

## FEATURES AND SPECIFICATIONS



## 2.00mm (.079") Pitch Milli-Grid™ with Metal Latch

**Molex offers the new metal latch version of Milli-Grid™.**

The development of the Milli-Grid™ with metal latch is for customers whose applications require high level of secure mating. These sturdy metal latches ensure that the connector are completely inserted when mated.

When the two connectors are mated, the latches emit a "click" which indicates that they have been fully inserted and may only be un-mated when the user intentionally depresses both latches.

All of the Milli-Grid™ connectors offered by Molex are compliant with industry standards.

### Header

**87981** - Straddle Mount

**87982** - Vertical, Through Hole

**87983** - Vertical, SMT

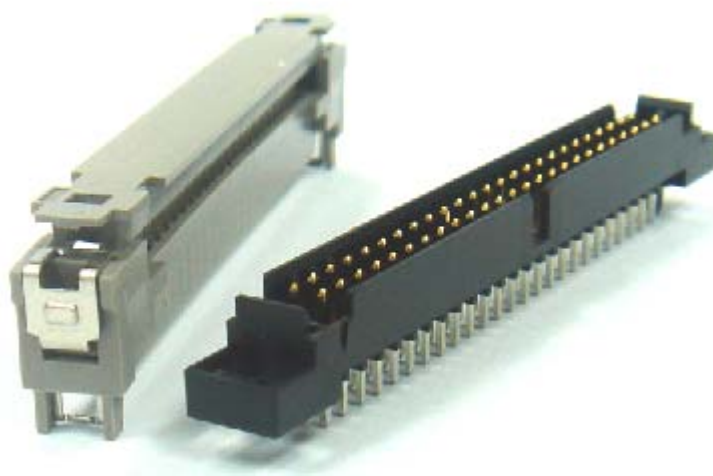
**87984** - Right Angle, Through Hole

### IDT Receptacle

**87985** - Wire-to-Board

### Features and Benefits

- Early entry system crimp terminals provide long pin wipe.
- Center polarization key and slot prevents incorrect mating orientation.
- Metal Latches produce audible "click" to indicate that header and receptacle have been fully inserted when mated.



## SPECIFICATIONS

### Reference Information

Packaging: See Ordering Table

Mates With: See Ordering Table

Designed In: Millimeters

### Electrical

Voltage: 125V AC/DC max.

Current: 2.0A per Pin max. (Header)

1.0A per Pin max. (Receptacle)

Contact Resistance: 30 milliohms max.

Dielectric Withstanding Voltage: 500V AC

Insulation Resistance: 1000 Megohms max.

### Mechanical

Mating Force: 2N max

Unmating Force: 0.4N min

Durability: 30 Cycles

### Physical

Housing: Black, High-temperature Plastic, UL 94V-0

Contact: Copper Alloy

Plating:

Contact Area — 0.38µm Gold

Solder Tail Area — Tin

Underplating — Nickel

PCB Thickness: 1.60 mm

Operating Temperature: -40°C to 85°C

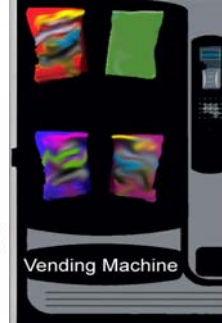
**MARKETS AND APPLICATIONS**



**2.00mm (.079") Pitch  
Milli-Grid™ with Metal Latch**

- **Office Machines**
  - Printers
  - Fax Machines
  - Scanners
  - Copiers
- **Computer Peripherals**
  - Disk drives
  - Storage
  - Servers
  - Modems
  - Motherboards
  - Monitors
- **Measuring/Analyzing Equipment**
  - Security Systems
  - Alarms
  - Medical Monitoring
  - Lab Equipment

- **Entertainment**
  - Set-top Boxes
  - Car Radios
  - Video or DVD Products
- **Other Applications**
  - Vending Machines
  - Gaming Machines
  - Exercise Equipments



**Other Applications**

**Header**

- 87981** - Straddle Mount
- 87982** - Vertical, Through Hole
- 87983** - Vertical, SMT
- 87984** - Right Angle, Through Hole

**IDT Receptacle**

- 87985** - Wire-to-Board



**Measuring/Monitoring Equipment**

**ORDERING INFORMATION**

**Header**

Lead-Free Order No.	Description	Circuit Size	Packaging	Mates with
87981-3044	Right Angle, Straddle Mount	44	Tube	87985
87981-3050		50		
87982-3030	Vertical, Through Hole	30		
87982-3040		40		
87982-3044		44		
87982-3050		50		
87983-3044	Vertical, SMT	44	Tape and Reel	
87984-3040	Right Angle, Through Hole	40	Tube	

**IDT Receptacle**

Lead-Free Order No.	Description	Circuit Size	Packaging	Mates with
87985-3030	IDT Receptacle	30	Tray	87981 87982 87983 87984
87985-3040		40		
87985-3044		44		
87985-3050		50		

\* Contact Molex for availability of other circuit sizes

Americas Headquarters  
2222 Wellington Ct.  
Lisle, Illinois 60532 USA  
1-800-78MOLEX  
amerinfo@molex.com

Far East North Headquarters  
Yamato, Kanagawa, Japan  
81-462-65-2324  
feninfo@molex.com

Far East South Headquarters  
Jurong, Singapore  
65-6-268-6868  
fesinfo@molex.com

European Headquarters  
Munich, Germany  
49-89-413092-0  
eurinfo@molex.com

Corporate Headquarters  
2222 Wellington Ct.  
Lisle, Illinois 60532 USA  
630-969-4550

Visit our Web site at <http://www.molex.com>