

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







1801 Morgan Street Rockford, Illinois 61102 800-435-2931 www.molexkits.com



## **Datasheet for 76650-0187**

#### **General Information**

**Part Number:** 76650-0187

Manufacturer: Molex / Waldom

Title: Milli-Grid Connector Kit

**Description:** Shrouded Gold Vertical Header and Receptacle

**Product Family:** Milli-Grid™

Certificates: (Molex Parts within this kit) - EU RoHS Compliant, UL and CSA

Country of Origin: Kit assembled in U.S.A.

# **Specifications**

Design

Configuration: Wire-to-Board

Pitch: 2.0mm (.079")

Connector Type: Receptacles and Headers

Mounting

Orientation: Vertical

Circuit Sizes: 4, 6, 10; Latching: 14 and 16

**Current Rating:** (0.5-2) Amps - Dependant on Wire Gauge

Voltage: 125 VoltsDC Wire Size: 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 mismating
- 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



3

### **Datasheet for 76650-0187**

#### Bill of Materials for Part No. 76650-0187 Quantity in Country Molex Part No. of Origin Description Kit Singapore Milli-Grid™ Female Crimp Gold Terminals (30-24) AWG 100 50394-8100-C 2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 4 Circuits, 3 51110-0460 Singapore without Cntr Pol Key, 2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 6 Circuits, 3 51110-0660 Singapore without Cntr Pol Key, 2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 10 Circuits, 51110-1060 Singapore without Cntr Pol Key, 3 2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 14 Circuits, 51110-1451 Singapore with Cntr Pol Key, with Latching 3 2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 16 Circuits, Singapore with Cntr Pol Key, with Latching 3 51110-1651 2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Singapore Hole, 4 Circuits, 0.38µm (15µ") Gold 3 87831-0420 2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Singapore Hole, 6 Circuits, 0.38μm (15μ") Gold 3 87831-0620 2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through 3 87831-1020 Singapore Hole, 10 Circuits, 0.38µm (15µ") Gold 2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through 87831-1420 Singapore Hole, 14 Circuits, 0.38µm (15µ") Gold 3 2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through

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

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

Singapore Hole, 16 Circuits, 0.38μm (15μ") Gold

87831-1620

<sup>\*</sup>Tool(s) not included in kit. Tool(s) ordered separately.