

# **PicoMQS**

# AUTOMOTIVE-GRADE 1.27MM PITCH MINIATURE SIGNAL CONNECTOR SYSTEM

- 1.27mm robust and reliable connector system for space-constrained signal interfaces
- Up to 78% reduction in PCB footprint (compared to MQS)



TE Connectivity's PicoMQS automotive connector system delivers a cutting-edge, miniaturized solution that meets the growing demand for compact, high-performance connectivity in modern vehicles. Engineered for durability and ease of integration, PicoMQS offers automotive-grade robustness to withstand high-vibration and high-temperature environments, while enabling a 55% reduction in crimp length and up to 78% reduction in PCB footprint. Ideal for connecting sub-systems like headlamp units, steering wheel modules, and battery management systems, this solution helps channel partners meet customer needs for space-saving, reliable, and scalable interconnects—making it the smallest automotive-qualified crimped terminal, connector, and header system on the market.

# **APPLICATIONS**

- Head lamps/indicators
- · Steering wheel controls
- Front and rear cameras
- Switches/sensors/roof control/antenna module
- Wire harness/electrical systems
- HVAC
- Audio modules
- Battery applications: (battery management system, battery/cell control modules)

#### **BENEFITS**

- Automotive-grade robustness with Class 2 vibration stability with maximum temperature of 130°C (Sn) / 150°C (Ag). 0.22 wire, continuous current capability up to 4A @90°
- Best-in-class miniaturization/space reduction for space-constrained signal interfaces with up to 78% reduction in PCB footprint (compared to MQS), 1.27 mm pin pitch (30% reduction), and 55% reduction in crimp length with complete LV214 qualification
- Smallest LV214 qualified crimped connection with anti-scooping features, secondary locking system, Kojiri connector design
- Manufacturing ease, quality and cost efficiency with automated pin insertion and S-bending solder pin design for camera control for header board position with a reduced pin length by 4mm (42% shorter length)

#### **TARGET MARKETS**

- Automotive
- Transportation
- · Industrial & Commercial Transportation

# **PRODUCT FEATURES**

- 1.27mm pin-to-pin pitch
- · SG2 vibration grade
- 0.13mm<sup>2</sup> to 0.22mm<sup>2</sup> wire range
- Current capacity: 4A (90°C)
- Mating for 0.5mm x 0.4mm blade size
- S-bended pins header design
- Max. temperature 130°C (Sn) / 150°C (Ag)
- Automotive standard compliant (LV214)
- · Locking lance design
- · Primary and secondary contact locking
- Click-audible connector position assurance (CPA) possible
- Clearance and creepage distance on a level of 12V
- FFC terminal coming soon
- 2-to-22 position side latch housings
- · 2-to-22 position headers
- Receptacle 0.22 FLU & FLR (0.13 FLR)

# **LEARN MORE**

- PicoMQS Connector Product Page
- PicoMQS Product Video
- Miniature Automotive Connector Systems
   Portfolio Landing Page
- Automotive Connector Strategies and Solutions for Space Reduction White Paper
- Battery Connectivity, Management and Protection White Paper
- Miniaturized Connector Solutions Portfolio (NA)
- Miniaturized Connector Solutions (EMEA)
- Battery Management System Resources

