

## Datasheet for 76650-0187

### General Information

<b>Part Number:</b>	76650-0187
<b>Manufacturer:</b>	Molex / Waldom
<b>Title:</b>	Milli-Grid Connector Kit
<b>Description:</b>	Shrouded Gold Vertical Header and Receptacle
<b>Product Family:</b>	Milli-Grid™
<b>Certificates:</b>	(Molex Parts within this kit) - EU RoHS Compliant, UL and CSA
<b>Country of Origin:</b>	Kit assembled in U.S.A.

### Specifications

#### Design

<b>Configuration:</b>	Wire-to-Board
<b>Pitch:</b>	2.0mm (.079")
<b>Connector Type:</b>	Receptacles and Headers

#### Mounting

<b>Orientation:</b>	Vertical
<b>Circuit Sizes:</b>	4, 6, 10; Latching: 14 and 16
<b>Current Rating:</b>	(0.5-2) Amps - Dependant on Wire Gauge
<b>Voltage:</b>	125 VoltsDC
<b>Wire Size:</b>	30-24 AWG

### Product Highlights

Molex's Milli-Grid family of high density connectors is based on a 2.00 by 2.00mm (.079 by .079") grid pattern. Compared to traditional 2.54mm (.100") pitch connectors, Milli-Grid connectors offer up to 40% savings in PCB real estate.

#### Features and Benefits

- Early entry terminal design for superior contact
- Locking ramps provide strong retention force to header
- Fully shrouded to protect pins during mating/unmating
- Center polarization slot, prevents mismatching
- Locking windows, secures firm locking to receptacle
- Front latches for added retention forces after mating

#### Applications

- Office Automation: Printers, Fax machines, Scanners, Copiers
- Telecom: Servers, Hubs, Switches, Routers
- Other applications: Vending machines, Gaming machines, Fitness equipment
- Computer / Peripherals: Disk Drives, Storage, Servers, Notebook PC, Modems, Motherboards, Monitors
- Measuring / Analyzing Equipment: Security systems / alarms, Medical monitoring, Lab equipment
- Entertainment: Set-top boxes, Car stereos, Video / DVD products
- Brown Goods

**For additional Molex / Waldom Design and Solution Kits please go to [www.molexkits.com](http://www.molexkits.com)**

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**Bill of Materials for Part No. 76650-0187**

<b>Molex Part No.</b>	<b>Country of Origin</b>	<b>Description</b>	<b>Quantity in Kit</b>
50394-8100-C	Singapore	Milli-Grid™ Female Crimp Gold Terminals (30-24) AWG	100
51110-0460	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 4 Circuits, without Cntr Pol Key,	3
51110-0660	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 6 Circuits, without Cntr Pol Key,	3
51110-1060	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 10 Circuits, without Cntr Pol Key,	3
51110-1451	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 14 Circuits, with Cntr Pol Key, with Latching	3
51110-1651	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 16 Circuits, with Cntr Pol Key, with Latching	3
87831-0420	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 4 Circuits, 0.38µm (15µ") Gold	3
87831-0620	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 6 Circuits, 0.38µm (15µ") Gold	3
87831-1020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 10 Circuits, 0.38µm (15µ") Gold	3
87831-1420	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 14 Circuits, 0.38µm (15µ") Gold	3
87831-1620	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 16 Circuits, 0.38µm (15µ") Gold	3

**Recommended Molex Tool(s) for Part No. 76650-0187\***

<b>Molex Part No.</b>	<b>Country of Origin</b>	<b>Description</b>
63819-0100 *	Sweden	Hand Crimp Tool for Milli-Grid™ and MicroBlade Crimp Terminals

\*Tool(s) not included in kit. Tool(s) ordered separately.