

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

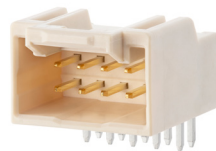
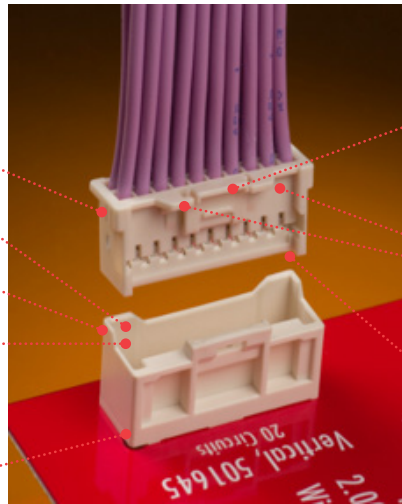
Prevents wire-snagging beneath the latch; gives an audible "click" when fully secured and enables easy un-mating

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

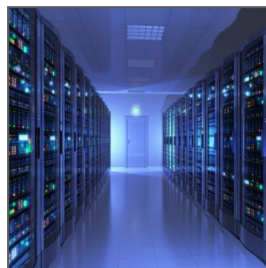
Home appliances
Gaming machines
Infotainment

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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