Millipacs® 2MM Hard Metric Series – Vertical Header Connectors

COST-EFFECTIVE YET FLEXIBLE MODULAR SYSTEM

Millipacs[®] is a 2mm modular, Board-to-Board Interconnection system in Hard Metric (HM) configuration that is versatile due to the cost-effectiveness, user flexibility, and availability of its broad range.

- Conform to IEC 917, IEC 61076-4-101 and Telcordia GR-1217-CORE standards
- Suitable for chassis-based packaging in the communications, data, medical, industrial, and instrumentation segment
- Optional hybrid modules



FEATURES

- Hard Metric
- 2mm pitch
- Modular and scalable by 25mm to 50mm
- Three levels of mating contact lengths and different terminal lengths.
- Multipurpose center, coding feature, guiding feature and location peg
- SI performance
- Different length contacts at any position
- Hybrid connectors with signal, power, and coaxial contacts
- Two outer rows

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
- Standard modular length and without any loss of position
- Suitable for various applications with different PCB thickness, rear plug up applications, hot swapping
- Easy guiding and visual identification prevents wrong mating
- Suitable pinning assignment for data rate up to 3Gb/s
- Customizes loading
- Enables versatile circuit design
- Optional shielding

TECHNICAL INFORMATION

MATERIAL

- Insulator Material: Thermoplastic UL94 V-0 for standard press-fit and high temperature polymer for Pin-in-Paste terminations
- Contact Material: Copper Alloy
- Contact Plating Material: Gold / Palladium Nickel on mating area and Tin over Nickel on press-fit/pin-inpaste terminal area

ELECTRICAL PERFORMANCE

Operating Current: 1.5A at 20°C 1.0A at 70°C

■ Test Voltage: 750Vrms

■ Contact Resistance: 20mΩ max. Insulation Resistance: 10⁴MΩ min.

MECHANICAL PERFORMANCE

- Mating Force: 0.75N max. per contact pair
- Withdrawal Force: 0.15N min. per contact pair
- Hertz Stress: 200Kpsi min.
- Misalignment: Longitudinal ± 2.0mm Transversal ± 2.5mm

ENVIRONMENTAL

Operating Temperature Range: -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

SPECIFICATIONS

- IEC 917, IEC 61076-4-101
- Telcordia GR-1217-CORE standards

PACKAGING

- Tray packaging for standard versions.
- Tape and Reel packaging for Pin-in-Paste versions

TARGET MARKETS/APPLICATIONS



IP, Internet backbone driving high bandwidth requirements

LAN / WAN interfaces & data over public Networks **Core Switches**

Router

Hubs

Base Station

Wireless Base Station

Transmission Access System



Server Storage Unit



Energy Management System Data Acquisition systems for Test & Measurements Control Systems for Process/Factory Automation Railway Traffic Management & Control Systems Renewable Energy In-flight Entertainment & Communication for Avionics Digital Image Processing Video Surveillance



MRI Scanner Diagnostic Equipment

Sonar System

PART NUMBERS

Maximum no. of Signal Pins	Stack Height (mm)	Length (mm)	Туре	Vertical Header	Vertical Receptacle
5	Α	22 column, 50mm + MPC+ location peg	НМ2Р07Р	110	Press-fit
	Α	22 column, 50mm +MPC + Guide pin option + location peg	HM2P29P	110	Press-fit
	Α	12 column, 30mm + MPC + location peg	HM2P27P	60	Press-fit
	Α	22 column, 50mm + MPC	HM2P40P	110	Press-fit
	В	25 column, 50mm	HM2P08P	125	Press-fit
	B22	22 column, 44mm	НМ2Р70Р	110	Press-fit
	B19	19 column, 38mm	HM2P71P	95	Press-fit
	В8	8 column, 16mm	HM2P78P	40	Press-fit
	AB	25 column, 50mm + polarization on housing walls	HM2P65P	125	Press-fit
	AB22	22 column, 44mm + polarization on housing walls	НМ2Р66Р	110	Press-fit
	AB19	19 column, 38mm + polarization on housing walls	НМ2Р67Р	95	Press-fit
	С	11 column, 25mm + end polarization + location peg	НМ2Р09Р	55	Press-fit
	CR	11 column, 25mm + reversed + end polarization + location peg	НМ2Р80Р	55	Press-fit
	L	50mm, 6 power/coax + MPC	HM2A30P	6 Spl.	Press-fit
	М	50mm, 55 signal + 3 power/coax + MPC	HM2P11P	3 Spl. + 55	Press-fit
	N	25 mm, 3 power/coax + end polarization	HM2A32P	3 Spl.	Press-fit
8	D	22 column, 50mm + MPC + guide pin option + location peg	HM2P87P	176	Press-fit
	DE	25 column, 50mm + polarization on walls	HM2P95P	200	Press-fit
	Е	25 column, 50mm	HM2P88P	200	Press-fit
	F	11 column, 25mm + end polarization + location peg	НМ2Р89Р	88	Press-fit
5	Α	22 column, 50 mm + MPC	HM2P40S	110	Pin-in-Paste
	С	11 column, 25mm + end polarization + location peg	HM2P09S	55	Pin-in-Paste
	М	50 mm, 55 signal + 3 power/coax + MPC	HM2P11S	3 Spl. + 55	Pin-in-Paste

Find part number details using the search box on www.amphenol-cs.com

^{*}MPC - Multi purpose center for polarization and coding

^{*}Application tooling are available on request
*Compact PCI Connectors are available for Types A, B22, B19,B8, AB22,

 $^{{\}bf *Performance\ levels:}$

^{3 - 50} mating cycles;

^{2 – 250} mating cycles; 1 – 500 mating cycles