

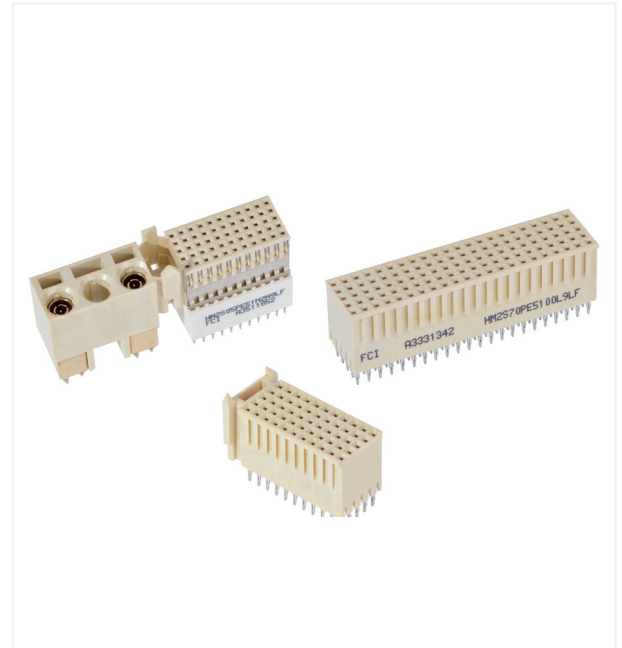
MILLIPACS® 2mm HARD METRIC SERIES – VERTICAL RECEPTACLE CONNECTORS

OVERVIEW

Millipacs® is a 2mm modular, Board-To-Board or Cable-To-Board Interconnection system in Hard Metric (HM) configuration designed in accordance with IEC 917, IEC 61076-4-101 and Telcordia GR-1217-CORE standards.

2mm HM connector is one of the most popular backplane connector systems. Millipacs® series offers attractive propositions for all market segments due to the cost effectiveness, user flexibility, standardization and availability of its broad range. Millipacs® connector system is extensively used for chassis-based packaging in the communications, data, medical and industrial & instrumentation segments.

Millipacs® HM vertical receptacles are offered in standard 5 row signal modules and up to maximum of 125 signal contacts per 50mm. Vertical receptacle module, when mated to a standard straight header are suitable for parallel Board-To-Board applications. Vertical receptacle can also be used in backplane in the place of vertical header and mated with right angle header on the daughter card.



FEATURES

- Hard Metric
- 2mm pitch

BENEFITS

- Popular equipment practice standard. Millipacs® co-exists with all HM compatible connectors and accessories
- Adequate spacing for routing PCB traces and thereby optimizing board layers, Reduces PCB real estate Vs 2.54mm

- Modular and Scalable by 25mm to 50mm

- Standard Modular length, without any loss of position

- One piece receptacle housing design
- Multipurpose center, Coding feature, location peg

- Robustness
- Easy guiding and visual identification. Prevents wrong mating

- Customized loading pattern

- Cost-effective solutions for product extensions and customized requests

- Long pin connector
- Rear plug up

- Extended stack height in mezzanine applications
- Extended mating applications via shrouds on the rear side of the PCB

- Two outer rows

- Optional shielding



TECHNICAL INFORMATION

MATERIALS

- Insulator material: High-Temperature polymer
- Contact material: Copper Alloy
- Contact plating: Gold/Palladium nickel on mating areas and Tin over Nickel on press-fit/terminal area

ELECTRICAL PERFORMANCES

- Operating current: 1.5 A at 20°C
: 1.0 A at 70°C
- Test voltage: 750 Vrms
- Contact resistance: 20 mΩ max
- Insulation resistance: 10⁴ MΩ min

MECHANICAL PERFORMANCE

- Mating force: 0.75 N max per contact pair
- Withdrawal force: 0.15 N min per contact pair
- Hertz stress: 200 Kpsi min
- Misalignment: Longitudinal ± 2.0mm
Transversal ± 2.5mm
- Inclination: ±2.0°

SPECIFICATIONS

- Product specification: GS-12-203
- Application specification: GS-20-022

ENVIRONMENTAL

- Operating temperature: -55°C to +125°C

APPROVALS AND CERTIFICATIONS

- Designed in accordance with IEC 917 and IEC 61076-4-101
- Fits DIN 43356 and IEEE 1301 Hard Metric Practice
- Telcordia GR-1217-CORE standards
- UL and CSA recognized

PACKAGING

- Tray Packaging

TARGET MARKETS/APPLICATIONS

- Communications
 - IP, Internet backbone driving high bandwidth requirements
 - LAN / WAN interfaces & data over public networks
 - Core Switches
 - Routers
 - Hubs
 - Base Station
 - Wireless Base Station
 - Transmission Access Systems
- Data
 - Servers
 - Storage units
- Industrial & Instrumentation
 - Data Acquisition systems for Test & Measurements
 - Railway Traffic Management & Control Systems
 - Control Systems for Process
 - Energy & Power Industries
 - In-flight Entertainment & Communication for Avionics
 - Digital Image Processing
 - Multimedia
 - Signage
 - Video Surveillance
 - Radar
 - Sonar System
 - UAV
- Medical
 - MRI Scanners
 - Diagnostic Equipment

PART NUMBERS

No. of signal rows	Type	Features	Vertical Receptacle series	Max. No. of signal pins	Mounting style
5	A	22 column, 50mm + MPC	HM2S10P	110	Press-fit
		22 column, 50mm + MPC+ location peg	HM2S01P	110	Press-fit
		22 column, 50mm + MPC + long pin	HM2S10PE51N	110	Press-fit
	B	25 column, 50mm	HM2S02P	125	Press-fit
	B22	22 column, 44mm	HM2S70P	110	Press-fit
	B19	19 column, 38mm	HM2S71P	95	Press-fit
	C	11 column, 25mm + end polarization	HM2S30P	55	Press-fit
		11 column, 25mm + end polarization + location peg	HM2S03P	55	Press-fit
		11 column, 25mm + end polarization + long pin	HM2S30PE51N	55	Press-fit
	M	50mm, 55 signal + 3 power/coax + MPC + long pin	HM2S05PE51N	55	Press-fit

* MPC – Multi purpose center for polarization and coding

* Application tooling are available on request

* Performance levels: 3 – 50 mating cycles;
2 – 250 mating cycles;
1 – 500 mating cycles.