



## RCII™

### RC324 - 3-Row Mid/Top-of-Stack Connector with SI

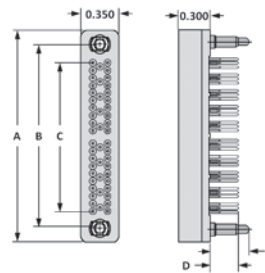
Contact spacing: 0.075" (1.91 mm)

A full bodied high-density press-fit connector with a 4-row aligned contact field for improved signal integrity. Use in RCII board-to-board stacking applications and/or at the top of the board stack.

### DIMENSIONS

SIZE	A	B	C
25	1.235	1.005	0.675
50	2.010	1.780	1.450
75	2.785	2.555	2.225
100	3.560	3.330	3.000

Tolerances: ± 0.010"

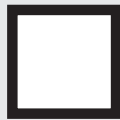


CONTACT SELECTION	CONTACT D	HARDWARE E
20	0.270	0.370
21	0.300	0.400
22	0.400	0.500
23	0.500	0.600
24	0.700	0.800
25	0.800	0.900
26	0.900	1.000
27	0.600	0.700
28	1.000	1.100

### Sample Part Number Format: RC324-050-201-3900



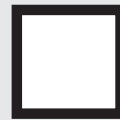
**SERIES**  
 Stackable  
 Compliant  
 Full-Profile  
 3 Rows  
 0.075" Spacing



**CONFIGURATION**  
 025 - 3 Rows/1 Bay  
 050 - 3 Rows/2 Bays  
 075 - 3 Rows/3 Bays  
 100 - 3 Rows/4 Bays



**PLATING**  
 1 - 50 μ" Au



**CONTACT**  
 20 - 0.270" Long  
 21 - 0.300" Long  
 22 - 0.400" Long  
 23 - 0.500" Long  
 24 - 0.700" Long  
 25 - 0.800" Long  
 26 - 0.900" Long  
 27 - 0.600" Long  
 28 - 1.000" Long



**HARDWARE**  
 39 - 0.370" Long (use with #20 contact)  
 40 - 0.400" Long (use with #21 contact)  
 41 - 0.500" Long (use with #22 contact)  
 42 - 0.600" Long (use with #23 contact)  
 43 - 0.800" Long (use with #24 contact)  
 44 - 0.900" Long (use with #25 contact)  
 45 - 1.000" Long (use with #26 contact)  
 46 - 0.700" Long (use with #27 contact)  
 47 - 1.100" Long (use with #28 contact)



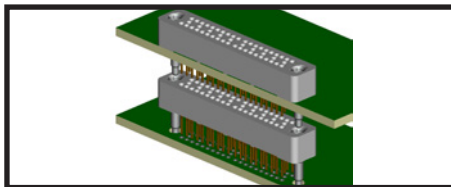
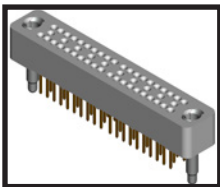
**VARIATION**  
 Blank - None  
 XXX - Consult factory



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 0.300" and, when used with the -20 or -30 (0.270") contact, the mounting is flush (board-bottom mounted to connector top). This board-bottom to connector top spacing can be modified based on the contact selected by approximately the difference in pin length. See Table 2.



### SI DATA - Differential 100 Ohm

1	Diff. Insertion Loss	6.0 GHz @ -3 dB
2	Diff. Return Loss	4.6 GHz @ -20 dB
3	NEXT	4.0 GHz @ -50 dB
4	FEXT	4.0 GHz @ -48 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-A967  
 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

NOTE: Performance values are estimates at this time. Actual values will be determined when final product testing is complete.