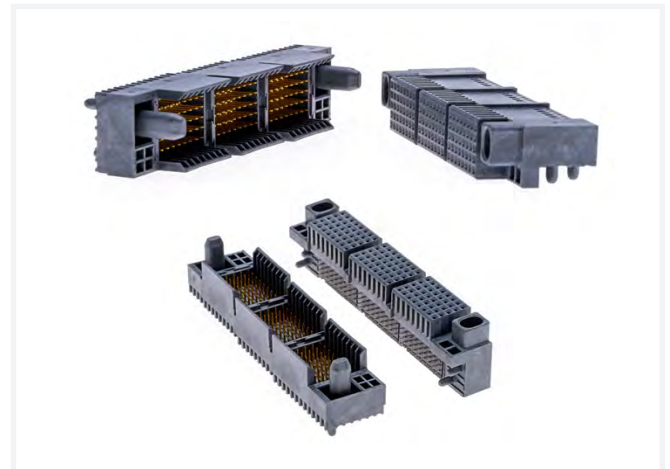


Millipacs® Plus Configurable Connectors

MILLIPACS® PLUS CONFIGURABLE AND SCALABLE OFFERS CHOICE OF SIGNAL & HYBRID SOLUTIONS

Millipacs® Plus 2mm Hardmetric connector offers a choice of data rates ranging from 3 to 25Gb/s with configurable and scalable high speed, low speed signal, guiding, and power modules. Available in vertical header on the backplane mating with right angle receptacle on a daughter card, scalable design is easy to populate on boards and offers flexibility to designers. Tulip contact systems and 2mm+ wiping distance ensure a high level of reliability with multiple contact points. Options for hot swapping, EMI shielding, and high temperature compatibility are available.

- Configurable signal, low speed and high speed with power and guiding options
- Current rating up to 1.5A for signal contacts and 40A for power contacts
- Provides power contacts for power distribution and signal contacts for power control
- Data rates options up to 25Gb/s for signal contacts
- Hot Swapping and EMI Protection



TARGET MARKETS



FEATURES

- Configurable modules
- Hardmetric equipment practice
- Choice of contact mating levels
- Choice of data rates
- Shielding Option
- Tulip contact design

BENEFITS

- Design flexibility and easy to pressfit
- Popular backplane architecture with standard board-to-board distance
- Hot swapping of boards
- Optimize cost
- EMI Protection
- Multiple contact points ensuring high reliability. Can withstand shock and vibration

TECHNICAL INFORMATION

MATERIAL

- Insulator Material: Thermoplastic UL94 V0
- Contact Material: Copper Alloy

MECHANICAL PERFORMANCE

- Signal Contact
 - Mating Force: 0.75N max. per contact pair
 - Withdrawal Force: 0.15N min. per contact pair
 - Hertz Stress: 200Kpsi min.
 - Misalignment: Longitudinal ± 2.0 mm Transversal ± 2.5 mm
 - Inclination: $\pm 2.0^\circ$
- Power Contact
 - Insertion Force: 10N max.
 - Withdrawal Force: 1.6N min.

ELECTRICAL PERFORMANCE

- Signal Contact
 - Operating Current:
 - 1.5A at 20°C
 - 1A at 70°C
 - Test Voltage: 750Vrms
 - Contact Resistance: 20m Ω max.
 - Insulation Resistance: 10,000M Ω min.
- Power Contact
 - Operating current up to 40A
 - Contact Resistance: <1m Ω under 10A

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

SPECIFICATION

- Product Specification: GS-12-203

PACKAGING

- Tray

TARGET MARKETS/APPLICATIONS



Automotive



Communications



Telecom



Industrial & Instrumentation
Avionics
Oil & Gas-Down the hole
HVAC
Renewable
Embedded Computing
Heavy Duty Loaders, Conveyers
Factory Automation
Energy Management System
ESS



Medical

PART NUMBERS

Type	Vertical Header MPN	Description	Mating Right Angle Receptacle MPN	Description	
Signal	10164739-901LF	Millipacs® Plus Vertical Header with 40 Signal Pins Press Fit Tail Unshielded and Level 1 mating height	10164741-901LF	Millipacs® Plus 10G RA Receptacle Unshielded with 8 high speed differential pairs press fit tail	
			10164741-902LF	Millipacs® Plus 10G RA Receptacle Unshielded with 8 high speed differential pairs and 4 low speed signals press fit tail	
	10164739-903LF	Millipacs® Plus Vertical Header with 40 Signal Pins Press Fit Tail Unshielded and Level 2 mating height	10164741-903LF	Millipacs® Plus 10G RA Receptacle Unshielded with 8 high speed differential pairs and 24 low speed signals position press fit tail	
			10164741-904LF	Millipacs® Plus RA Receptacle Unshielded with 40 low speed signal pins press fit tail	
	10164739-902LF	Millipacs® Plus Vertical Header with 40 Signal Pins Press Fit Tail Shielded and Level 1 Mating Height	10166493-901LF	Millipacs® Plus 10G RA Receptacle Shielded with 8 high speed differential pairs press fit tail	
			10166493-902LF	Millipacs® Plus 10G RA Receptacle Shielded with 8 high speed differential pairs and 4 low speed signals press fit tail	
			10166493-903LF	Millipacs® Plus 10G RA Receptacle Shielded with 8 high speed differential pairs and 24 low speed signals press fit tail	
			10166493-904LF	Millipacs® Plus Standard RA Receptacle Shielded with 40 low speed signal pins press fit tail	
			10170090-901LF	Millipacs® Plus 25G RA Receptacle Shielded with 10 high speed differential pairs press fit tail	
	Power	10169584-1ERPLF	Millipacs® Plus 1 Position 40A Power Module with Vertical Termination	10169585-1ERPLF	Millipacs® Plus 1 position 40A Right Angle Receptacle Power module press fit tail
		10169584-2ERPLF	Millipacs® Plus 1 Position 40A Power Module with Vertical Termination and FMLB	10169585-2ERPLF	Millipacs® Plus 1 position 40A Right Angle Receptacle Power module with FMLB and press fit tail
Guide	10164742-001LF	Millipacs® Plus Straight Male Guide Module for Right End	10164743-003LF	Millipacs® Plus right angle female guide module for left end	
	10164742-002LF	Millipacs® Plus Straight Male Guide Module for Centre	10164743-002LF	Millipacs® Plus right angle female guide module for centre	
	10164742-003LF	Millipacs® Plus Straight Male Guide Module for Left End	10164743-001LF	Millipacs® Plus right angle female guide module for right end	

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