



RC442 - Low Profile Board-to-Board Stackable Connector

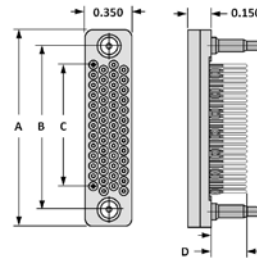
Contact spacing: 0.075" (1.91 mm)

A low profile bodied, high-density press-fit connector. Uses a patented female/compliant/male stacking contact system. Used in board-to-board stacking applications.

DIMENSIONS

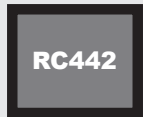
SIZE	A	B	C
28	1.014	0.784	0.450
52	1.464	1.234	0.900
76	1.914	1.684	1.350
100	2.364	2.134	1.800
128	2.889	2.659	2.325
152	3.339	3.109	2.775
200	4.239	4.009	3.675
252	5.214	4.984	4.650
300	6.114	5.884	5.550

Tolerances: ± 0.010"



CONTACT SELECTION	CONTACT D	HARDWARE E
30	0.270	0.370
31	0.300	0.400
32	0.400	0.500
33	0.500	0.600
34	0.700	0.800
35	0.800	0.900
36	0.900	1.000
37	0.600	0.700
38	1.000	1.100

Sample Part Number Format: RC442-052-311-4000



SERIES
Stackable
Compliant
Low-Profile
4 Rows
0.075" Spacing



CONFIGURATION
028 – 4 Rows/7 Columns
052 – 4 Rows/13 Columns
076 – 4 Rows/19 Columns
100 – 4 Rows/25 Columns
128 – 4 Rows/32 Columns
152 – 4 Rows/38 Columns
200 – 4 Rows/50 Columns
252 – 4 Rows/63 Columns
300 – 4 Rows/75 Columns



PLATING
1 – 50 μ" Au

CONTACT

30 – Press fit tail 0.270***
31 – Press fit tail 0.300***
32 – Press fit tail 0.400***
33 – Press fit tail 0.500***
34 – Press fit tail 0.700***
35 – Press fit tail 0.800***
36 – Press fit tail 0.900***
37 – Press fit tail 0.600***
38 – Press fit tail 1.000***



HARDWARE

39 – 0.370" Long (use with #30 contact)
40 – 0.400" Long (use with #31 contact)
41 – 0.500" Long (use with #32 contact)
42 – 0.600" Long (use with #33 contact)
43 – 0.800" Long (use with #34 contact)
44 – 0.900" Long (use with #35 contact)
45 – 1.000" Long (use with #36 contact)
46 – 0.700" Long (use with #37 contact)
47 – 1.100" Long (use with #38 contact)



VARIATION
Blank – None
XXX – Consult factory

NOTES

** Use with body style 442 or 422 only.

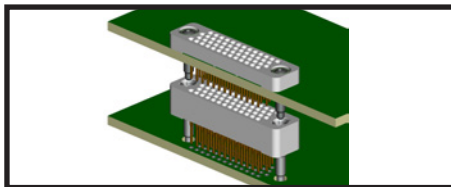
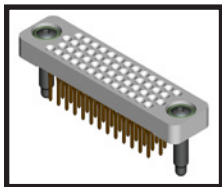


Press-Fit Tail

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

MATED HEIGHT

The connector body height is 0.150" but the functional spacing (the bottom surface of the board, on which the connector is mounted, to the top of the connector below it) can be modified based on the contact/pin length selected (see Table 2 in top window).



SI DATA – Differential 100 Ohm

1	Diff. Insertion Loss	5.0 GHz @ -3 dB
2	Diff. Return Loss	2.0 GHz @ -8 dB
3	NEXT	4.0 GHz @ -25 dB
4	FEXT	4.0 GHz @ -35 dB

MATERIALS and FINISHES

Contact: BeCu per ASTM B768 (BeCu C17410 brush alloy 174)
Contact Finish: Gold per MIL-G-45204 over nickel per IAW QQ-N-290
Molded Insulator: Glass-filled polyphenylene sulfide (PPS) per MIL-M-24519
Hardware: Stainless steel per ASTM A582, passivated per ASTM 967
Guide Pin/Socket: BeCu per ASTM B196/197, nickel-plated per QQ-N-290

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

PERFORMANCE

Contact Rating: 3 amperes
Operating Temperature: -65° C to +125° C
Insulation Resistance: 5,000 megaohms minimum @ 500 VDC
Durability: 500 connector mating cycles
Contact Resistance: 3 to 5 milliohms (contact length dependent)
Contact Engagement Force: 4.0 oz (113 g) max. w/0.0246" dia. test pin
Contact Separation Force: 0.5 oz (14 g) min. w/0.0226" dia. test pin
Compliant Insertion Force: 22.5 lb (10.21 Kg) max. per contact
Compliant Removal Force: 4.5 lb (2.04 Kg) min. per contact

Mouser Electronics

Authorized Distributor

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

AirBorn:

RC442-028-311-4000	RC442-052-371-4600	RC442-100-321-4100	RC442-028-371-4600	RC442-028-301-3900
RC442-100-341-4300	RC442-052-301-3900	RC442-152-301-3900	RC442-076-301-3900	RC442-100-311-4000
RC442-076-311-4000	RC442-028-331-4200	RC442-028-341-4300	RC442-028-321-4100	RC442-052-311-4000
RC442-052-341-4300	RC442-076-321-4100	RC442-076-351-4400	RC442-076-371-4600	RC442-100-381-4700
RC442-152-341-4300	RC442-152-351-4400	RC442-200-301-3900	RC442-028-361-4500	RC442-052-321-4100
RC442-052-331-4200	RC442-052-381-4700	RC442-076-381-4700	RC442-152-381-4700	RC442-200-321-4100
RC442-200-361-4500	RC442-252-341-4300	RC442-252-361-4500	RC442-300-301-3900	RC442-300-321-4100
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RC442-252-351-4400	RC442-300-331-4200	RC442-028-351-4400	RC442-076-331-4200	RC442-076-341-4300
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RC442-300-381-4700	RC442-300-371-4600			