



0.5MM FINE PITCH HERMAPHRODITIC (FPH) BOARD-TO-BOARD CONNECTORS

HERMAPHRODITIC DESIGN SIMPLIFIES INVENTORY MANAGEMENT

TE Connectivity's (TE) 0.5mm fine pitch board-to-board connectors feature a hermaphroditic design that mates to itself, reducing inventory product mix with consolidated part numbers and components. This also helps save the customer time and costs associated with qualifying new parts for a design - instead of a header part and receptacle part for each connection, there is only one part number.

Key Features and Benefits

- **Simplify inventory**
 - Hermaphroditic "mates-to-itself" design
 - Save time and cost associated with qualifying new parts
- **Dependable performance**
 - Perform reliably in demanding environments
 - Stub-less contact interface supports PCIe Gen 3 compatibility
 - Up to 8 Gbps data rates
 - Housing available in UL 94V-0 flammability-rated LCP material
- **Reliable connections**
 - Dual point contact design for better precision
 - Four guidance posts ensure easy mating

Applications

- Point-of-Sale (POS) Devices
- Retail equipment
- Networking
- Data and mass storage
- Instrumentation
- Industrial controls
- Medical equipment
- Military equipment
- Automotive

Mechanical

- Durability: 50 mating cycles
- Mating force: 68g max per contact pair
- Un-mating force: 10g min per contact pair
- Wipe length: 1.0mm minimum
- SMT lead co-planarity: 0.08mm maximum

Electrical

- Current rating per contact: 0.5A DC maximum
- Dielectric withstanding voltage: 500 Volts
- Voltage rating: 30 Volts
- Contact resistance: 30 milliohm maximum
- Operating temperature: -40°C to 125°C

Materials

- Housing: Liquid Crystal Polymer, UL 94-V0 classified, Color: Natural/Black
- Contacts: Copper alloy
- Plating: Performance-based with gold
- All materials lead-free RoHS compatible

Product Offering

TE Part Number	# of Positions	With Boss	Color
2199070-4	24	No	Natural
1-2199070-4	24	Yes	Natural
2199325-4	24	No	Black
2291283-1	30	Yes	Black
2291283-2	30	No	Black

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