

# Millipacs® High Temperature Backplane Connectors

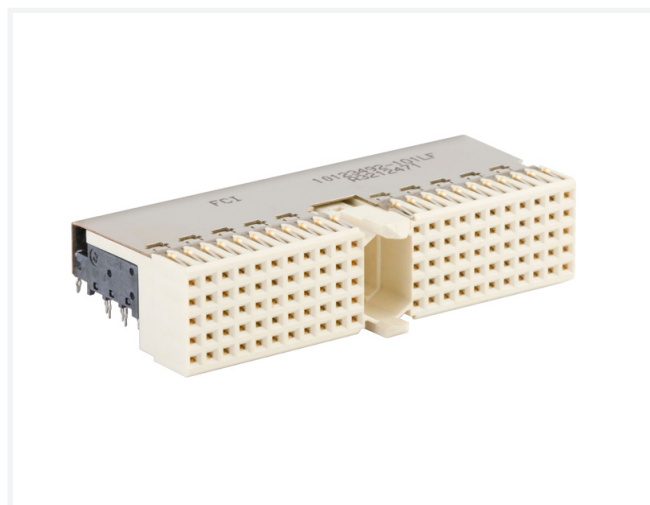
## COMPATIBLE FOR HIGH TEMPERATURE APPLICATIONS

Amphenol's Millipacs® is a 2.00mm grid Interconnection system in hard metric configuration designed in accordance to IEC 917, IEC 61076-4-101, Telecordia GR-1217-CORE standards and fulfills Compact PCI bus architecture.

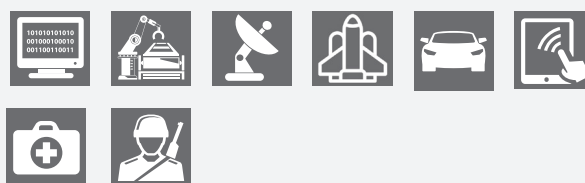
Millipacs® high temperature series addresses the market requirements for backplane connectors compatible for higher operating temperature applications. With growing density and electronics packaging, temperature rise is posing challenges to the users. Besides standard operating temperature range of -55°C to +125°C, options for extended temperature range of -65°C to +175°C and smoke and fire compliant standard EN45545 is available.

As one of the most popular backplane connector series, Millipacs® is feature-packed for rugged environments. Features like two-beam twisted tulip contact, header pin length choice for hot swapping, EMI shielding, coding, guiding, high operating temperature make it ideal for use in rugged and reliable applications in multiple market segments

- Smoke and fire compliant EN45545 version
- Extended high temperature capacity range from -65°C to 175°C
- Option for enhanced current rating up to 3A per pin or standard 1.5A per pin
- Data rates options up to 3Gb/s and hybrid power up to 40A per pin
- Hot Swapping and EMI Protection



### TARGET MARKETS



# ▶ Millipacs® High Temperature Backplane Connectors

## FEATURES

- EN45545-2 certified: fire and smoke compliant
- Thermal absorption and withstanding capability up to -65°C to +175°C
- Enhanced current rating per signal pin up to 3A max
- Receptacle contact – tulip type
- Press fit and Pin-in-Paste tail options
- FMLB and LMFB
- Top and bottom shielding options
- RoHS compliant and lead-free

## BENEFITS

- Suitable for railway applications
- Saves process cost and suitability for higher temperature applications
- Lower temperature rise
- Equalized signal path and contact reliability
- High temperature with reflow capable housing and Pin-in-Paste soldering allows for transition to reflow PCB assembly
- Hot swapping and direct plugging
- EMI Protection
- Meets environmental, health, and safety requirements

## TECHNICAL INFORMATION

### MATERIAL

- High Temperature Thermoplastic UL94V-0
- Contact: Copper Alloy

### ELECTRICAL PERFORMANCE

- Insulation Resistance: 10,000MΩ min.
- Voltage Rating: 750V(RMS)
- Contact Resistance: 20mΩ max. (initial)
- Current Rating: 1.5A and option up to 3A per signal pin

### MECHANICAL PERFORMANCE

- Durability: 250 mating cycles
- Mating Force: 0.75N max. per contact
- Withdrawal Force: 0.15N min. per contact
- Hertz Stress: 200Kpsi min.

### ENVIRONMENTAL

- Operating Temperature Range: -65°C to +125°C and option up to +175°C

### APPROVALS AND CERTIFICATIONS

- UL and CSA recognized
- Telcordia GR-1217-CORE standards
- IEC 917, IEC 61076-4-101
- DIN 43356 and IEEE 1301 Hard Metric Practice
- EN45545-2

### SPECIFICATIONS

- Product Specification: GS-12-203
- Packaging Specification: GS-20-022

### PACKAGING

- Tray Packaging

### TARGET MARKETS/APPLICATION



Avionics



Communications



Data



Oil & Gas-Down the hole  
HVAC  
Motion Control  
Renewable  
Embedded Computing  
Heavy Duty Loaders, Conveyers



Medical



Military



Space

## PART NUMBER

- High Temperature Version
- Current rating up to 3A per pin
- Operating Temperature Range: -65°C to +175°C

No of Rows	Type	Module	Header Series	Pin Orientation	Receptacle Series	Pin Orientation	Max. No of Signal Pins	Mounting Style
5	A	Module length 50mm 110 pos MPC	HM2P07H	Vertical	HM2R01H	Right Angle	110	Press fit- High Temperature (EN45545)
	AB	Module length 50mm 125 pos guiding pegs	HM2P65H	Vertical	HM2R65H	Right Angle	125	Press fit- High Temperature (EN45545)
	C	Module length 25mm 55 pos guiding pegs	HM2P09H	Vertical	HM2R03H	Right Angle	55	Press fit- High Temperature (EN45545)

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)

## PART NUMBER

- Smoke & fire compliant EN45545 Standard Version
- Current rating up to 1.5A per pin
- Operating Temperature Range: -55°C to +125°C

No of Rows	Type	Module	Header Series	Pin Orientation	Receptacle Series	Pin Orientation	Max. No of Signal Pins	Mounting Style
5	A	Module length 50mm 110 pos MPC	HM2P07F	Vertical	HM2R01F	Right Angle	110	Press Fit- Fire & Smoke (EN45545)
	AB	Module length 50mm 125 pos guiding pegs	HM2P65F	Vertical	HM2R65F	Right Angle	125	Press Fit- Fire & Smoke (EN45545)
	C	Module length 25mm 55 pos guiding pegs	HM2P09F	Vertical	HM2R03F	Right Angle	55	Press Fit- Fire & Smoke (EN45545)
	A	Module length 50mm 110 pos MPC	HM2J07F	Right Angle	HM2S01F	Vertical	110	Press Fit- Fire & Smoke (EN45545)
	B	Module length 50mm 125 pos Without guiding pegs	HM2J08F	Right Angle	HM2S02F	Vertical	125	Press Fit- Fire & Smoke (EN45545)
	C	Module length 25mm 55 pos guiding pegs	HM2J09F	Right Angle	HM2S03F	Vertical	55	Press Fit- Fire & Smoke (EN45545)
	AB	Module length 50mm 125 pos guiding pegs	HM2J65F	Right Angle	HM2S65F	Vertical	125	Press Fit- Fire & Smoke (EN45545)

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