≣FCi Basics

Amphenol

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: $10^4 M\Omega$ 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 Sonar System



MRI Scanner Diagnostic Equipment

www.amphenol-cs.com

Disclaimer

Please note that the above information is subject to change without notice.

PART NUMBERS

| Maximum no. of Signal Pins | Stack Height (mm) | Length (mm) | Туре | Vertical Header | Vertical Receptacle |
|----------------------------------|-------------------------|--|---------|--------------------|------------------------|
| 5 | А | 22 column, 50mm + MPC+ location peg | HM2P07P | 110 | Press-fit |
| | А | 22 column, 50mm +MPC + Guide pin option + location peg | HM2P29P | 110 | Press-fit |
| | А | 12 column, 30mm + MPC + location peg | HM2P27P | 60 | Press-fit |
| | А | 22 column, 50mm + MPC | HM2P40P | 110 | Press-fit |
| | В | 25 column, 50mm | HM2P08P | 125 | Press-fit |
| | B22 | 22 column, 44mm | HM2P70P | 110 | Press-fit |
| | B19 | 19 column, 38mm | HM2P71P | 95 | Press-fit |
| | B8 | 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 | HM2P66P | 110 | Press-fit |
| | AB19 | 19 column, 38mm + polarization on housing walls | HM2P67P | 95 | Press-fit |
| | С | 11 column, 25mm + end polarization + location peg | HM2P09P | 55 | Press-fit |
| | CR | 11 column, 25mm + reversed + end polarization + location peg | HM2P80P | 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 |
| | E | 25 column, 50mm | HM2P88P | 200 | Press-fit |
| | F | 11 column, 25mm + end polarization + location peg | HM2P89P | 88 | Press-fit |
| 5 | А | 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,

and AB19

*Performance levels:

3 - 50 mating cycles;

2 – 250 mating cycles; 1 – 500 mating cycles

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