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

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

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)