

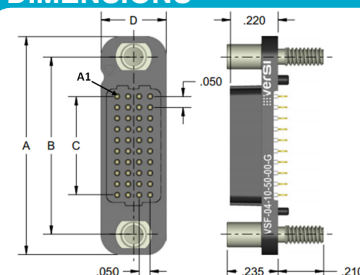


## VSF – Vertical (Female)

**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-04-10-30-02



**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**  
30 – 30 μ" Au  
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 – Surface-mount (SMT)



**OPTIONS**  
Blank – No options  
G – Guide socket  
J – #2-56 Jackscrew  
L – #2-56 Locking screw  
N – #2-56 Locking jacknut

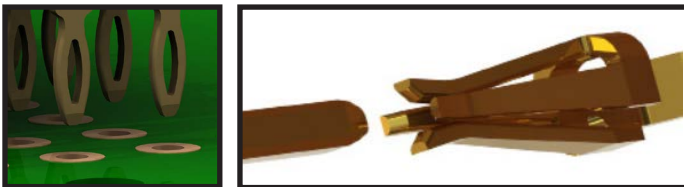
### NOTES

Connector potting is standard.

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 ASTM B194  
Contact Finish: ..... Localized gold finish per ASTM B488 over nickel per ASTM B689 Type I  
Molded Insulators: .....Glass-filled liquid crystal polymer (LCP) per ASTM D5138  
Hardware: .....Stainless steel per ASTM A582/A582M, or ASTM A320;  
passivated per ASTM A967, SAE AMS-QQ-P-35

NOTE: AirBorn can manufacture other configurations to your exact specifications.

### SI DATA – Simulated (Connectors Only)

1	Diff. Insertion Loss	22 GHz @ -2 db	
2	Diff. Return Loss	7.5 GHz @ -20 db	17.5 GHz @ -10 db
3	Diff. Impedance	100 ohm ±10%	
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)