iGrid 2.00mm Dual-Row Wire-to-Board Connectors with Positive Lock

molex

Available in gold-plated terminals, iGrid 2.0 connectors support higher electrical conductivity for a variety of data, industrial and consumer wire-to-board applications.

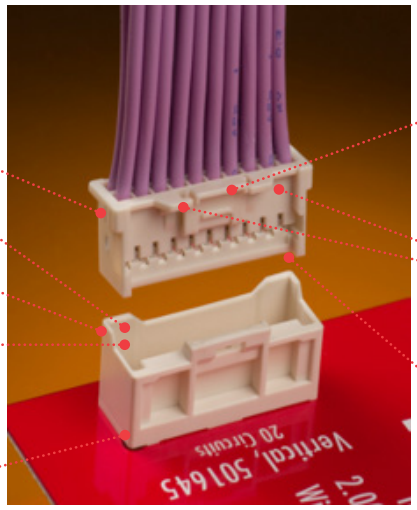
Features and Advantages

Multiple color options
Prevent connector mis-mating

High (header) housing wall
Offers terminal protection and mating guidance

Anti-angle mating structure
Prevents plug terminal damage

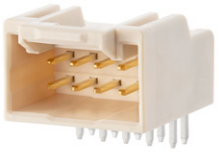
Locating peg (boss)
Ensures the correct mounting orientation on the PCB



Internal positive lock
Prevents wire-snagging beneath the latch; gives an audible "click" when fully secured and enables easy un-mating

Latch guard
Protects the latch during transportation and assembly operations

Available in vertical and right-angle orientations with tin- and gold-plating options
Offers design flexibility



Right-Angle Header, Gold Plated

Markets and Applications

Datacom
- Servers
- Printers
- ATMs

Consumer
- Home appliances
- Gaming machines
- Infotainment

Industrial
- Power controllers
- HVAC equipment

Automotive
- Lighting
- Safety systems



Data Center Servers



Refrigerator



Vending Machine

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Specifications

REFERENCE INFORMATION

Packaging: Reel (503095), Tray (208659), Bag (501646)
UL File No.: E29179
Mates With:
- 503091 with 501646 housing (Gold)
- 208659 with 501646 housing (Gold)
- 501645 with 501646 housing (Tin)
- 501876 with 501646 housing (Tin)

Use With:
- 501646 housing with 503095 terminals (Gold)
- 501646 housing with 501647 / 501648 terminals (Tin)

Designed In: Millimeters
RoHS: Yes
Halogen Free: No
Glow Wire Compliant: No

ELECTRICAL

Voltage (max.): 250V
Current (max.): 3.0A
Contact Resistance (max.): 20 milliohms
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance (min.): 1000 Megohms

MECHANICAL

Contact Insertion Force (max.): 9.8N
Contact Retention to Housing (min.): 9.8N
Insertion Force to PCB (min.): 9.8N
Mating Force (max.): 49.0N (24 circuit, Gold)
Unmating Force (min.): 4.3N (24 circuit, Gold)
Durability (min.): 30 cycles

PHYSICAL

Housing: Polyamide
Contact:
- Copper Alloy (503095, 501647, 501648), Brass (503091, 208659, 501645, 501876)

Plating:
- Contact Area: Gold (503091, 208659), Tin (501645, 501876)
- Solder Tail Area: Tin (501645, 501876, 208659), Gold (503091)
- Underplating: Nickel

PCB Thickness: 1.20 to 1.60mm
Operating Temperature: -40 to +105°C

Ordering Information

Series No.	Component	Plating	AWG
208659	Right-Angle Header	Gold (0.10, 0.38 and 0.76µm)	-
503091	Vertical Header	Gold Flash	-
503095	Crimp Terminal	Gold (0.10, 0.38 and 0.76µm)	22 to 28
501645	Vertical Header	Tin	-
501876	Right Angle Header	Tin	-
501647	Crimp Terminal	Tin	22 to 26
501648	Crimp Terminal	Tin	26 to 28
501646	Crimp Housing	-	

www.molex.com/link/igrid.html

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