

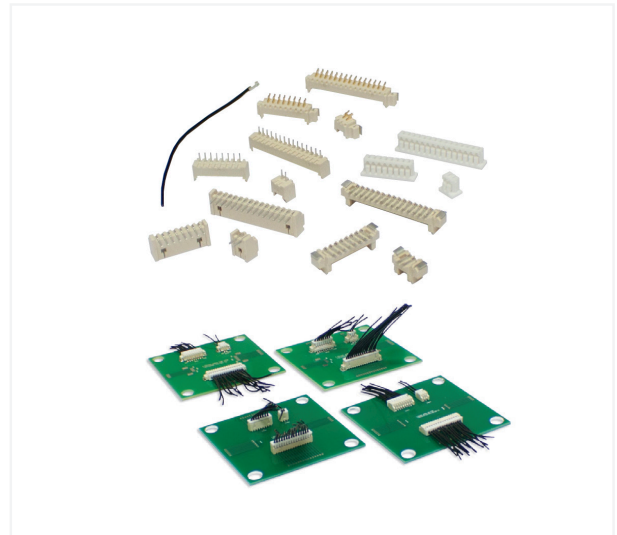
# 1.25mm WIRE-TO-BOARD SYSTEM

## OVERVIEW

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

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  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ .



## FEATURES

- Fully polarized housings
- Crimping housing is equipped with friction
- Halogen-free resin material
- Available in UL94V-0 flammability rated LCP
- Provide various types PCB header
- Plating with Tin, Gold Flash, 15u" Gold and 30u" Gold
- RoHS compliance and Lead-free
- Tape and Reel with pick up cap packaging

## BENEFITS

- Prevents accidental mis-mating
- Prevents harness-to-header mis-mating
- Meet environmental requirement
- High flammability rating
- Supports various PCB applications
- Different plating options available
- Meet environmental, health and safety requirements
- Pick and place for SMT production process



## 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 PERFORMANCES

- 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: 0.5Kg min.
- Hold down/Housing retention force: 1.0Kg min.
- Wire retention force: 0.5Kg min.
- Terminal/Housing retention force: 0.5Kg min.
- Vibration: 1µs max., EIA-364-28 Condition I
- Shock: 1µs max., EIA-364-27A Hold down/Housing
- Durability: 30 cycles

### SPECIFICATIONS

- Product Specifications: GS-12-675
- Packaging Specifications: 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

### TARGET MARKETS/APPLICATIONS

- Industrial & Instrumentation
- Industry Control
  - Instrumentation/Metering
  - Office Equipment
  - Small Motor/Robot Control
  - Security
  - Alarm Systems
  - Vending POS Machine
- Consumer
  - Car Audio

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## PART NUMBERS

