General Information	
Kit Part Number:	76650-0236
Connector Type:	Wire-to-Board
Solution:	Off the Board
Molex Family:	PicoBlade™, PanelMate™, Pico-SPOX™, CLIK-Mate™ 1.25mm
Certificates:	N/A
Country of Origin:	Kit assembled in U.S.A
Specifications	
Circuit Size:	2, 4, 6
Current Rating:	1.5-3A, 1A
Mounting Style:	PCB Through Hole, SMT (Surface Mount Technology)
Orientation:	Plugs, Receptacles, Right Angle Headers, Vertical Headers
Pitch:	1.25mm (.049"), 1.50mm (.098")
Tool Included:	No
Voltage Rating:	125V, 30V, 50V
Wire Gauge (AWG):	26-22, 30-22, 30-24, 30-28, 32-30
Product Hightlights	

## Datasheet for 76650-0236

Molex's new 1.25mm pitch CLIK-Mate<sup>™</sup> series has a superior lock design that offers easier use and better mating retention, compared to competitive versions. The system also provides about 60% space savings compared to similar dual-lock 2.0mm pitch versions. CLIK-Mate<sup>™</sup> 1.25 was designed for applications, such as LCD TVs, that require higher pin count connectors to carry more signal lines in less space. This system has a similar design to Molex's CLIK-Mate<sup>™</sup> 2.0 family and includes many of the same features. 1.25mm (.049") pitch PicoBlade<sup>™</sup> system is designed for high-density harness applications. PicoBlade provides the same 1.0 amperes of current as similar 2.00mm (.079") pitch systems, but in a more compact design. PicoBlade<sup>™</sup> is offered in wire-to-board and wire-to-wire options. The system saves about 45% of PCB space compared to typical 2.00mm wire-to-board systems. It is a single row system, available in 2 to 15 circuits, with both surface mount and through-hole headers. Molex's Pico-SPOX<sup>™</sup> connector system is an ideal solution for higher current wire-to-board configurations in tight packaging applications. The box style terminal makes contact with the header pin via two inward-facing dimples to ensure high reliability. Headers are available in vertical and right angle configurations and offered in tape and reel packaging for high volume pick-and-place production. Polarizing keys on both the headers and receptacles ensure proper mating. A reliable friction lock feature ensures secure mating retention. The system is rated for 3A max. using AWG #24 wires in a compact 1.50mm pitch design. All parts are lead-free. Molex's 1.25mm (.049") pitch PanelMate<sup>™</sup> name derives from the original flat-panel LCD display applications for which it was designed.

## Features and Benefits

- Reliable two points of contact, high current capable, good electrical connection
- Box-style contact, protects contact area
- Very thin Receptacle design (1.80mm)
- Friction lock provides secure mating
- · Polarizing features, ensures proper mating
- Durable blade-type pins, protection
- Locking tang latches into housing window
- · Anti-fishhooking contact design to improve handling during harness assembly

- Tuning fork style contact design, secure contact, and avoids terminal stubbing
- Two solder tabs for better connection to the PCB
- Low insertion force, easy and quick mating for operators
- Lead-in chamfer to ease mating
- Solder-conducing fillet SMT tail design helps ensure stable solder joints
- Headers fully shrouded to protect pins
- Ultra low mating profile of 1.90mm (.075")

## Applications

- Data communication equipment
- Medical equipment
- Automotive
- Office machines
- Alarm systems
- Process controls
- Any application requiring superior mating assurance
- Any low-profile application
- Base Stations
- Digital camera
- Cash dispensers
- Set top boxes
- DVD players
- Patient monitors
- Car radios
- Consumer
- Gaming/Pachinko
- LCD/PDP Televisions
- PCs and monitors
- Handy terminal
- Camcorder
- LCD

Bill of Materials		
Molex Part No.	Description	Quantity
50058-8000	PicoBlade™ Crimp Terminal, Female, 32-28 AWG	100
51021-0200	1.25mm (.049") Pitch PicoBlade™ Receptacle, 2 Circuits	3
51021-0400	1.25mm (.049") Pitch PicoBlade™ Receptacle, 4 Circuits	3
51021-0600	1.25mm (.049") Pitch PicoBlade™ Receptacle, 6 Circuits	3
53261-0271	1.25mm (.049") Pitch PicoBlade™ Header, Surface Mount, Right Angle, 2 Circuits	3
53261-0471	1.25mm (.049") Pitch PicoBlade™ Header, Surface Mount, Right Angle, 4 Circuits	3
53261-0671	1.25mm (.049") Pitch PicoBlade™ Header, Surface Mount, Right Angle, 6 Circuits	3
53398-0271	1.25mm (.049") Pitch PicoBlade™ Header, Surface Mount, Vertical, 2 Circuits	3
53398-0471	1.25mm (.049") Pitch PicoBlade™ Header, Surface Mount, Vertical, 4 Circuits	3
53398-0671	1.25mm (.049") Pitch PicoBlade™ Header, Surface Mount, Vertical, 6 Circuits	3
502381-0000	CLIK-Mate <sup>™</sup> Male Terminal for 1.25mm (.049") Pitch	100
502380-0200	1.25mm (.049") Pitch, 2 Circuit CLIK-Mate™ Plug	3
502380-0400	1.25mm (.049") Pitch, 4 Circuit CLIK-Mate™ Plug	3
502380-0600	1.25mm (.049") Pitch, 6 Circuit CLIK-Mate™ Plug	3
502382-0270	1.25mm (.049") Pitch, 2 Circuit CLIK-Mate™ Vertical Receptacle	3
502382-0470	1.25mm (.049") Pitch, 4 Circuit CLIK-Mate™ Vertical Receptacle	3
502382-0670	1.25mm (.049") Pitch, 6 Circuit CLIK-Mate™ Vertical Receptacle	3
502386-0270	1.25mm (.049") Pitch, 2 Circuit CLIK-Mate™ Right Angle Receptacle	3
502386-0670	1.25mm (.049") Pitch, 6 Circuit CLIK-Mate™ Right Angle Receptacle	3
502386-0470	1.25mm (.049") Pitch, 4 Circuit CLIK-Mate™ Right Angle Receptacle	3
87421-0000	Pico-Spox™ Female Crimp Terminal Tin, 24-30 AWG	100
87437-0243	1.50mm (.098") Pitch Pico-Spox™ SMT Vertical Header, 4 Circuits	3
87437-0643	1.50mm (.098") Pitch Pico-Spox™ SMT Vertical Header, 6 Circuits	3
87438-0443	1.50mm (.098") Pitch Pico-Spox™ SMT Right Angle Header, 4 Circuits	3
87438-0643	1.50mm (.098") Pitch Pico-Spox <sup>™</sup> SMT Right Angle Header, 6 Circuits	3
87439-0400	1.50mm (.098") Pitch Pico-Spox <sup>™</sup> Receptacle, 4 Circuits	3
87439-0600	1.50mm (.098") Pitch Pico-Spox <sup>™</sup> Receptacle, 6 Circuits	3
50641-8141	PanelMate <sup>™</sup> Female Terminal 30-28 AWG	100
51146-0200	1.25mm (.049") Pitch PanelMate <sup>™</sup> , 2 Circuit, Ultra Low-Profile Receptacle	3
51146-0400	1.25mm (.049") Pitch PanelMate <sup>™</sup> , 4 Circuit, Ultra Low-Profile Receptacle	3
51146-0600	1.25mm (.049") Pitch PanelMate <sup>™</sup> , 6 Circuit, Ultra Low-Profile Receptacle	3
53780-0270	1.25mm (.049") Pitch PanelMate <sup>™</sup> , 2 Circuit, Right Angle Header	3
53780-0670	1.25mm (.049") Pitch PanelMate™, 6 Circuit, Right Angle Header	3
53780-0470	1.25mm (.049") Pitch PanelMate™, 4 Circuit, Right Angle SMT Header	3
87438-0243	1.50mm (.098") Pitch Pico-Spox™ SMT Right Angle Header, 2 Circuits	3
87439-0200	1.50mm (.098") Pitch Pico-Spox™ Receptacle, 2 Circuits	3
87437-0243	1.50mm (.098") Pitch Pico-Spox™ SMT Right Angle Header, 2 Circuits	3

## **Recommended Molex Tool**

Molex Part No.

Descripition