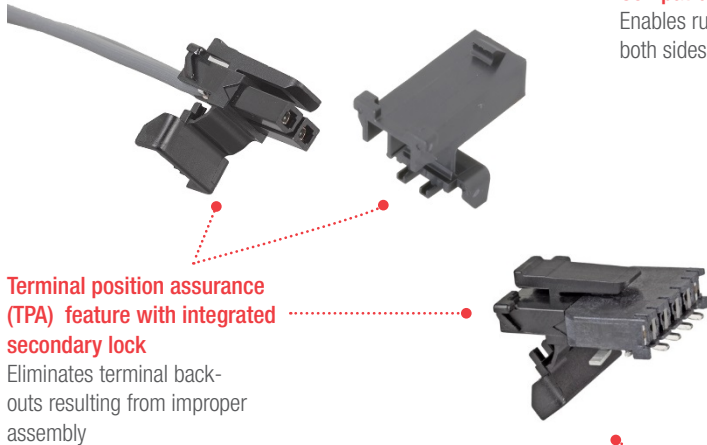


# Micro-Fit TPA W-to-W, W-to-B and B-to-B Connector Family



**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



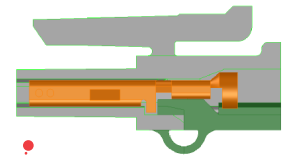
**Terminal position assurance (TPA) feature with integrated secondary lock**

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)

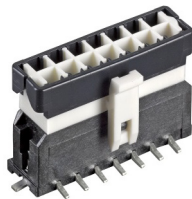
### Telecommunications / Networking

- Harness manufacturers
- Servers
- Routers
- Switches

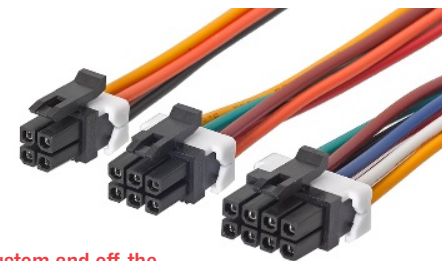
### Automotive / Commercial Vehicle

- Harness manufacturers
- Non-sealed applications
- Inside devices

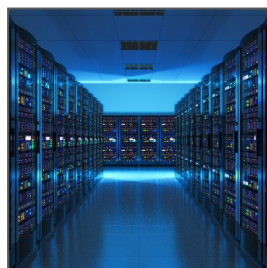
*Micro-Fit TPA Dual-Row Receptacle and Plug, Mated*



**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
<a href="#">171850</a>	TPA Single-Row Receptacle (mates with 43640, 43650)	Wire-to-Wire, Wire-to-Board
<a href="#">172952</a>	TPA Dual-Row Receptacle (mates with 43020, 43045, 44914)	
<a href="#">172953</a>	TPA Retainer	2 Parts per Receptacle; Same Part Number
<a href="#">200875</a>	Plug (Mates with 171850 and Micro-Fit 3.0 Receptacle 43645)	Wire-to-Wire

### Terminals

Series No.	Component	Wire Gauge (AWG)
<a href="#">43031</a>	Male Terminal (Use with Housing Series 200875)	20 to 30
<a href="#">43030</a>	Female Terminal (use with Receptacle Series 171850, 172952)	

### Off-the-Shelf Cable Assemblies

Series No.	Product	Circuits	Lengths (m)
<a href="#">45132</a>	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
<a href="#">Contact Molex</a>	Single	Receptacle	Wire-to-Wire, Wire-to-Board	8 to 12
	Dual			16 to 24

[www.molex.com/link/microfit30.html](http://www.molex.com/link/microfit30.html)

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