



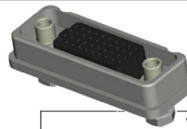
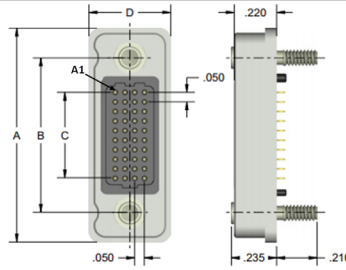
versI™

VRF – Vertical Rugged

Pitch: 1.27 mm

VRF signal-integrity connectors are ruggedized versions of the standard VSF female connectors. These connectors can be used in extreme environmental conditions while maintaining high reliability and continuous performance.

DIMENSIONS



VRF DIMENSIONS					
Columns	A	B	C	Rows	D
10	1.125	0.813	0.450	4	0.425
20	1.625	1.313	0.950	5	0.475
30	2.125	1.813	1.450	6	0.525
40	2.625	2.313	1.950	8	0.625
50	3.125	2.813	2.450	10	0.725

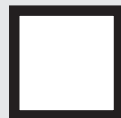
Sample Part Number Format: VRF-04-10-50-04-J



SERIES
 Vertical Rugged
 (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[‡]
 E – No hardware/EMI gasket[‡]
 GE – Guide socket/EMI gasket[†]
 G1E – Guide socket/EMI gasket[‡]
 JE – Turning jackscrew/EMI gasket[†]
 J1E – Turning jackscrew/EMI gasket[‡]
 LE – Locking screw/EMI gasket[†]
 L1E – Locking screw/EMI gasket[‡]
 NE – Fixed jacknut/EMI gasket[†]
 N1E – Fixed jacknut/EMI gasket[‡]

NOTES

Connector potting is standard.

¹ Used for PC board thickness up to 0.125"

² 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.

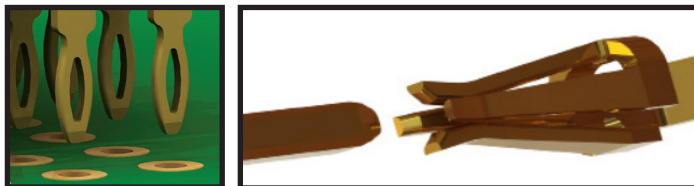
AirBorn can manufacture other configurations to your exact specifications.

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

Shell: Aluminum alloy 6061-T6 per SAE AMS 4027 or 6061-T6511 per QQ-A-200/8
 Finish: Electroless nickel per SAE AMS-2404, Class 3; 500 μIN min
 Socket Contact: 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, 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)
 EMI Gasket (GE, G1E, NE and N1E options only): Conductive Elastomer per MIL-DTL-83528 Type D
 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 [Board to Board & Mezzanine Connectors](#) category:

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

Other Similar products are found below :

[589158040000018](#) [MDF7C-18P-2.54DSA\(55\)](#) [FCN-230C068-11](#) [FCN-268F012-G/BD](#) [FCN-268F036-G/BD](#) [FCN-268M012-G/0D](#) [FCN-268M024-G/1D](#) [FCN-723J004/1](#) [MIS-048-01-F-D-DP-K](#) [832-10-034-10-001000](#) [FX4C-80S-1.27DSA](#) [FCN-214Q030-G/0](#) [FCN-234P048-G/0](#) [FCN-235D050-G/C](#) [210-93-314-41-105000](#) [2-22603-0](#) [MDF7-40DP-2.54DSA\(55\)](#) [AXG720047](#) [5031084030](#) [MIT-114-03-F-D-K](#) [55323-1519](#) [DF33-2P-3.3DSA\(24\)](#) [YFT-20-05-H-03-SB-K](#) [503308-3040](#) [026-6203-PDB](#) [027-6203-PDB](#) [069159702701000](#) [10123981-102LF](#) [101A10019X](#) [55650-0588-C](#) [68682-310LF](#) [68684-306](#) [75140-7012](#) [87471-650](#) [YTW-30-07-H-Q-410-140](#) [194261-1](#) [FCN-268F024-G0D](#) [10124054-515LF](#) [68685-603](#) [8-1616154-3](#) [MIS-019-01-F-D](#) [FCN-268M024-G/3D](#) [20021832-06016C1LF](#) [KX15-20KLDL-E1000E](#) [MDF7-16DP-2.54DSA\(55\)](#) [AXE810124](#) [FCN-214J100-G/0](#) [FCN-230C068-E/S](#) [AXE812124](#) [AXE816124](#)