

B2A-PCB & B2C-PCB Printed Circuit Board Mounted Connectors

The B2A-PCB & B2C-PCB are sturdy, mechanical, screw type compression wire connectors. The copper "buss staple" at the bottom is designed to be inserted into two slots in the printed circuit board. The connectors can be used on .06" or .09" or .12" thick boards (leg is .13" high). Wave solderable, these connectors are aimed at 60-100 amp applications. Actual currents depend on mounted heat flow characteristics. Each application should be tested as constructed. Though rated the same, the B2C-PCB is larger in size and wire hole capacity.

- 1. Material is 6061-T6 aluminum, which is triple plated for corrosion resistance.
- 2. Aluminum has excellent heat dissipation characteristics and conductivity.
- 3. Buss staple and box connector have low thermal "inertia" which is compatible with <u>wave soldering.</u>
- 4. Plating type: Box: tin on copper on zinc. Buss staple: dull tin on copper.
- 5. Solderability testing can be offered to any special requirements.
- 6. Parts is supplied with a steel (zinc plated) screw. Option is an aluminum screw (tin plated).
- 7. Connector is UL recognized for 115 Amps AL7CU (75C°) rating with .047" buss supplied subject to UL approval of final PCB assembly. AL9CU (90C°) rating available with an aluminum screw.
- 8. B2A & B2C-PCB are AWG 2 to 14 capacity. Connectors with other capacities can be quoted.
- Wire retaining screw torque for the 5/16 screw is 50 inch-pounds (UL standard for this screw).
 Mounted to a typical board, the soldered joint can withstand multiple 60 inch-pounds torque applications.
- 10. Typical torque applied by an AWG 2 coarse stranded wire when forcibly bent while attached to a B2A/B2C-PCB is under 35 inch-pounds. (7strands x 0.1 dia.).
- 11. Other connectors can be custom made to meet customer specifications.

Customers should fully investigate the soldered interface with their PC board for adequate strength including (but not limited to) analysis of effects at anticipated operating temperatures, weight of hanging wires on creep strength, number of torque cycles on wire retention screw and thermal cycling effects on soldered interface. While standard property data and test data can be provided, no responsibility whatsoever will be taken for the mounted connector. IHI will however supply parts in accordance with agreed dimensions and specifications. Depending on long term storage conditions, solderability may be reduced over time.

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