

As Flat-Panel TVs and other electronic devices become thinner and packed more tightly with components, the mating of wire-to-board connectors can become more difficult for operators. Some competitive wire-to-board designs have had problems with the terminals or pins becoming damaged due to angled mating, or with high insertion forces that make it difficult for operators to mate and unmate. Molex recognized these issues and developed the new Micro-Lock wire-to-board connector family to meet these needs.

A key feature of the new system is its "crash-free" mating design that protects housing terminals and headers pins from damage. In some competitive designs, contacts and pins can become deformed if the housing is forced in at an angle, which can often happen in tight packaging applications. This can lead to signal degradation or interference.

Molex's Micro-Lock connectors include guard walls and detent features that guide the housing into the header without allowing the pin to be touched until the housing is aligned for safe or "crash-free" mating.



Micro-Lock™ 2.00mm Pitch Wire-to-Board Connectors, Single Row, Through Hole, Right Angle, Positive Lock

503657 Crimp Terminal 503658 Housing 503660 Header

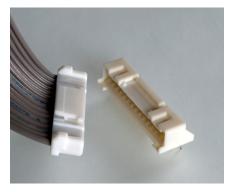
FEATURES AND BENEFITS

Features

- Damage-free pin protection feature
- Low profile
- Low insertion force
- Positive lock
- · Low-halogen housing and wire harness material

Benefits

- Avoids damage to pin even from angled mating
- Meets space-saving needs for LCD TV and other applications
- Easy mating/unmating
- Provides secure mating retention
- Meets preferred environmental standard level for Flat Panel TV makers



Molex's new Micro-Lock 2.00mm pitch positive-lock connectors with "crash-free" mating design

SPECIFICATIONS

Reference Information

- Packaging: Reel
- · Designed In: mm
- RoHS Compliant: Yes
- Halogen Status: Low Halogen

Electrical

- Voltage: 250V max.
- Current: 3.0A max.
- Contact Resistance: 20 milliohms max.
- Dielectric Withstanding Voltage: 800V AC
- Insulation Resistance: 1000 Megohms min.

Mechanical

• Durability: 30 cycles

Physical

- Terminal: Copper Alloy, Tin-Plated
- Housing/Header: PBT, UL 94V-0, White
- Header Pin: Brass, Tin-Plated
- Operating Temperature: -40 to +85 °C

MARKETS AND APPLICATIONS

- Consumer
 - LCD and PDP Flat Panel Display
- Set-top Box
- Gaming equipment

- Data Communications
- Hubs/Routers
- Personal Computers
- Car Audio

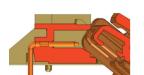




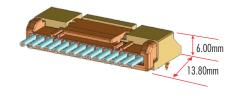
ADDITIONAL PRODUCT FEATURES

1) "Crash-Free" Design

2) Low Profile and Compact







Guard wall and slits molded into the housing and header (right) help to provide mating alignment for pin protection (left).

The Micro-Lock system is the first 2.00mm pitch positive-lock wire-to-board solution to achieve a profile height as low as 6.00mm.

Micro-Lock™ 2.00mm Pitch Wire-to-Board Connectors, Single Row, Through Hole, Right Angle, Positive Lock

503657 Crimp Terminal 503658 Housing 503660 Header

ORDERING INFORMATION

Crimp Terminal

Order No.	
503657-1000	

Housing and Header

Circuit Size	Order No. Housing	Order No. Header
04	503658-0400	503660-0410
05	503658-0500	503660-0510
06	503658-0600	503660-0610
08	503658-0800	503660-0810
10	503658-1000	503660-1010
12	503658-1200	503660-1210
14	503658-1400	503660-1410
15	503658-1500	503660-1510

