



# MINI-FIT TPA 2 POWER CONNECTORS

## Molex Mini-Fit TPA 2 Connectors Prevent Contact Back-Out to Reduce Product Quality Issues and Warranty Claims

### BUSINESS CHALLENGE

**Provide the telecom and data networking market with a connector solution for high-end system architectures that will allow customers to reduce layer counts**

Industries from automakers to home appliance manufacturers increasingly rely on sophisticated electronics to deliver more for their customers at lower costs. Consumers have come to expect standard features such as advanced navigation and safety systems in their vehicles and capacitive fluid level monitoring in their refrigerators, dish washers, and washing machines.

These complex applications require accurate and reliable connector systems to avoid costly service issues and warranty claims. Traditional connectors are susceptible to contact back-out, particularly when lower-strength, smaller-gauge wires are used. A terminal that is not fully loaded into the connector — a common problem in assembly-line operations — will often still pass continuity testing at the factory.

Once the consumer receives the faulty unit, the terminal will eventually come loose and the unit will fail to power up. The result is an upset customer who requires an expensive service technician to troubleshoot the problem and provide a relatively simple fix.

### SOLUTION

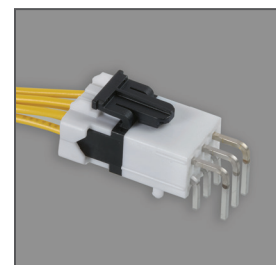
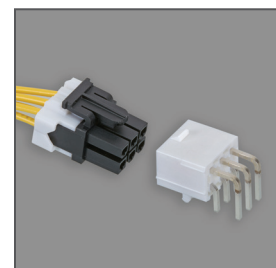
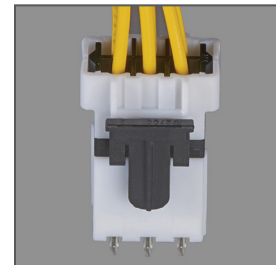
**Molex Mini-Fit TPA 2 Power Connectors prevent quality issues that affect a manufacturer's bottom line.**

Mini-Fit TPA 2 Power Connectors provide manufacturers with a secure and reliable solution to ensure proper mating and prevent accidental terminal back-outs that can lead to product failure. Terminal position assurance (TPA) provides a secondary locking feature to reduce assembly error. If a contact isn't properly positioned, the TPA will not fully latch onto the housing, alerting the assembler to fix the error. Fully isolated header pins and terminals protect contacts from damage during handling and mating. The positive-lock receptacle makes an audible click when the connection is made to establish that assemblies will not accidentally disengage. White and black options are available with Molex franchise distributors.

### CUSTOMER BENEFITS

**Current ratings and compatibility of Mini-Fit TPA 2 connectors meet quality standards and reduce engineering time and resources.**

- Mini-Fit TPA 2 Power Connectors deliver a 9.0A current rating and are compatible with standard Mini-Fit headers, allowing easy implementation into existing designs.
- There's no need to purchase a specific TPA header or make significant revisions to interfaces.
- Molex has the most complete range of certified and compliant TPA connectors of any manufacturer worldwide — quickly available off the shelf or custom built for final designs.
- Molex offers a TPA solution for nearly any application, including ISO/TS16949-certified models to meet auto industry standards.



To learn more [www.molex.com/FiT](http://www.molex.com/FiT)

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