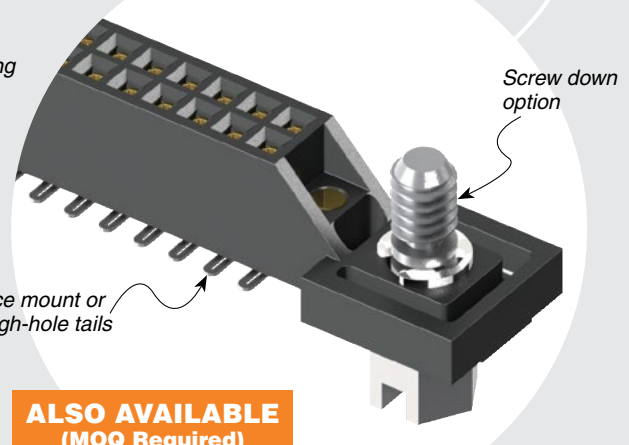
All parts within this catalog are built to Samtec's specifications. Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.



**SFM, SFML SERIES**



Mates with TFM for coplanar and perpendicular mating



**OTHER SOLUTIONS**

- Lower cost plating options. See SFC Series.

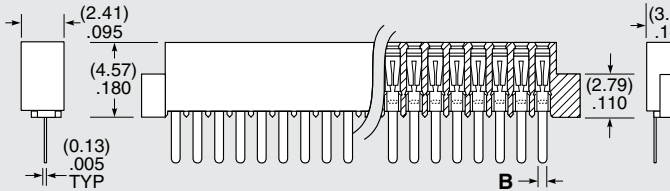
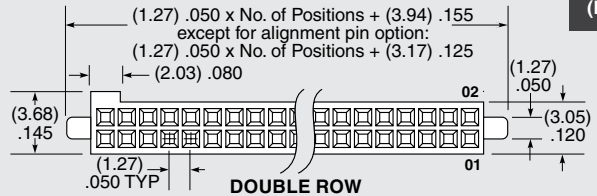
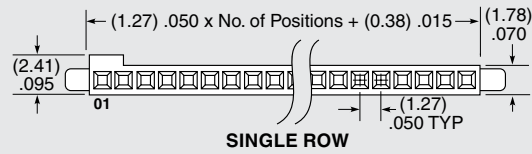
**ALSO AVAILABLE (MOQ Required)**

- Solder nail option
- Other sizes
- Other platings

**PLATING OPTION**

**-L**  
= 10 μ" (0.25 μm) 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 (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 (1.60 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, -TR)

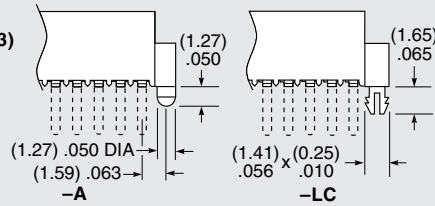
Specify only -K or -P (Lead styles -02, -L2, -T2 only)

**-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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## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View SFM-105-02-S-D 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