



THE DATASHEET OF
172952-1001

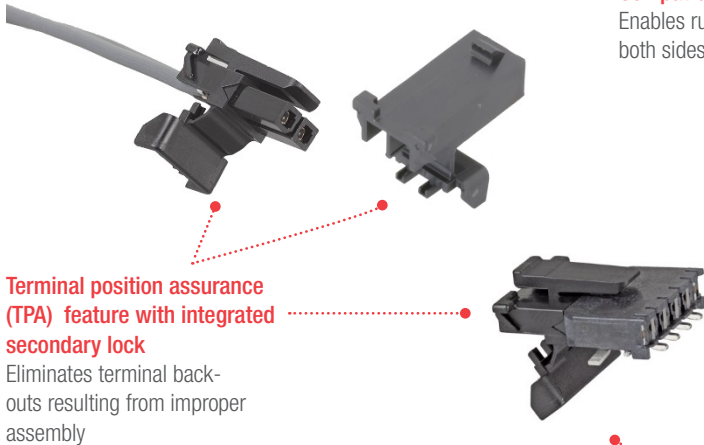


Micro-Fit TPA W-to-W, W-to-B and B-to-B Connector Family



Micro-Fit TPA Connector Family ensures proper terminal insertion and prevents accidental back-outs for wire-to-wire, wire-to-board and board-to-board configurations, with single-row components delivering a one-piece solution and the double-row a two-piece retainer

Features and Benefits



Terminal position assurance (TPA) feature with integrated secondary lock

Eliminates terminal back-outs resulting from improper assembly

Fully polarized housings

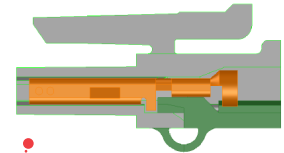
Assures proper mating orientation. Compatible with existing headers and plugs

Single-row receptacle incorporates a 1-piece housing and terminal lock design

No secondary pieces, reducing SKUs

Fully isolated contacts on each side of the interface

Prevents potential arcing



Cross Section Showing TPA Feature Activated in the Single-Row Receptacle

Single- and dual-row, wire-to-wire and wire-to-board configurations immediately available in multiple circuit sizes

Provides wide range of design flexibility, and supports rapid implementation

Applications

Consumer / Home Appliance

- Harness manufacturers
- Appliances

Data / Computing

- Harness manufacturers
- Desktops
- Workstations
- Power supplies
- Uninterruptible Power Supply (UPS)

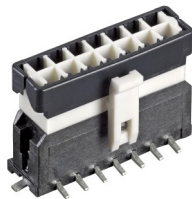
Telecommunications / Networking

- Harness manufacturers
- Servers
- Routers
- Switches

Automotive / Commercial Vehicle

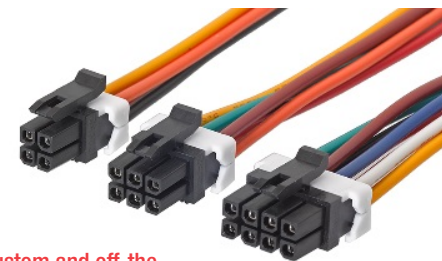
- Harness manufacturers
- Non-sealed applications
- Inside devices

Micro-Fit TPA Dual-Row Receptacle and Plug, Mated



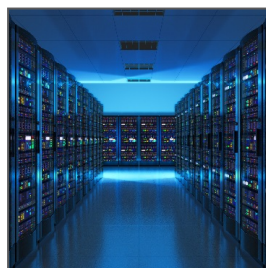
New tang-less terminals

Avoids snagging during mating



Both custom and off-the-shelf assemblies available

Provides quick availability for development and production programs and customized versions for final designs



Servers



Work Station



Refrigerator

Micro-Fit TPA W-to-W, W-to-B and B-to-B Connector Family



Specifications

REFERENCE INFORMATION

Packaging:
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With:
 Micro-Fit TPA Single-Row Receptacles mate with Micro-Fit TPA Single-Row Plugs (series [200875](#)), Micro-Fit 3.0 Single-Row Plug (Series [43640](#)) and Header (Series [43650](#));
 Micro-Fit 3.0 Dual-Row Plug Housing (Series [43020](#)) and Header (Series [43045](#) and [44914](#))
 Terminal Used: Micro-Fit 3.0 female crimp terminals (Series [43030](#), [46235](#)); Micro-Fit male crimp terminals (Series [43031](#))
 Designed In: Millimeters
 RoHS: Yes
 Halogen Free: Yes (non-Glow-Wire versions)
 Glow Wire Compliant: Option Available, [Contact Molex](#)

ELECTRICAL

Voltage (max.): 600V
 Current (max.): 5.0 to 10.0A (Please see product specifications; determined by terminal used)
 Contact Resistance (max.): 10 milliohms
 Dielectric Withstanding Voltage: <5mA
 Insulation Resistance (min.): 1,000 Megohms

MECHANICAL

Contact Insertion Force (max.): 14.7N per contact
 Contact Retention to Housing (min.): 24.5N
 Mating Force (max.): 8N per circuit
 Unmating Force (min.): 3.7N per circuit
 Durability (max.): typically 30 cycles, refer to product specifications

PHYSICAL

Housing: Nylon
 Contact: Various
 (Phosphor Bronze, Copper Alloy – see Product Specifications for Particular Connector System)
 Operating Temperature: -40 to +105°C

Ordering Information

Receptacles and TPA Retainers

| Series No. | Component | Configuration |
|------------------------|---|--|
| 171850 | TPA Single-Row Receptacle (mates with 43640, 43650) | Wire-to-Wire, Wire-to-Board |
| 172952 | TPA Dual-Row Receptacle (mates with 43020, 43045, 44914) | |
| 172953 | TPA Retainer | 2 Parts per Receptacle; Same Part Number |
| 200875 | Plug (Mates with 171850 and Micro-Fit 3.0 Receptacle 43645) | Wire-to-Wire |

Terminals

| Series No. | Component | Wire Gauge (AWG) |
|-----------------------|---|------------------|
| 43031 | Male Terminal (Use with Housing Series 200875) | 20 to 30 |
| 43030 | Female Terminal (use with Receptacle Series 171850, 172952) | |

Off-the-Shelf Cable Assemblies

| Series No. | Product | Circuits | Lengths (m) |
|-----------------------|--|----------|---------------|
| 45132 | Off-the-Shelf Micro-Fit TPA Discrete Wire Cable Assemblies | 4, 6, 8 | 1.0, 1.5, 3.0 |

AVAILABLE OPTIONS: OTHER CIRCUIT SIZES

| Series No. | Rows | Component | Configuration | Circuits |
|-------------------------------|--------|------------|-----------------------------|----------|
| Contact Molex | Single | Receptacle | Wire-to-Wire, Wire-to-Board | 8 to 12 |
| | Dual | | | 16 to 24 |

www.molex.com/link/microfit30.html

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-  Shortage Management
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