



## TECHNICAL INFORMATION

### MATERIALS

- Contacts: Copper Alloy
- Contact Finish:
  - Performance-based plating over nickel at separable interface
  - Tin over nickel on press-fit tails on standard lead-free products. Tin-lead option available upon request
- Housings: High Performance Thermoplastic, UL94V-0

### ELECTRICAL PERFORMANCES

- Contact Resistance:  $\leq 35\text{m}\Omega$  initial,  $\leq 10\text{m}\Omega$  increase after environmental test
- Current Rating ( $\leq 30^\circ\text{C}$  rise above ambient in still air): 0.5A/contact with all contacts powered

### 100 $\Omega$ CONNECTORS

- Differential impedance:  $100 \pm 8\Omega$  @ 50 ps (10-90%) rise time
- Differential insertion loss:  $< 1\text{dB}$  through 6.25Gb/s  
 $< 1.5\text{ dB}$  through 12.5Gb/s
- Near-end crosstalk (multi-active):  $< -38\text{ dB}$  through 6.25Gb/s;  $< -28\text{ dB}$  through 12.5Gb/s
- Far-end crosstalk (multi-active):  $< -41\text{ dB}$  through 6.25Gb/s;  $< -28\text{ dB}$  through 12.5Gb/s

### 80 $\Omega$ CONNECTORS

- Differential impedance:  $85 \pm 5\Omega$  @ 50 ps (10-90%) rise time
- Differential insertion loss:  $< 1.5\text{ dB}$  through 8Gb/s
- Near-end crosstalk (multi-active):  $< -30\text{ dB}$  through 8Gb/s
- Far-end crosstalk (multi-active):  $< -30\text{ dB}$  through 8Gb/s

### MECHANICAL PERFORMANCE

- Durability: 200 cycles
- Mating Force: 0.45N max./contact
- Unmating Force: 0.15N min./contact
- Compliant pin insertion force:
  - Vertical headers, right-angle headers or right-angle receptacles: 40 N max.
  - Vertical receptacles: 25 N max.

### SPECIFICATIONS

- Product: GS-12-239
- Application: GS-20-035

### APPROVALS AND CERTIFICATIONS

- Telcordia GR-1217-CORE Central Office

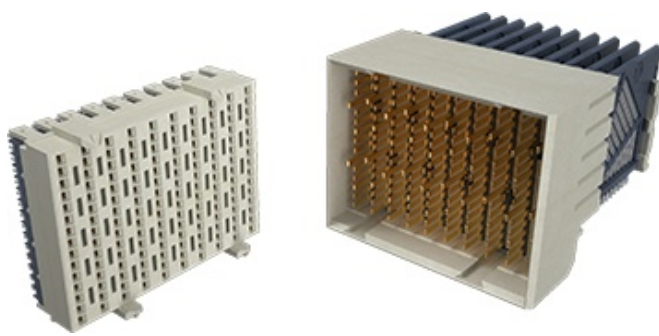
### PACKAGING

- Tubes
- Trays (vertical receptacle only)

### TARGET MARKETS/APPLICATIONS

- Communications
  - Switches
  - Routers
  - Access
  - Optical Transmission
  - Wireless Base Stations
- Data
  - Servers
  - Switches
  - Storage
- Industrial & Instrumentation
  - Test & Measurement
- Medical

# AirMax VS® BACKPLANE/MIDPLANE CONNECTORS



Vertical Receptacle

Right Angle Header (4 Wall)

## PART NUMBERS

### AirMax VS® SIGNAL MODULES WITH VERTICAL BACKPLANE RECEPTACLES 0.5mm PTH PRESS-FIT\*

Product Variation				Mating Connector System			Differential Impedance
Pairs	Columns	Differential Pairs	Column Pitch	Vertical Receptacle	Right Angle Header	Header Version	
3	6	18	2mm	10043546-101LF	10040862-101LF	2 Wall	100 OHMS
	6	18	2mm	10043546-101LF	10039851-101LF	4 Wall	
	8	24	2mm	10045271-101LF	10045266-101LF	2 Wall	
	8	24	2mm	10045271-101LF	10045267-101LF	4 Wall	
	10	30	2mm	10034251-101LF	10034264-101LF	2 Wall	
	10	30	2mm	10034251-101LF	10034249-101LF	4 Wall	
4	6	24	2mm	10052829-101LF	10052825-101LF	4 Wall	
	6	24	2mm	10052829-101LF	10052824-101LF	2 Wall	
	8	32	2mm	10052842-101LF	10052837-101LF	2 Wall	
	8	32	2mm	10052842-101LF	10052838-101LF	4 Wall	
	8	32	3mm	10064493-101LF	10064488-101LF	2 Wall	
	8	32	3mm	10064493-101LF	10064489-101LF	4 Wall	
	10	40	2mm	10028264-101LF	10029391-101LF	2 Wall	
	10	40	2mm	10028264-101LF	10028436-101LF	4 Wall	
	10	40	3mm	10035465-101LF	10035514-101LF	2 Wall	
5	8	40	2mm	10040993-101LF	10041746-101LF	2 Wall	
	8	40	2mm	10040993-101LF	10041460-101LF	4 Wall	
	10	50	2mm	10016537-101LF	10016527-101LF	2 Wall	
	10	50	2mm	10016537-101LF	10025613-101LF	4 Wall	
	10	50	3mm	10035146-101LF	10037323-101LF	2 Wall	
	10	50	3mm	10035146-101LF	10037324-101LF	4 Wall	

Product Variation				Mating Connector System			Differential Impedance
Pairs	Columns	Differential Pairs	Column Pitch	Vertical Receptacle	Right Angle Header	Header Version	
3	6	18	2mm	10096461-101LF	10097256-101LF	4 Wall	85 OHMS
5	10	50	2mm	10099763-101LF	10097311-101LF	4 Wall	
	10	50	3mm	10096461-101LF	10087771-101LF	2 Wall	

\*0.5mm standard press-fit pin is the same as the standard AirMax VS® connectors

For more information,  
please contact: [Communications@fci.com](mailto:Communications@fci.com)  
or visit us at [www.fci.com](http://www.fci.com)

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

# Mouser Electronics

Authorized Distributor

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[10034249-101LF](#) [10034251-101LF](#) [10053656-101LF](#) [10040993-101LF](#) [10041460-101LF](#) [10037324-101LF](#)  
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[10126796-102LF](#) [10127117-102LF](#) [10130668-102LF](#)