

## Datasheet for 76650-0195

### General Information

<b>Part Number:</b>	76650-0195
<b>Manufacturer:</b>	Molex / Waldom
<b>Title:</b>	Milli-Grid Deluxe Connector Kit
<b>Description:</b>	SMT Vertical Header, Through-Hole Vertical and Right Angle Header and Receptacle and IDT 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
<b>Mounting</b>	
<b>Orientation:</b>	Vertical and Right Angle
<b>Circuit Sizes:</b>	4, 6, 10, 14, 16, 20, 24, 30, 40, 44 and 50
<b>Current Rating:</b>	(0.5-2) Amps - Dependent 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
- Pre-loaded upper housing offers precise cover-to-base alignment, ensuring a reliable termination

### 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

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**Bill of Materials for Part No. 76650-0195**

<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,	2
51110-0660	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 6 Circuits, without Cntr Pol Key,	2
51110-1060	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 10 Circuits, without Cntr Pol Key,	2
51110-1451	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 14 Circuits, with Cntr Pol Key, with Latching	2
51110-1651	Singapore	2.00mm (.079") Pitch, Milli-Grid™ Receptacle, 16 Circuits, with Cntr Pol Key, with Latching	2
87568-1063	Singapore	2.00mm (.079") Pitch, Milli-Grid™ 10 Circuit Receptacle	2
87568-1073	Singapore	2.00mm (.079") Pitch, Milli-Grid™ IDT Receptacle, 10 Circuits, Gold, without Center Polarization Key, with Locking Ramp	2
87568-1493	Singapore	2.00mm (.079") Pitch, Milli-Grid™ 14 Circuit IDT with Polarization & Lock Ramp Receptacle	2
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™ 30 Circuit IDT with Polarization & Lock Ramp Receptacle	2
87568-4093	Singapore	2.00mm (.079") Pitch, Milli-Grid™ 40 Circuit IDT with Polarization & Lock Ramp Receptacle	1
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
87831-0420	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 4 Circuits, 0.38µm (15µ") Gold	2
87831-0620	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 6 Circuits, 0.38µm (15µ") Gold	2
87831-1020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 10 Circuits, 0.38µm (15µ") Gold	2

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<b>Bill of Materials for Part No. 76650-0195 Continued</b>			
<b>Molex Part No.</b>	<b>Country of Origin</b>	<b>Description</b>	<b>Quantity in Kit</b>
87831-1420	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 14 Circuits, 0.38µm (15µ") Gold	2
87831-1620	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 16 Circuits, 0.38µm (15µ") Gold	2
87831-2020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 20 Circuits, Gold	2
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, 0.38µm (15µ") Gold	2
87831-4020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, 40 Circuits, Gold	1
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
87832-1020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, SMT, 10 Circuits, Gold	2
87832-1420	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, SMT, 14 Circuits, Gold	2
87832-3020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, SMT, 30 Circuits, Gold	2
87832-4020	Singapore	2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, SMT, 40 Circuits, Gold	1
87833-1020	Singapore	2.00mm (.079") Pitch Milli-Grid™ 10 Circuit Milli-Grid Right Angle Header	2
87833-1420	Singapore	2.00mm (.079") Pitch Milli-Grid™ 14 Circuit Milli-Grid Right Angle Header	2
87833-3020	Singapore	2.00mm (.079") Pitch Milli-Grid™ 30 Circuit Milli-Grid Right Angle Header	2
87833-4020	Singapore	2.00mm (.079") Pitch Milli-Grid™ 40 Circuit Milli-Grid Right Angle Header	1

**Recommended Molex Tool(s) for Part No. 76650-0195\***

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

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

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