



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



TYPE
 00 – None



VARIATION
 Blank – None
 XXX – Consult factory

HARDWARE

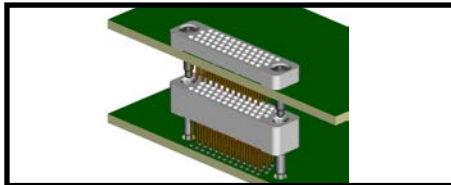
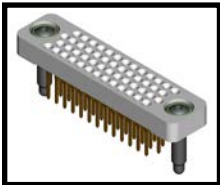
39 – 0.370" Long (use with #30 contact)
 40 – 0.400" Long (use with #31 contact)
 41 – 0.500" Long (use with #32 contact)
 42 – 0.600" Long (use with #33 contact)
 43 – 0.800" Long (use with #34 contact)
 44 – 0.900" Long (use with #35 contact)
 45 – 1.000" Long (use with #36 contact)
 46 – 0.700" Long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



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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).



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

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

Mouser Electronics

Authorized Distributor

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