BOARD/WIRE-TO-BOARD CONNECTORS



ROTACONNECT® ROTATABLE BOARD-TO-BOARD CONNECTOR

OVERVIEW

FCI 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 $+90^{\circ}$ 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, FCI's RotaConnect[®] BTB range offers 2 and 4 positions with hold-down and locating peg options.



FEATURES

BENEFITS

Hermaphroditic "mates to itself" design	 Eliminates the need for both a header and receptacle for Board-to-Board applications
 Mates under any angle +90° and -60° 	 Angled connection is not an issue, as connectors can be placed anywhere on the PCB
• Header contact contains a coined hole, the center of the hole is the intended rotation point	• Connection Reliability
Reliable dual beam contact	
• Receptacle contact will guide itself into the center of the hole	e • Self-guided features prevent mis-mating and assure correct counterpart positioning
Pins are protected by housing	Prevents pin damage during connector mating
Hold-down option	Better retention onto the PCB
Locating peg option	Simplify positioning even in manual assembly condition

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TECHNICAL INFORMATION

MATERIALS

- Housing: High-Temperature thermoplastic UL94V-0
- Contact: Copper Alloy
- Plating: GXT™

ELECTRICAL PERFORMANCE

- Current Rating: up to 5A
- Operating Voltage: 125V

ENVIRONMENTAL

• Operating Temperature: -40°C to +125°C

MECHANICAL PERFORMANCE

- Durability : \leq 20 mating cycles
- + Mating Angle: between +90° and -60°

SPECIFICATIONS

• Test specifications EIA 364 and IEC test methods

APPROVALS AND CERTIFICATIONS

• UL E66906

PACKAGING

• Tape and Reel

TARGET MARKET/APPLICATIONS

- Industrial
 - 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

Mouser Electronics

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FCI / Amphenol:

10120045-200LF 10120045-400LF 10120045-401LF 10120045-201LF