

Milli-Grid™ BMI (Blind Mate Interface) Connectors

Dual-row, Fully Shrouded, Through-hole, Panel-to-Board Solution

Fully shrouded 2.00mm pitch header offers the smallest blind-mating interface available for wire-to-board and panel-to-board applications across a variety of industries

Features and Benefits

Fully shrouded housing	Protects mating contact from accidental bending and damage
Wide lead-in bevel design	Self-aligns connectors without the need for direct line-of-sight or wrenching tools
Floating x- and y-axes	Helps position connectors to achieve fully mated condition
High-temperature LCP housing	Meets lead-free processing requirements
Choice of 6 PC tail lengths (2.10, 2.60, 3.00, 3.50, 4.00, 4.50mm)	Suits a variety of PCB thicknesses for greater design flexibility
Locating peg	Ensures correct connector orientation on PCB

Applications

Data/Communications

- High-end Computing (Servers)
- Personal Computers
- Hard/Optical Disk Drives

Telecommunications/Networking

- Infrastructure

Consumer/Home Entertainment

- Game Centers
- Gaming Consoles



Personal computers and gaming consoles

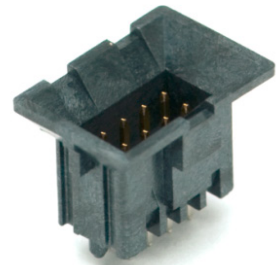


Servers



Gaming centers

molex®

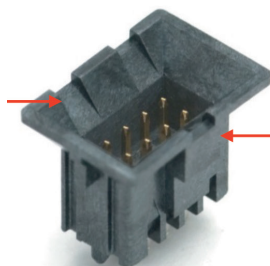


Fully Shrouded, 8-circuit, Vertical Through-hole Milli-Grid™ BMI Header with Panel-Mount Receptacle Assembly

(Remark: Wires in the photo are for illustration purposes only)

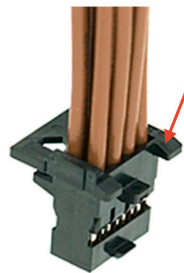
Product Features

Wide bevel to align mating receptacle



Fully shrouded header housing

Illustration showing a dual-row, 8-circuit, vertical Milli-Grid™ BMI header (Series: 151013)



Receptacle housing

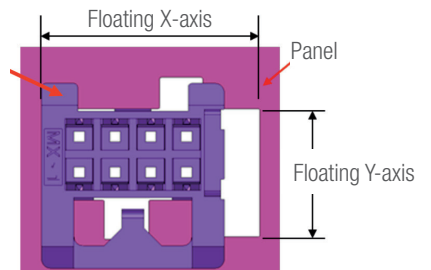


Illustration showing a dual-row, 8-circuit Milli-Grid™ Panel-Mount Receptacle with panel (Series: 151014)

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Specifications

Reference Information

Packaging: Tube (Header)/Bulk (Receptacle)

UL File No.: E29179

CSA File No.: 1585720 (LR19980)

Mates With:

151013 with 151014 housing

151013 with 51110 housing

Use With:

51110 housing with 50394 terminals

151014 housing and 50394 terminals

Terminal Used: Phosphor Bronze

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

Glow Wire Compliant: No

Electrical

Voltage (max.): 125V

Current (max.): 2.0A

Contact Resistance: 40 milliohms

Dielectric Withstanding Voltage: 1000V AC (1 minute)

Insulation Resistance: 1000 megohms

Mechanical

Contact Retention to Housing (Header):

8.5N min per pin

Contact Retention to Housing (Receptacle):

9.8N min per pin

Mating Force: 1.9N max per pin

Unmating Force: 0.35N min per pin

Durability (min.): 25 cycles

Physical

Housing (Header): LCP, glass-filled, UL 94V-0, Black

Housing (Receptacle): PBT, UL 94V-0, Black

Contact: Phosphor Bronze, 0.50mm square

Plating:

Contact Area — Refer to table below

Solder Tail Area — 1.27µm Matte Tin (Sn)

Underplating — 1.27µm Nickel (Ni)

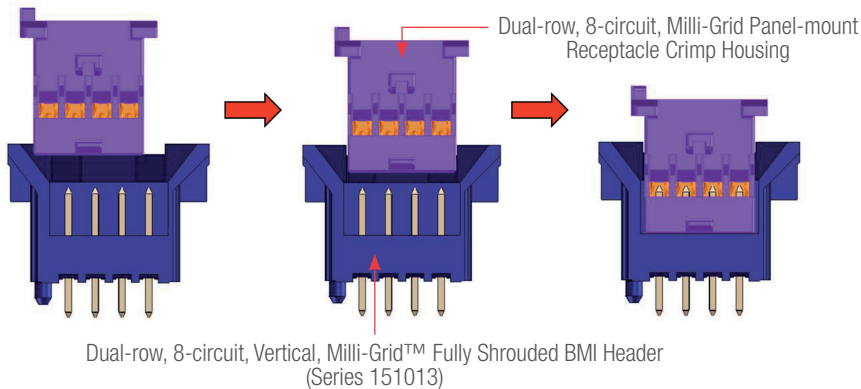
Operating Temperature: 0 to +75°C

Ordering Information

Series No.	Component	Orientation	Plating Option	Tail Length Option	Circuit Sizes
151013	PCB Header	Peg	151013-X X X X 2-0.76µm Gold (Au) 3-0.38µm Gold (Au) 4-0.05µm Gold (Au)	151013-X X X X 0-2.60mm 1-4.00mm 2-3.00mm 3-3.50mm 4-4.50mm 5-2.10mm	04
					06
					08
					10
					12
					14
					16
					18
					20
					8*
151014	Crimp Receptacle Housing	N.A.	N.A.	N.A.	8*
50394	Crimp Receptacle Terminal N	N.A.	50394-805 X 1-0.38µm Gold (Au) 2-0.76µm Gold (Au) 4-0.05µm Gold (Au)	N.A.	N.A.

Contact sales for 6, 10, 12 and 14 circuit version enquiries

Blind-Mating of Crimp Housing to Header



Cross-section illustration showing mating sequence of Dual-row, 8-circuit, Milli-Grid™ Panel-mount Receptacle Crimp Housing (Series 151014, top) with Vertical Milli-Grid™ BMI Header (Series 151013, bottom)

www.molex.com/product/milligrd.html