Rotaconnect® Rotatable Board-to-Board Connector

Amphenol extends the RotaConnect® Board-to-Board (BTB) range with a pegged version. The locating pegs aid simple placement. This eliminates the hold-down and hence will help customer save the space between connectors on the PCB.

The RotaConnect® BTB range is a unique rotatable Board-to-Board SMT connector that can be used to support perpendicular, coplanar and angled connections, in multiple mating and unmating directions.

The hermaphroditic "mates to itself" design enables mating at any angle between +90° and -60°, enabling the connectors to be placed anywhere on the PCB. This design allows the use of a single part number which will comprise both male and female contacts.

The high temperature grade housing material is reflow solder compatible. Tape and reel packaging permits vacuum pick and place application.

With this extension, Amphenol's RotaConnect® BTB range offers 2, 4 and 6 positions.



FEATURES

- Hermaphroditic "mates to itself" design
- Mates under any angle +90° and -60°
- Header contact contains a coined hole, the center of the hole is the intended rotation point
- Reliable dual beam contact
- Receptacle contact will guide itself into the center of the hole
- Pins are protected by housing
- Hold-down option
- Locating peg option

BENEFITS

- Eliminates the need for both a header and receptacle for Board-to-Board applications
- Angled connection is not an issue, as connectors can be placed anywhere on the PCB
- Connection Reliability
- Self-guided features prevent mis-mating and assure correct counterpart positioning
- Prevents pin damage during connector mating
- Better retention onto the PCB
- Simplify positioning even in manual assembly condition

TECHNICAL INFORMATION

MATERIAL

• Housing: High-temperature thermoplastic UL94V-0

Contact: Copper Alloy

■ Plating: GXT®

MECHANICAL PERFORMANCE

■ Durability: ≤ 20 mating cycles

■ Mating Angle: Between +90° and -60°

ELECTRICAL PERFORMANCE

Current Rating: Up to 5AOperating Voltage: 125V

PACKAGING

■ Tape & Reel

APPROVALS AND CERTIFICATIONS

■ UL E66906

SPECIFICATION

Test specifications EIA 364 / IEC test methods

ENVIRONMENTAL

■ Operating Temperature Range: -40°C to +125°C

TARGET MARKETS/APPLICATIONS



Control Boards Sensors, Actuators Rigid LED Strips Automotive Lighting Channel Lettering Lighting Luminaries

PART NUMBERS

| Description | No. of Contacts | Termination | Contact Type | Part Number |
|--|-----------------|-------------|------------------|----------------|
| 2 Position Hermaphroditic Rotatable Board-To-Board Connector | 2 | SMT | 1 Male, 1 Female | 10120045-200LF |
| 2 Position Hermaphroditic Rotatable Board-To-Board Connector with Locating Pegs | 2 | SMT | 1 Male, 1 Female | 10120045-201LF |
| 4 Position Hermaphroditic Rotatable Board-To-Board Connector | 4 | SMT | 2 Male, 2 Female | 10120045-400LF |
| 4 Position Hermaphroditic Rotatable Board-To-Board Connector with Locating Pegs | 4 | SMT | 2 Male, 2 Female | 10120045-401LF |
| 6 Position Hermaphroditic Rotatable Board-To-Board Connector | 6 | SMT | 3 Male, 3 Female | 10120045-600LF |

Find part number details using the search box on www.amphenol-cs.com