

Datasheet for 76650-0188

General Information

Part Number:	76650-0188
Manufacturer:	Molex / Waldom
Title:	Milli-Grid Connector Kit
Description:	Vertical Header and IDT 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:	10,14, 16, 20, 24, 30, 40, 44 and 50
Current Rating:	1 Amp
Voltage:	125 VoltsDC
Wire Size Style:	IDT Style (UL2651 and UL2678) flat ribbon cable

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. IDT (Insulation Displacement Technology) makes for cable-to-board connections.

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Features and Benefits	Applications
<ul style="list-style-type: none"> • 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 mechanical locking • Pre-loaded upper housing offers precise cover-to-base alignment, ensuring a reliable termination • Early-entry single-beam contact provides long wiping action during mating 	<ul style="list-style-type: none"> • 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

Bill of Materials for Part No. 76650-0188

Molex Part No.	Country of Origin	Description	Quantity in Kit
87568-1073	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 10 Circuits, Gold, without Center Polarization Key, with Locking Ramp	3
87568-1493	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 14 Circuits, Gold, with Center Polarization Key and Locking Friction Ramp	3
87568-1693	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 16 Circuits, Gold, with Center Polarization Key and Locking Friction Ramp	2
87568-2093	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 20 Circuits, Gold, with Center Polarization Key and Locking Friction Ramp	2
87568-2493	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 24 Circuits, Gold, with Center Polarization Key and Locking Friction Ramp	2
87568-3093	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 30 Circuits, Gold, with Center Polarization Key and Locking Friction Ramp	2
87568-4093	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 40 Circuits, Gold, with Center Polarization Key and Locking Friction Ramp	2
87568-4443	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 44 Circuits, Gold, with Center Polarization Key, without Locking Ramp	1
87568-5093	Singapore	2.00mm (.079") Pitch Milli-Grid™ IDT Receptacle, 50 Circuits, Gold, with Center Polarization Key and Locking Friction Ramp	1
87831-1020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 10 Circuits, Gold	3
87831-1420	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 14 Circuits, Gold	3
87831-1620	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 16 Circuits, Gold	2
87831-2020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 20 Circuits, Gold	2

For additional Molex / Waldom Design and Solution Kits please go to www.molexkits.com

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Bill of Materials for Part No. 76650-0188 continued

Molex Part No.	Country of Origin	Description	Quantity in Kit
87831-2420	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 24 Circuits, Gold	2
87831-3020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 30 Circuits, Gold	2
87831-4020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 40 Circuits, Gold	2
87831-4420	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 44 Circuits, Gold	1
87831-5020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 50 Circuits, Gold	1

Recommended Molex Tool(s) for Part No. 76650-0188*

Molex Part No.	Country of Origin	Description
62100-2000 *	USA	IDT - Manual - Tool
62100-3200 *	USA	IDT - Manual - Tool Kit
62100-2400 *	USA	IDT Ribbon Cable Adapter Kit For 2.00mm Milli-Grid™ - Semi-Automatic

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