

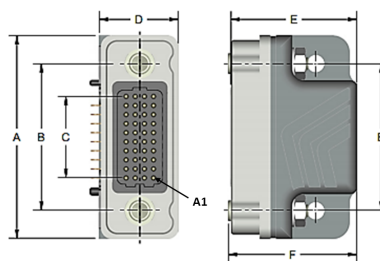


VRRAF – Rugged Right Angle (Female)

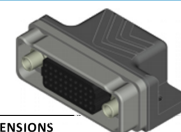
Pitch: 1.27 mm

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

DIMENSIONS



VRRAF DIMENSIONS							
Columns	A	B	C	Rows	D	E	F
10	1.125	0.813	0.450	4	0.438	0.698	0.714
20	1.625	1.313	0.950	5	0.488	0.748	0.764
30	2.125	1.813	1.450	6	0.538	0.798	0.814
40	2.625	2.313	1.950	8	0.638	0.898	0.914
50	3.125	2.813	2.450	10	0.738	0.998	1.014



Sample Part Number Format: VRRAF-04-10-50-00-G



SERIES
Rugged Right Angle
(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"



OPTIONS
Blank – Standard¹
G – Guide socket¹
N – Fixed jacknut¹
J – Turning jackscrew²
L – Locking screw²
E – Standard/EMI gasket¹
GE – Guide socket/EMI gasket¹
NE – Fixed jacknut/EMI gasket¹
JE – Turning jackscrew/EMI gasket²
LE – Locking screw/EMI gasket²

NOTES

¹ Shells & hardware supplied uninstalled.

² Connectors come pre-assembled with shells & hardware.

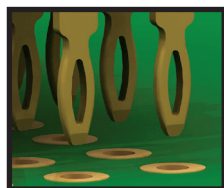
AirBorn can manufacture other configurations to your exact specifications.

RoHS Complaint; 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 AMS-2404, Class 3; 500 μ N min
Socket Contact (Mating Face): BeCu per ASTM B194
Socket Contact (Termination): Brass alloy per ASTM B36 (PIH or PTH) or
BeCu per ASTM B768 (press-fit contact)
Contact Finish (Mating Face): Localized gold finish per ASTM B488, Type II, Code C
over nickel per ASTM B689, Type I, 50 μ N min
Contact Finish (Termination): Localized gold finish per ASTM B488, Type II, Code C,
50 μ N min over nickel per ASTM B689, Type I, 50 μ N min (Press Fit) or localized gold per ASTM
B488, Type 1, Code A or C, 10-25 μ N over nickel per ASTM B689 Type I, 50 μ N min (PIH or PTH)
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 & passivated per NASM35333
EMI Gasket (GE and NE options only): Conductive Elastomer per MIL-DTL-83528 Type D

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 $\pm$ 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)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

AirBorn:

[VRRAF-06-40-50-03-N](#) [VRRAF-04-30-50-00-G](#) [VRRAF-06-40-50-00-G](#) [VRRAF-06-10-50-03-N](#) [VRRAF-10-50-50-00-N](#) [VRRAF-04-50-50-00-N](#) [VRRAF-04-10-50-00-G](#) [VRRAF-04-20-50-00-G](#) [VRRAF-04-30-30-01-N](#) [VRRAF-06-40-50-00-N](#) [VRRAF-04-10-50-03-N](#) [VRRAF-04-10-50-04-NE](#) [VRRAF-06-50-50-04-N](#) [VRRAF-06-10-50-04-N](#) [VRRAF-06-30-50-04-N](#) [VRRAF-04-10-50-00-N](#) [VRRAF-04-20-50-03-N](#) [VRRAF-04-30-50-03-N](#) [VRRAF-06-30-50-03-N](#) [VRRAF-04-20-50-00-NE](#) [VRRAF-06-10-50-00-E](#)