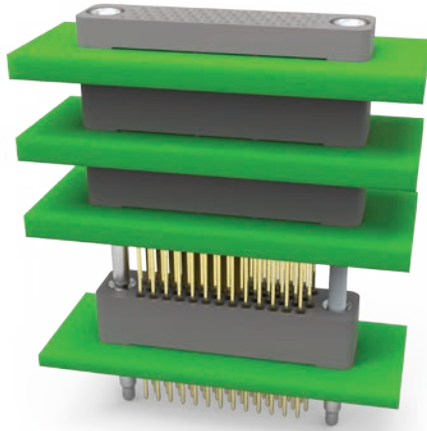




## Stackable, Press-Fit, Compliant Pin/Socket



A high-density, press-fit connector using patented, compliant pin stacking contacts consisting of a female/compliant/male configuration, used in board-to-board stacking applications.

Contact configurations, designed for improved signal integrity and trace design ease, are also available.

### Features & Benefits

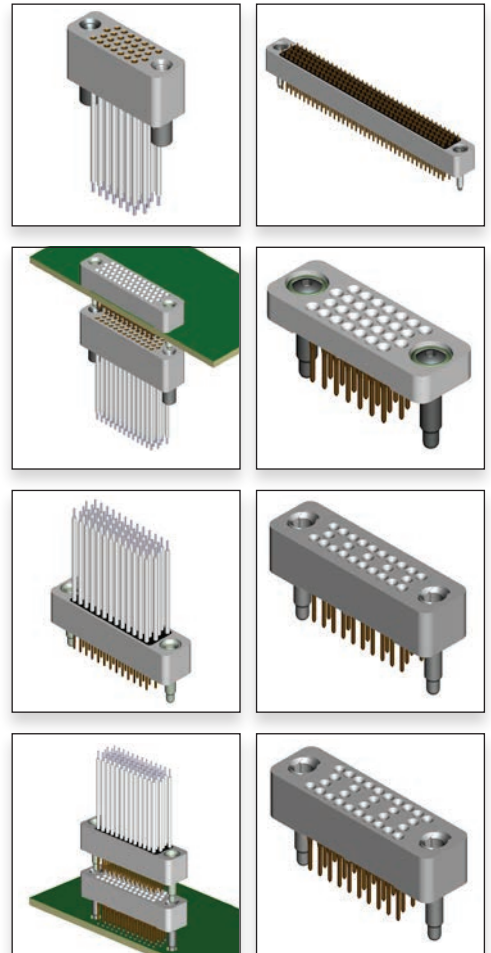
- BeCu contacts (special high-conductivity, high-temperature alloy)
- Board-to-board, cable-to-board and flex-to-board offering; both high-speed and power
- Contacts with different tail lengths can be selectively loaded in any pattern per customer requirement
- COTS (commercial-off-the-shelf) connector with less than 4 weeks' lead time
- Long "wipe", high "normal force", redundant "crossed cylinder" contact interface design provides a highly-reliable electrical connection
- RCII is optimized for signal routing; both single-ended and differential
- Reliable "eye-of-the-needle" compliant section design eliminates soldering

### Materials

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

### Performance

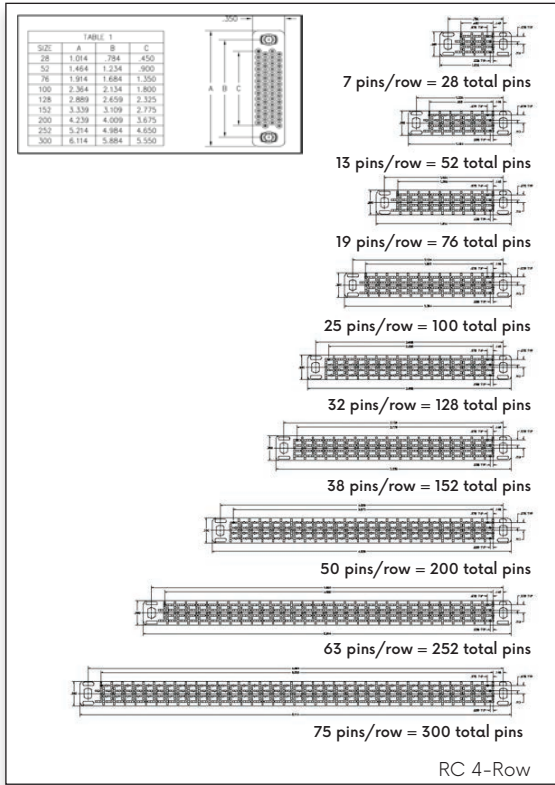
Current Rating	3.0 amperes
Operating Temperature	-65° C to +125° C
Insulation Resistance	5,000 megaohms minimum @ 500 VDC
Durability	500 connector mating cycles
Contact Resistance	3 to 5 milliohms (contact length dependent)
Contact Engagement Force	4.0 oz (113 g) max. w/0.0246" dia. test pin
Contact 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



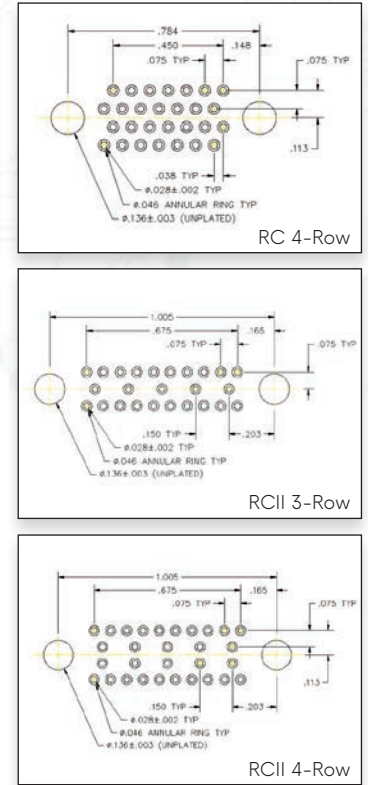
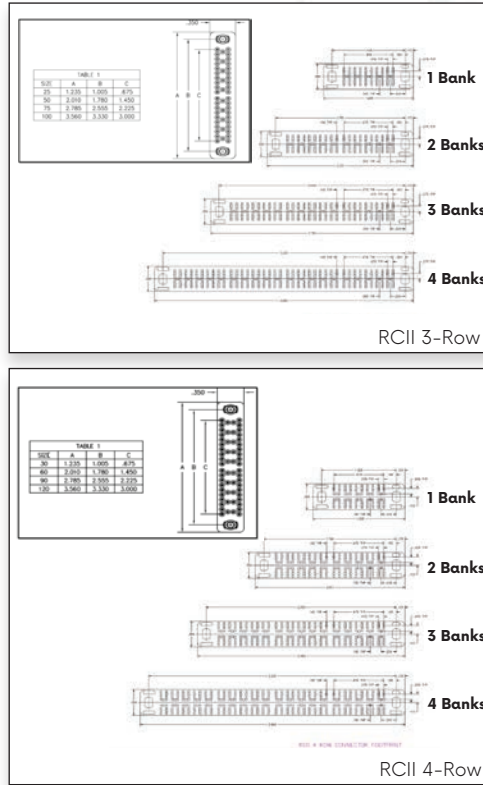
RCB-B



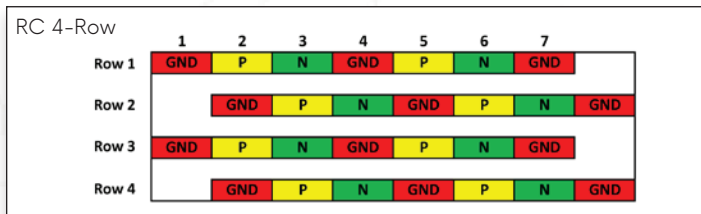
## SI Performance Summary for Mated Pairs & Typical PCB Footprint



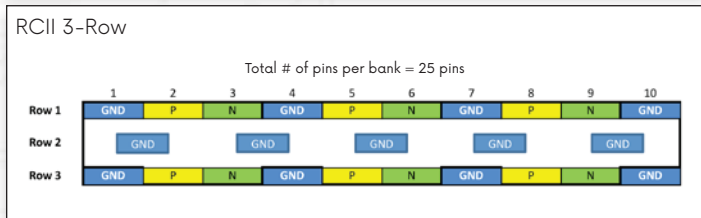
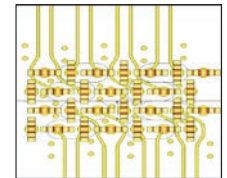
Pin Count



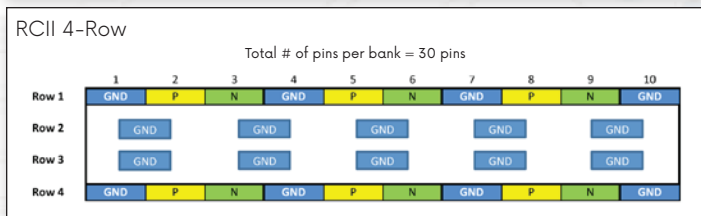
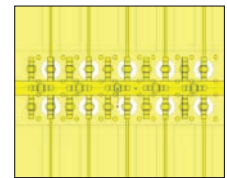
PCB Footprint



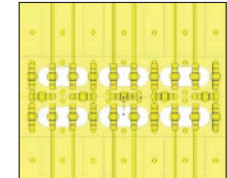
RC 4 Row, Differential 100 ohm		
Signal Integrity Performance (Connectors only)		
1	Diff. Insertion Loss	5 GHz @ -3dB
2	Diff. Return Loss	2.0 GHz @ -8dB
3	NEXT	4.0 GHz @ -25dB
4	FEXT	4.0 GHz @ -35dB



RC II 3 and 4 Row, Single Ended 50 ohm		
Signal Integrity Performance (Connectors only)		
1	S.E. Insertion Loss	6 GHz @ -3dB
2	S.E. Return Loss	4.0 GHz @ -20dB
3	NEXT	4.0 GHz @ -35dB
4	FEXT	4.0 GHz @ -30dB



RC II 3 & 4 Row, Differential 100 ohm		
Signal Integrity Performance (Connectors only)		
1	Diff. Insertion Loss	6 GHz @ -3dB
2	Diff. Return Loss	4.6 GHz @ -20dB
3	NEXT	4.0 GHz @ -50dB
4	FEXT	4.0 GHz @ -48dB



Typical Pin-Out

SI Performance Data