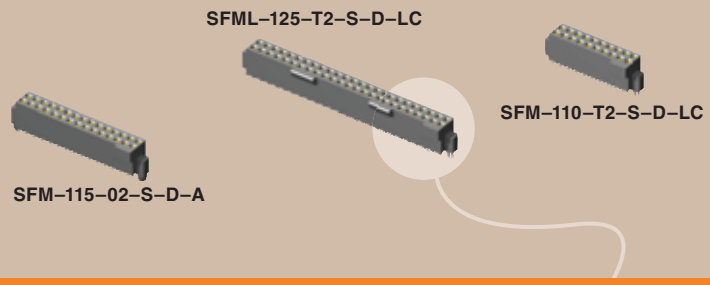
samtec

micro MATE

Surface SMT Mount



MICRO MATE SOCKETS SFM, SFML SERIES

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 over 50µ" (1,27µm) Ni
Current Rating: 2A @ 80°C ambient
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:

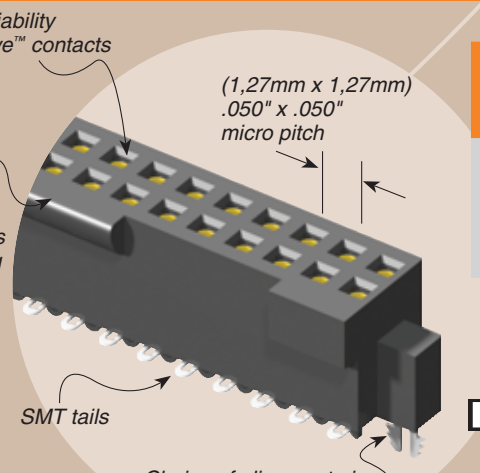
Max Processing Temp: 230°C for 60 seconds, or 260°C for 20 seconds 3x
Lead-Free Solderable: Yes
SMT Lead Coplanarity: (0,10mm) .004" max (05-25) (0,15mm) .006" max (30-50)

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

SFM Mates with: TFM, TFSD, FTS (LIF), FW (LIF), FTSH (LIF)

SFML Mates with: TFML

TIGER EYE™ CONTACT



APPLICATION SPECIFIC OPTION

SFM single row available. SFML solder nail option available. Call Samtec.

RUGGEDIZED by SAMTEC

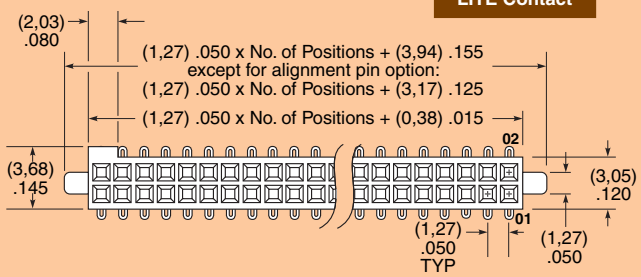
Available with optional Pick & Place pads

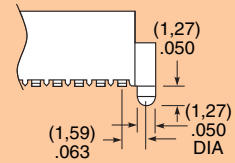
COST-SAVING APPLICATIONS

TIGER EYE L·I·T·E

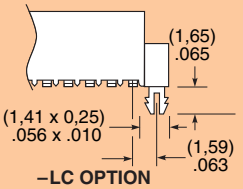
Lower cost Phosphor Bronze contact (–T2) for applications where Beryllium Copper is not needed. See SFC Series for lower cost plating options.

TYPE STRIP	–	1	NO. PINS PER ROW	–	LEAD STYLE	–	PLATING OPTION	–	D	–	OPTION
SFM = Standard **SFML** = Locking (Lead style –T2 only. 05 positions N/A)			05, 10, 15, 20, 25, 30, 35, 40, 45, 50 (Call Samtec or see SFMC Series for more sizes)		**–02** = Tiger Eye™ Contact **–L2** = Low Insertion Force Tiger Eye™ Contact **–T2** = Tiger Eye LITE Contact		**–S** = 30µ" (0,76µm) Gold on contact, Matte Tin on tail				**–A** = Alignment Pin (N/A with –LC) **–LC** = Locking Clip (N/A with –A) **–K** = (4,00mm) .157" DIA Polyimide film Pick & Place Pad **–P** = Plastic Pick & Place Pad **–TR** = Tape & Reel

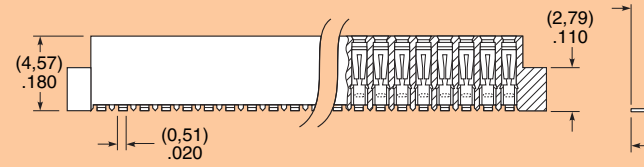


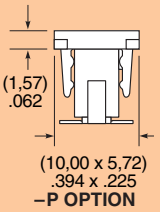


–A OPTION



–LC OPTION





–P OPTION

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

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