

## Milli-Grid™ Dual-row Headers with horizontal SMT solder tails and other customizable features enable perpendicular or edge-board style mating across a range of industry applications

Molex provides customization of 2.00mm Pitch Milli-Grid™ Shrouded and Unshrouded PCB Headers in Dual-row, Horizontal SMT configuration for horizontal or perpendicular board-to-board and wire-to-board mating applications. These applications can include datacom, telecom, consumer, transportation, industrial and medical devices and equipment.

Used as an alternative to the Right Angle SMT versions, this angled SMT design comprises single or dual-row solder tails that are bent at two angles, terminating the header horizontally on the PCB. The 0.50mm square Bandolier pins provide the hardness needed for the connector and are not easily subject to bending even when dropped. When soldered, the bandolier-pin solder tails provide stronger PCB hold-down than thinner and flatter designs.

Each series of shrouded and unshrouded custom headers are mounted parallel to their board surface and facilitate easy mating with either side-entry Milli-Grid™ receptacles to form an edge-board type mating interface or with top-entry Milli-Grid™ receptacles if a perpendicular mating configuration is preferred.

Molex is able to vary mating pin-lengths in 1.00mm increment as well as solder tail lengths, and customize bend-angles to the desired requirements of customers for Unshrouded Header series. A choice of pin voids and plating thickness variations; packaging styles including tape-and-reel, kapton-tape for pick-and-place operations, tube, tray or bag, are available. Customers can request for single or dual-wafer options. The 87979 series of Unshrouded Custom Headers are RoHS-compliant.

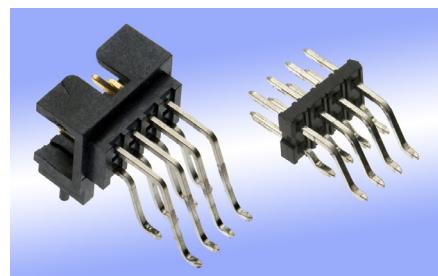
The solder tail lengths and bend-angles of the Shrouded Headers are variable. Housing features such as polarization slots and keys can be configured to the desired shapes and sizes. Locking windows and ramps can be added as well. Series 78264 Shrouded Headers are both RoHS-compliant and halogen-free.

More product information is available on our website at:  
[www.molex.com/product/milligrid.html](http://www.molex.com/product/milligrid.html)

## Milli-Grid™ 2.00mm (.079") Pitch, Dual-row, Horizontal SMT Custom Headers

**78264 Shrouded Headers, Halogen-free, Lead-free**

**87979 Unshrouded Headers, Lead-free**



Milli-Grid™ Shrouded (Series 78264) and Unshrouded Custom Headers (Series 87979) with Horizontal SMT solder tails

## FEATURES AND BENEFITS

- Durable bandolier-pin solder tails provide more robust PCB hold-down for high mating cycles
- Moisture-proof shrouded headers designed with durable LCP housings prevent blistering on connector housing
- IR reflow-compatibility headers are suitable for exposure to higher lead-free, solder-reflow temperatures
- Customizability and design flexibility with wide selection of circuit sizes from 6 to 50, and addition of pegs and other housing features if required. Unshrouded header housing permits breakaway to smaller circuit sizes for greater ease-of-use and quick turnaround, and are end-to-end stackable for modular configuration
- RoHS-compliance (all) and halogen-free (shrouded headers only) characteristics ensure environmental sustainability

## SPECIFICATIONS

### Reference Information

Packaging:  
UL File No.: E29179 (Series 78264 only)  
CSA File No.: LR19980-182 (Series 78264 only)

Mates With:  
Refer to "Molex products for associated sell"

Designed In: mm

RoHS: Yes

Halogen Free: Yes (Series 78264 only)

Glow Wire Compliant: No

### Electrical

Voltage (max.): 125V  
Current (max.): 2.0A  
Dielectric Withstanding Voltage:  
1000VAC (Series 87979)  
1000 Vrms (Series 78264)  
Insulation Resistance: 1000 Megaohms

### Mechanical

Pin Retention to Housing:  
0.85kgf (1.87lbf)

### Physical

Housing:  
Refer to Ordering Information table  
Contact:  
Refer to Ordering Information table  
Plating:  
Contact Area —  
Refer to Ordering Information table  
Solder Tail Area —  
Refer to Ordering Information table  
Underplating — Nickel (Ni) overall  
Operating Temperature:  
-55 to +125°C (Series 87979)  
-55 to +120°C (Series 78264)

## MOLEX PRODUCTS FOR ASSOCIATED SELL:

Both featured series of Shrouded and Unshrouded custom headers mate with the following Milli-Grid™ Receptacles:

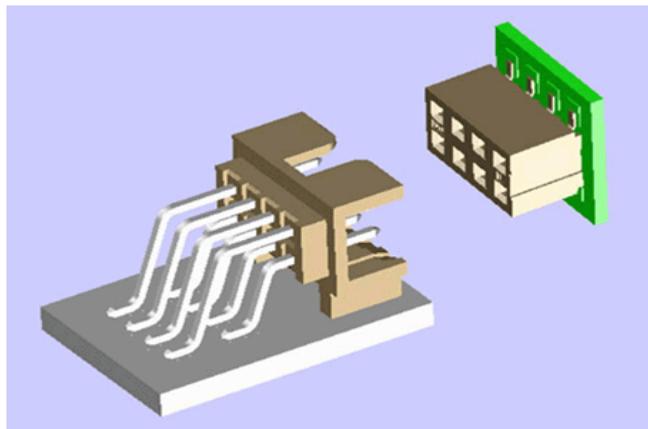
- 79107 (Top-entry, Through-hole)
- 79109 (Top/Bottom-entry, SMT)
- 87381 (Top-entry, SMT)

The Unshrouded Header series can also mate with the following Milli-Grid™ Receptacles:

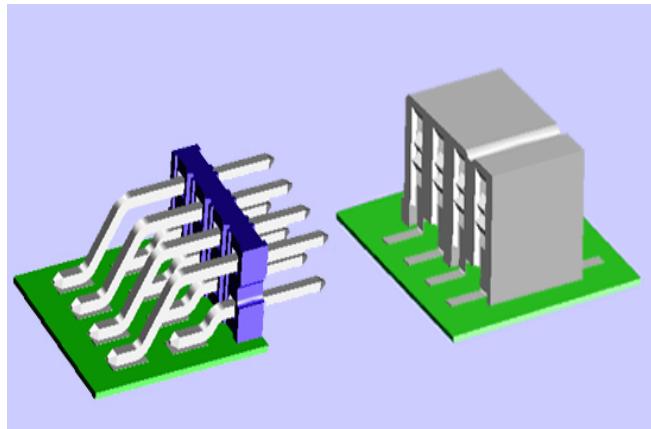
- 87264 (Side-entry Through Hole)
- 87368 (Side-entry SMT)

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### MATING CONFIGURATION EXAMPLES



*Illustration showing Shrouded Custom Header (Series 78264) mating with a Top-entry, SMT Receptacle (Series 87381) in a perpendicular mating configuration*



*Illustration showing Unshrouded Custom Header (Series 87979) mating with a Side-entry, SMT Receptacle (Series 87368) in a horizontal, board-edge mating configuration*

### ORDERING INFORMATION

Description	Circuit Sizes	Plating	Housing Material	Housing Colors	Locating Pegs	Packaging Configuration
87979-0406	4	2.54µm (100µ") Tin (Sn) Plating	Nylon	Black only	N.A.	Tray
87979-5006	50	Tin (Sn) Overall Plating	High-temperature Nylon			
Other 87979 custom designs	6 to 50	Tin (Sn), Gold (Au) Flash, 0.25 and 0.76µm (15 and 30µ") Gold (Au) options	LCP; consult Global Product Manager for non-LCP alternatives	Black; contact Global Product Manager for other options	Standard round or crush-rib pegs if needed; consult Global Product Manager for non-standard designs	Tray, Bag, Tube, Tape-on-Reel
Milli-Grid™ Shrouded Custom Header, Halogenfree (Series 78264)		Gold (Au) Flash, 0.25 and 0.76µm (15 and 30µ") Gold (Au) options				Tray, Bag, Tube, Tape-on-Reel (Remark: Clockwise or anticlockwise Reel Operation to be specified)

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## APPLICATIONS

- Datacom and Telecom
  - Computer servers
  - Personal computers
  - Office equipment
  - Hubs
  - Servers
  - Routers
- Consumer
  - White and brown goods
  - Home entertainment systems
  - Multimedia equipment
  - Vending machines
- Transportation
  - Engine train
  - Body electronics
  - Car infotainment systems
  - Data or Telemetry
  - GPS



*Servers*



*Office Equipment*



*Home Entertainment Systems*



*Car infotainment systems*

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