

# Datasheet for 76650-0237

## General Information

|                           |                                                         |
|---------------------------|---------------------------------------------------------|
| <b>Kit Part Number:</b>   | 76650-0237                                              |
| <b>Connector Type:</b>    | Wire-to-Board                                           |
| <b>Solution:</b>          | Off the Board                                           |
| <b>Molex Family:</b>      | CLIK-Mate™ 2.0 , MicroBlade™, MicroClasp™, Micro-Latch™ |
| <b>Certificates:</b>      | N/A                                                     |
| <b>Country of Origin:</b> | Kit assembled in U.S.A                                  |

## Specifications

|                          |                                                    |
|--------------------------|----------------------------------------------------|
| <b>Circuit Size:</b>     | 11, 12, 14, 2, 3, 4, 6, 9                          |
| <b>Current Rating:</b>   | 0.5-2A, 2A, 3A                                     |
| <b>Mounting Style:</b>   | PCB Through Hole, SMT (Surface Mount Technology)   |
| <b>Orientation:</b>      | Receptacles, Right Angle Headers, Vertical Headers |
| <b>Pitch:</b>            | 2.00mm (.079")                                     |
| <b>Tool Included:</b>    | No                                                 |
| <b>Voltage Rating:</b>   | 125V, 250V                                         |
| <b>Wire Gauge (AWG):</b> | 26-22, 28-22, 30-24                                |

## Product Highlights

Micro-Latch™ connectors provide a reliable connection interface for industry standard 2.00mm (.079") wire-to-board applications. The kit includes female crimp terminals, receptacle housings and semi-shrouded right angle headers. The connector applies a friction lock mechanism where the noses on the receptacle housings slide into the header wall openings. This ensures a durable mating and protection of the electrical circuits.

Molex's new 2.00mm pitch SMT CLIK-Mate™ connectors provide dual positive locks and a superior audible "click" to help ensure connectors are fully mated. CLIK-Mate™ was designed for applications such as LCD TVs that require higher pin count connectors to carry more signal lines in less space. The system includes a unique tuning-fork terminal concept that provides low insertion force and secure mating contact. The system is available in both vertical and right angle versions in 4 to 14 circuits to meet various application needs. Provides a compact and flexible solution for industry standard 2.00mm (.079") pitch applications such as consumer and small data devices. The MicroBlade™ system includes a reliable box-type terminal that provides secure electrical contact, and headers in straight/right angle entry for design flexibility. The system also includes a user-friendly friction lock system that includes housing windows to confirm mating. Provides space savings and easy mating/unmating compared to similar 2.00mm (.079") and 2.50mm (.098") pitch wire-to-board systems. MicroClasp™ includes a unique inner positive lock that provides latch protection, secure retention and an audible mating "click". The terminal design offers low insertion and withdrawal forces and is able to carry 3.0A current in a compact 2.00mm (.079") pitch design. MicroClasp™ system is available in 2-40 circuits in SMT and through-hole designs, and in single and dual-row versions.

## Features and Benefits

- Uses popular terminals
- Friction lock for good mating retention
- Compact, low-profile size for space savings
- Tuning fork style contact design, secure contact, and avoids terminal stubbing
- Polarizing features ensures proper mating orientation
- Surface Mount Component vertical header is reflow process capable
- Low insertion force, easy and quick mating for operators
- Inner positive lock for latch protection

- Reinforced metal solder tabs, housing wall support and secure PCB retention
- High-current contacts can carry up to 3.0A
- Flat area for pick-and-place, no costly capton tape needed

#### Applications

- Data Communication Equipment
- Automotive
- White goods
- Medical
- Industrial
- Vending/gaming machines
- Office automation equipment
- Home Entertainment
- Printers/Faxes
- Digital video cameras
- Notebook computers
- LCD/PDP Televisions
- Any application requiring superior mating assurance
- PCs and Monitors
- DVD players

**Bill of Materials**

| Molex Part No. | Description                                                              | Quantity |
|----------------|--------------------------------------------------------------------------|----------|
| 50212-8100     | Micro-Latch™ Female Crimp Terminal, 30-24 AWG                            | 100      |
| 502438-0100    | CLIK-Mate™ Male Crimp Terminal, 26-22 AWG Loose                          | 100      |
| 502439-0400    | 2.00mm (.079") Pitch, CLIK-Mate™ 4 Circuit, Plug Housing                 | 3        |
| 502439-0600    | 2.00mm (.079") Pitch, CLIK-Mate™ 6 Circuit, Plug Housing                 | 3        |
| 502439-0800    | 2.00mm (.079") Pitch, CLIK-Mate™ 8 Circuit, Plug Housing                 | 3        |
| 502443-0470    | 2.00mm (.079") Pitch CLIK-Mate™ Receptacle Vertical SMT, 4 Circuits      | 3        |
| 502443-0670    | 2.00mm (.079") Pitch CLIK-Mate™ Receptacle Vertical SMT, 6 Circuits      | 3        |
| 502443-0870    | 2.00mm (.079") Pitch CLIK-Mate™ Receptacle Vertical SMT, 8 Circuits      | 3        |
| 502494-0470    | 2.00mm (.079") Pitch CLIK-Mate™ 4 Circuit Receptacle, Right Angle SMT    | 3        |
| 502494-0670    | 2.00mm (.079") Pitch CLIK-Mate™ 6 Circuit Receptacle, Right Angle SMT    | 3        |
| 502494-0870    | 2.00mm (.079") Pitch CLIK-Mate™ 8 Circuit Receptacle, Right Angle SMT    | 3        |
| 51004-0600     | 2.00mm (.079") Pitch, MicroBlade™ Receptacle, 6 Circuits                 | 3        |
| 51004-0900     | 2.00mm (.079") Pitch, MicroBlade™ Receptacle, 9 Circuits                 | 3        |
| 51004-1100     | 2.00mm (.079") Pitch, MicroBlade™ Receptacle, 11 Circuits                | 3        |
| 51065-0200     | 2.00mm (.079") Pitch Micro-Latch™ Receptacle, 2 Circuits                 | 3        |
| 51065-0300     | 2.00mm (.079") Pitch Micro-Latch™ Receptacle, 3 Circuits                 | 3        |
| 51065-0400     | 2.00mm (.079") Pitch Micro-Latch™ Receptacle, 4 Circuits                 | 3        |
| 51065-0800     | 2.00mm (.079") Pitch Micro-Latch™ Receptacle, 8 Circuits                 | 3        |
| 51353-1200     | 2.00mm (.079") Pitch MicroClasp™ 12 Circuit, Receptacle, Dual Row        | 3        |
| 51353-1400     | 2.00mm (.079") Pitch MicroClasp™ 14 Circuit, Receptacle, Dual Row        | 3        |
| 53014-0610     | 2.00mm (.079") Pitch, MicroBlade™ Header, Vertical, 6 Circuits           | 3        |
| 53014-0910     | 2.00mm (.079") Pitch, MicroBlade™ Header, Vertical, 9 Circuits           | 3        |
| 53014-1110     | 2.00mm (.079") Pitch, MicroBlade™ Header, Vertical, 11 Circuits          | 3        |
| 53015-0610     | 2.00mm (.079") Pitch, MicroBlade™ Header, Right Angle, 6 Circuits        | 3        |
| 53015-0910     | 2.00mm (.079") Pitch, MicroBlade™ Header, Right Angle, 9 Circuits        | 3        |
| 53015-1110     | 2.00mm (.079") Pitch, MicroBlade™ Header, Right Angle, 11 Circuits       | 3        |
| 53253-0270     | 2.00mm (.079") Pitch Micro-Latch™ Vertical Header, 2 Circuits            | 3        |
| 53253-0370     | 2.00mm (.079") Pitch Micro-Latch™ Vertical Header, 3 Circuits            | 3        |
| 53253-0470     | 2.00mm (.079") Pitch Micro-Latch™ Vertical Header, 4 Circuits            | 3        |
| 53253-0670     | 2.00mm (.079") Pitch Micro-Latch™ Vertical Header, 6 Circuits            | 3        |
| 53253-0870     | 2.00mm (.079") Pitch Micro-Latch™ Vertical Header, 8 Circuits            | 3        |
| 53254-0270     | 2.00mm (.079") Pitch Micro-Latch™ Right Angle Header, 2 Circuits         | 3        |
| 53254-0370     | 2.00mm (.079") Pitch Micro-Latch™ Right Angle Header, 3 Circuits         | 3        |
| 53254-0470     | 2.00mm (.079") Pitch Micro-Latch™ Right Angle Header, 4 Circuits         | 3        |
| 55959-0830     | 2.00mm (.079") Pitch MicroClasp™ 8 Circuit Right Angle Header, Dual Row  | 3        |
| 55959-1230     | 2.00mm (.079") Pitch MicroClasp™ 12 Circuit Right Angle Header, Dual Row | 3        |
| 55959-1430     | 2.00mm (.079") Pitch MicroClasp™ 14 Circuit Right Angle Header, Dual Row | 3        |
| 56134-9100     | MicroClasp™ Female Terminal, 26-22 AWG                                   | 100      |

**Recommended Molex Tool**

| Molex Part No. | Description |
|----------------|-------------|
|----------------|-------------|