B2B® High Density SMT Connectors
.050(.127mm) Pitch

Table of Models

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> Molded B2B® Connector (BB)</td>
<td><strong>Description:</strong> Molded B2B® Connector (BA)</td>
</tr>
<tr>
<td><strong>Index:</strong> -40°C to 260°C (-40°F to 500°F)</td>
<td><strong>Index:</strong> -40°C to 260°C (-40°F to 500°F)</td>
</tr>
</tbody>
</table>

Features:
- Robust, shrouded design with screw-machined terminals and multi-finger contacts can withstand the rigorous demands of blind mating and mating/unmating cycles.
- At 3 amps per pin, more contacts can be assigned to data/signal transfer (fewer pins needed to handle power and ground).
- High density - over 400 contacts per square inch.
- Industry standard footprints in four mated heights.
- Precision molded with integral polarization keying features.

Specifications:
- **Terminals:**
  - Brass - Copper Alloy (C36000) ASTM-B-16
- **Contacts:**
  - Beryllium Copper (C17200) ASTM-B-194
- **Solder Ball:**
  - Standard: 63Sn/37Pb
  - Lead-free: 95.5Sn/4.0Ag/0.5Cu
- **Plating:**
  - G - Gold over Nickel
  - Gold per ASTM-B-488
  - Nickel per QQ-N-290

Insertion Force (6.00mm, 300 position):
- 50g average (per pin)

Durability (mated cycles):
- 500 cycles (<10mΩ change in resistance)

Extraction Force (6.00mm, 300 position):
- 45g average (per pin)

Additional performance and test data available online.

How To Order

**Female**
- **Body Type**
  - BB XXX - XXX G - TR
  - **Packaging Options**
    - TR - Tape and Reel
      - (includes pick-up dot)
  - **Contact Plating**
    - RoHS Compliant:
      - G - Gold
- **Terminal Plating**
  - RoHS Compliant:
    - G - Gold

**Male**
- **Body Type**
  - BA XXX - XXX G - TR
  - **Packaging Option**
    - TR - Tape and Reel
      - (includes pick-up cap)
  - **Terminal Plating**
    - RoHS Compliant:
      - G - Gold

Products shown covered by patents issued and/or pending. Specifications subject to change without notice.
# B2B® High Density SMT Connectors

## .050/(1.27mm) Pitch

### Standard Footprints

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Positions</th>
<th>Rows</th>
</tr>
</thead>
<tbody>
<tr>
<td>.050/(1.27) Typ.</td>
<td>240</td>
<td>30x8</td>
</tr>
<tr>
<td>.050/(1.27) Typ.</td>
<td>300</td>
<td>30x10</td>
</tr>
<tr>
<td>.050/(1.27) Typ.</td>
<td>400</td>
<td>40x10</td>
</tr>
<tr>
<td>.050/(1.27) Typ.</td>
<td>500</td>
<td>50x10</td>
</tr>
</tbody>
</table>

Consult factory for custom sizes.

### Dimensional Information

#### Female

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C^2</th>
<th>D^2</th>
<th>E^2</th>
<th>F^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>.236(6.00)</td>
<td>1.704(43.28)</td>
<td>.622(15.80)</td>
<td>.202/5.13</td>
<td>1.626(41.30)</td>
<td>.567/14.40</td>
</tr>
<tr>
<td>.315(8.00)</td>
<td>1.704(43.28)</td>
<td>.622(15.80)</td>
<td>.273/6.93</td>
<td>1.626(41.30)</td>
<td>.567/14.40</td>
</tr>
<tr>
<td>.500(12.70)</td>
<td>1.704(43.28)</td>
<td>.622(15.80)</td>
<td>.462/11.73</td>
<td>1.626(41.30)</td>
<td>.567/14.40</td>
</tr>
<tr>
<td>.750(19.05)</td>
<td>1.704(43.28)</td>
<td>.622(15.80)</td>
<td>.712/18.09</td>
<td>1.626(41.30)</td>
<td>.567/14.40</td>
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#### Male

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<th>E^2</th>
<th>F^2</th>
</tr>
</thead>
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<tr>
<td>.236(6.00)</td>
<td>2.204(55.98)</td>
<td>.722/(18.34)</td>
<td>.202/(5.13)</td>
<td>2.126/(54.00)</td>
<td>.667/(16.94)</td>
</tr>
<tr>
<td>.315(8.00)</td>
<td>2.204(55.98)</td>
<td>.722/(18.34)</td>
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Additional mated heights coming soon. Consult factory.

*Approximate dimension after soldering. ^Dimensions do not include solder ball height.

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### Packaging & Options:

- **Male connectors** - supplied with a pick-up cap to protect male pins and facilitate automated pick-and-place. Pick-up cap remains in place during reflow.
- **Female connectors** - supplied with a polyimide dot to facilitate automated pick-and-place.
- **Tape and Reel** - Add -TR to end of part number for Tape and Reel packaging.
- **Standard Trays** - If no packaging code is indicated, connectors are shipped in standard trays (Note: Trays are not suitable for automated pick-and-place processes.)

### Available Online:

- RoHS Qualification Test Report
- Product Specification
- Test data
- Signal Integrity Data
- CAD Drawings