molex

WIRE-TO-BOARD CONNECTORS

Molex Pico-Clasp Wire-to-Board Connector Options Enhance System Versatility and Support Innovative R&D

BUSINESS CHALLENGE

Molex customers seeking to optimize PCB real estate as part of their research and development efforts continually seek ever-smaller, more durable connector options.

To achieve the desired minimization for drones, smart meters, patient monitors, mobile POS terminals and other innovative electronic devices geared to the consumer, medical, industrial and automotive markets, customers are eager to take advantage of a broad spectrum of connectors that help them maximize limited PCB space.

At the same time, there's growing demand for increased reliability and durability along with increased need for multiple connectors within a single application.

The ability to use one system and family of connectors rather than having to select solutions from multiple vendors reduces cost, saves time and improves efficiency for both large OEM customers and smaller customers who source through distribution.

SOLUTION

Molex offers a full range of circuit sizes, orientation and plating options through its Pico-Clasp connector family.

Molex's core 1.00mm pitch Pico-Clasp Connectors offer a versatile wire-to-board system that simplifies development by delivering a wide variety of design options well-suited to a small footprint – all within the same family.

The small pitch is ideal for customers who need to miniaturize and optimize PCB space, while the availability of multiple connector versions recognizes that customers are developing products which often require more than one type of connector.

Connectors are available in single-row with gold and tin-plated versions with inner and outer lock options, as well as dual row gold plated version. Now we also offer 0.38 and 0.76µm thicker gold plating versions to cover customer needs. The gold plating provides the superior reliability, durability and longevity that customers value for signal connection in numerous applications.

In addition to space-saving inner friction locks, the connectors feature an outer

positive lock for secure mating retention and easy connector insertion and extraction. The positive inner lock ensures secure mating retention with low mating and unmating forces while preventing wire tangling and latch breakage. Customers can also take advantage of assembly and cost efficiencies with SMT mounting and automated assembly that reduces manual labor processes.

To provide maximum design flexibility for customer, Pico-Clasp connectors cover circuit sizes from 2 to 50 and can withstand operating temperatures from -40 to \pm 105°C. In addition, the connectors can accept up to 2.0A.

Molex Pico-Clasp connectors offer customers the advantage of one-stop shopping, as well as the simplicity of relying on a single system of connectors, enabling them to efficiently meet innovative design needs – and deliver products that meet the highest performance standards.

BENEFITS AND ROI

Unmatched Versatility within a Single Brand and Connector Line

- Pico-Clasp Connectors are available in a full range of various plating options, circuit sizes and orientation to provide R&D flexibility and support innovation
- The 1.0mm pitch wire-to-board connectors save space, enabling customers to optimize PCB real estate for additional product features and functions
- The connectors tolerate temperatures from -40 to +105°C, offering a wider ambient temperature range compared to most competitors
- The connectors are capable of running up to 2.0A maximum, double that typically provided by competitors, double that typically provided by competitors
- The gold-plating options provide highly desirable reliability and durability for numerous applications

To learn more www.molex.com/link/picoclasp.html

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