

NanoMQS

MINIATURIZED AUTOMOTIVE CONNECTOR SYSTEM

- 1.8mm connector system for space-constrained signal interfaces



Based on TE Connectivity's highly successful MQS connector system, the miniaturized NanoMQS connector system offers a locking lance terminal design, which audibly and tangibly latches onto the plastic housing once the terminal is fully inserted. The NanoMQS connector design has a pin pitch of 1.8mm enabling a PCB footprint reduction by up to 50% while offering up to 6 Amps of nominal current capacity, operating at a maximum operating temperature of 170°C (AG), while meeting automotive-robust specifications. The portfolio includes receptacle & tab terminals for round wires, and FFC terminal for flat flexible/printable cables including different types of contact surfaces to suit every application technical requirement.

APPLICATIONS

- Battery/Cell Control Modules
- Engine Control Units and Airbags
- Blackbox applications with extreme space constraints (headlamps, steering wheel, mirrors, doors, cameras, audio systems)

BENEFITS

- Space and weight savings – Up to 50% reduced PCB footprint and weight, compared to 2.54mm pin-pitch connector
- Locking Functions – CPA, Koshiri, primary and secondary contact locking
- Multiple Variants – Receptacle and tab terminals for round wires, automotive-grade FFC/FPC terminal for flat flexible/printed cables including different types of contact surfaces, 2-32 position connectors
- Easy Adoption – Integrated into the MQS terminal family series and connector cavity compatible with Gen50 locking lance

PRODUCT FEATURES

- 1.8mm pin-to-pin pitch
- 0.13mm to 0.35 mm² wire range
- Mating for 0.5 x 0.4 blade size
- Current capacity: 6A (90°C)
- Max. Temperature 170°C (Ag)
- SG4 Vibration Grade (Ag)
- LV214 compliant & USCAR (meets electrical requirements)
- Present in various European OEMs
- Locking Lance design
- Top latch and side latch
- Primary and secondary contact locking
- Click-audible connector position assurance (CPA)
- Koshiri Connector Design as Anti-Stubbing feature
- 2-to-11 position 1-row family
- 4-to-20 position 2-row family (with or without CPA) 90° and 180° 1 and 2-row headers (S-bending header design)
- NanoMQS FFC Terminal and Housing (8, 20 & 32 position)

LEARN MORE

- [NanoMQS Connector Product Page](#)
- [Miniature Product Group Page](#)
- [Miniaturized Automotive Connectivity Video](#)
- [Miniature White Paper](#)
- [Battery White Paper](#)
- [Miniature Portfolio \(US\)](#)
- [Miniature Portfolio \(EMEA\)](#)
- [Signal and Power Connector Brochure](#)
- [Battery Management System Resources](#)