

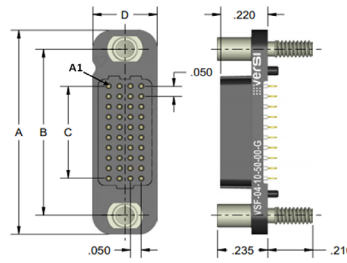


## VSF – Vertical (Female)

**Pitch: 1.27 mm**

VSF signal-integrity connectors are used in vertical, PCB-mount applications where a female interface is required. Termination styles include press-fit, paste-in-hole, plated thru-hole, and surface-mount.

### DIMENSIONS



VSF DIMENSIONS					
Columns	A	B	C	Rows	D
10	1.000	0.813	0.450	4	0.300
20	1.500	1.313	0.950	5	0.350
30	2.000	1.813	1.450	6	0.400
40	2.500	2.313	1.950	8	0.500
50	3.000	2.813	2.450	10	0.600

### Sample Part Number Format: VSF-04-10-50-02



**SERIES**  
Vertical (Female)  
1.27 mm



**ROWS**  
04 – 4 Rows  
05 – 5 Rows  
06 – 6 Rows  
08 – 8 Rows  
10 – 10 Rows



**COLUMNS**  
10 – 10 Columns  
20 – 20 Columns  
30 – 30 Columns  
40 – 40 Columns  
50 – 50 Columns



**CONTACT PLATING**  
50 – 50 μ" Au



**TERMINATION**  
00 – Press-fit  
01 – Paste-in-hole  
02 – PTH 0.078"  
03 – PTH 0.109"  
04 – PTH 0.140"  
05 – PTH 0.156"  
06 – PTH 0.172"  
10† – SMT - SN63PB37  
Solder Dipped  
11† – SMT - 42Sn/57.6Bi/0.4Ag  
lead free, solder dipped



**OPTIONS**  
Blank – No hardware†  
G – Guide socket†  
G1 – Guide socket‡  
J – Turning jackscrew†  
J1 – Turning jackscrew‡  
L – Locking screw†  
L1 – Locking screw‡  
N – Fixed jacknut†  
N1 – Fixed jacknut‡

### NOTES

Connector potting is standard.

<sup>1</sup> Used for PC board thickness up to 0.125"

<sup>2</sup> Used for PC board thickness 0.125" up to 0.250"

† Surface Mount Termination only available on 4 Row vertical connectors.

‡ No hardware supplied with blank hardware option connectors.

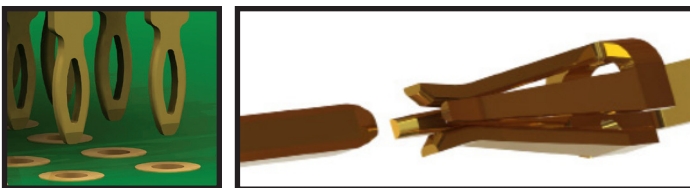
AirBorn can manufacture other configurations to your exact specifications.

RoHS Compliant (except for termination option 10); certificate of conformance available upon request with each shipment

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

### FEATURES

verSI board-mount connectors feature low mating force / high-reliability contact system with four points of contact. The open-pin field design allows for flexibility in termination schemes. Single-ended, differential pair, power, and ground are all available in one connector design. Guide hardware is optional.



### MATERIALS and FINISHES

Socket Contacts: ..... BeCu per ASTM B194  
Contact Finish: ..... Localized gold finish per ASTM B488 over nickel per ASTM B689 Type I, 50 μIN min  
Molded Insulators: ..... Glass-filled liquid crystal polymer (LCP) per ASTM D5138  
Potting Compound: ..... Frey Eng. Co. insulating compound CF3003-80  
Hardware (except washers): ..... Stainless steel per ASTM A484/A484M, ASTM A582/A582M, or ASTM A320 passivated per SAE AMS-2700, Method 1, Type 2  
Washers: ..... Stainless steel per NASM35333 (ASTM A240), passivated per NASM35333 (SAE AMS-2700)  
Solder Paste: ..... Sn63Pb37 (PN WS483) and 42Sn/57.6Bi/0.4Ag (PN ALPHA CVP-520)

### SI DATA – Simulated (Connectors Only)

1	Diff. Insertion Loss	-0.25 dB @ 5 GHz	-3dB @ 16 GHz
2	Diff. Return Loss	-20 dB @ 5 GHz	-6 dB @ 14 GHz
3	Diff. Impedance	100 ohm ±10% @ 50 ps rise time	
4	Diff. Skew	< 2 psec	

### PERFORMANCE

Contact Rating: ..... 2 amperes maximum  
Operating Temperature: ..... -55° C to 125° C  
Min. Contact Wipe: ..... 1.27 mm (0.050")  
Contact Normal Force: ..... 35-40 grams  
Max Recommended Voltage: ..... 200 V, RMS, 60 Hz  
Insulation Resistance: ..... 5,000 megaohms minimum @ 500 VDC  
Durability: ..... 2500 connector mating cycles  
Sinusoidal Vibration: ..... 20 g (EIA-364-28, condition IV)  
Shock: ..... 50 g (EIA-364-27, condition E)

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Rectangular Mil Spec Connectors](#) category:*

*Click to view products by [AirBorn](#) manufacturer:*

Other Similar products are found below :

[891-011-15SA2-BSST](#) [CTS-S16/16](#) [65002-062](#) [CY4602-000](#) [732-8020-01](#) [77058-22-55PN](#) [81542-20](#) [86.030.0053.0](#) [1241346-1](#) [RM252-020-311-2900](#) [DMC-M 08-16 SA](#) [1589051-4](#) [MSO34MPK1E1](#) [BACC65CAMA](#) [BACC65CP1PN](#) [BACI10BC0816PNBA](#) [HSB-D4S03DM222X](#) [2217548-1](#) [891-006-9PS-BST1T](#) [891-009-15SA2-BRT1T](#) [27963-20T12](#) [SIM2N40NC3](#) [SIM2S100A](#) [1604996-2](#) [SMD25PN90L-4055](#) [1900ND08S1B00A](#) [22628-10-6P-791](#) [RE04-212S](#) [M32139/03-G05SN](#) [CTD160E01F-6148](#) [CTJ112E03B](#) [CTJ122E02D-8000](#) [CTJ-3D-12](#) [CTJ920E06N-513](#) [CTJ920E12N-513](#) [CTL-16-090](#) [RM300-000-581-0000](#) [CY4600-000](#) [CY4601-000](#) [38111-14-15SN](#) [38112-14-15PN](#) [MMA23-0111R1](#) [MMD25-0071P1](#) [33516062020](#) [33526M11-08PE](#) [DMC-M99-01AN](#) [Y59113WE20PNV00300](#) [ZPF000000000106310](#) [105979-31](#) [EN4165M01AD0G0](#)