

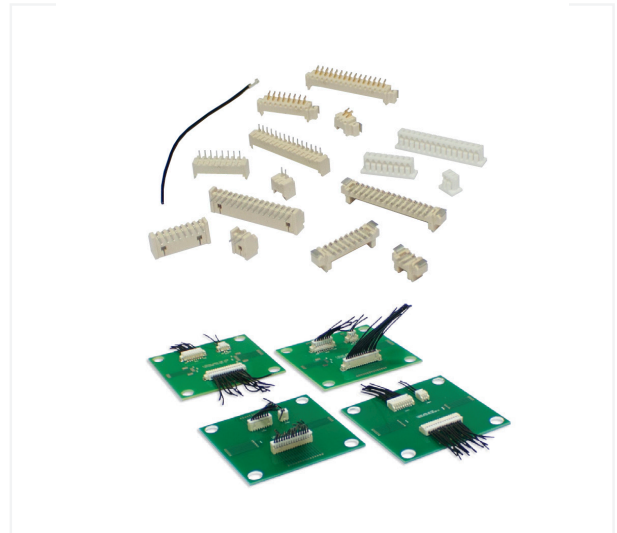
1.25MM WIRE-TO-BOARD SYSTEM

OVERVIEW

FCI's 1.25mm pitch wire-to-board connector series is designed for a wide variety of applications in Industrial, Automotive and Consumer.

The range consists of terminals, crimp housings and PCB headers in straight and right angle, surface mount and through mount configurations. It is a single row design, available with from 2 to 15 circuits. A crimping application tool is also available for wire harness assembly.

Unlike many other products for the same applications, FCI's 1.25mm wire-to-board range conforms to the EU Industry Safety Standard, PCB header material meets halogen free requirements and the products can be operated in the temperature range from -40°C to $+105^{\circ}\text{C}$.



FEATURES & BENEFITS

- Operating temperature: -40°C to $+105^{\circ}$
- Plating options: Matte tin, gold flash, $15\mu\text{in.}$ gold and $30\mu\text{in.}$ gold
- Circuits: #2~#15 positions available, extension up to 20 positions
- Current rating: 1A
- Polarized Mating Geometry: crimping housing is polarized to prevent mis-mating with PCB header
- Friction lock: crimping housing is equipped with friction to prevent mis-mating with PCB header
- PCB header material (resin) meets halogen free requirement
- Housing meets EU Industry Safety Standard
- RoHS compliance and UL approved
- Tape and reel packaging benefits pick and place of SMT production process

TARGET MARKETS/APPLICATIONS

- Office equipment
- Industry control
- Instrumentation/Metering
- Vending POS machine
- Small motor/Robot Control
- Security
- Car audio
- Alarm systems
- Industrial
- Consumer

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TECHNICAL INFORMATION

MATERIALS

- Contact: Copper alloy
Plating: Matte tin, gold flash, 15µin. gold and 30µin. gold over nickel
- Housing: Thermoplastic or thermoplastic high temperature, UL94V-0
- Metal hold down: Copper alloy
Plating: Matt tin

ELECTRICAL PERFORMANCE

- Contact resistance: 20mΩ max.
- Insulation resistance: 100MΩ min.
- Voltage rating: 125V AC, DC
- Current rating: 1A (0.8A -32 AWG)
- Dielectric withstand voltage: 500V AC/minute

ENVIRONMENTAL

- Resistance to reflow soldering heat:
 - Pre-heat: 150°C to 180°C, 60 – 90 seconds
 - Heat: 230°C min. , 40 seconds min.
 - Peak temperature: 260°C max. , 10 seconds max.
- Resistance to hand soldering heat:
 - Soldering iron: 350±10°C
 - Duration: 3 – 4 seconds min.
- Thermal shock (temperature cycling): conforms to EIA-364-32A
- Humidity (temperature cycling): conforms to EIA-361-31A
- Temperature life (heat aging): conforms to EIA-361-17A, 105°C for 96 hours
- Salt spray: conforms to EIA-364-26B
- Solderability: solderable area to have min. 95% solder coverage

MECHANICAL PERFORMANCE

- Mating & un-mating force: conforms to EIA-364-13
- Contact retention force: 0.5Kgf min.
- Hold down/Housing retention force: 1.0Kgf min.
- Wire retention force: 0.5Kgf min.
- Terminal/Housing retention force: 0.5Kgf min.
- Vibration: 1µs max. , EIA-364-28 Condition I
- Shock: 1µs max. , EIA-364-27A
- Durability: 30 cycles

SPECIFICATIONS

- Product Spec.: GS-12-675
- Packaging Spec.: GS-14-1592; GS-14-1593

APPROVALS AND CERTIFICATIONS

- RoHS conforms to EU Directive 2002/95/EC
- UL approval
- Housing connector conforms to IEC 60695-2 Industry Safety Standard (Glow Wire test)

PACKAGING

- PCB Header: tape and reel
- Crimping Housing: bag
- Terminal: reel

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PART NUMBERS

