≣FCi Basics

Amphenol

Metral[®] Vertical Header and Right Angle Receptacle

FUTUREBUS+ CONNECTORS RATED FOR BACKPLANE, COPLANAR AND MEZZANINE APPLICATIONS

Metral[®] product family offers the widest range of backplane connector solutions which includes vertical header and right angle receptacle series. The connectors are designed in accordance with IEC 61076-4-104 and Telcordia[®] GR-1217-CORE.

Metral® vertical headers and right angle receptacles offer high contact density of 250 contacts per 100mm connector length, and a contact pitch of 2mm. They are available in 4 and 5-row versions.

Metral[®] vertical headers can be used with vertical receptacles for mezzanine application.



Metral[®] backplane connectors meet Futurebus+ standards to support applications in data, industrial and instrumentation, medical, and telecom markets.

- Vertical and Right Angle versions available
- Available in Press-fit, Solder-to-Board and Pin-in-Paste terminations
- Versatile application support

FEATURES

- Modular and scalable, available in 1, 2, 4 and 8 modules
- 250 contacts per 100mm connector length
- Press-fit, Solder-to-Board and Pin-in-Paste terminations
- Varying pin length enables first-mate, last-break capability
- 4 and 5 row versions available
- Different length contacts at any position for headers
- Dual beam contact design for receptacles
- Locating pegs option available
- Stackable connector to Metral[®] high-speed range

BENEFITS

- Flexible modular length without any loss of contact position
- High signal density
- Caters to different application requirement
- Allows sequential connection of pins for design flexibility and offers protection
- Caters to different connector sizes
- Custom loading
- Provides electrical reliability and withstands vibration
- Enables accurate positioning of connector on PCB, holds connector in place
- Allows flexibility of low and high-speed signals

www.amphenol-cs.com

TECHNICAL INFORMATION

MATERIALS

- Housing : High temperature thermoplastic; UL 94V-0
- Contact: Copper Alloy
- Plating: Performance-based plating

ELECTRICAL PERFORMANCE

- Dielectric Withstanding Voltage: 1000Vrms
- Insulation Resistance: 5000M Ω min.
- Current Rating: 1.A (all contacts powered)

ENVIRONMENTAL

Operating Temperature Range: -55°C to +125°C

SPECIFICATIONS

- Product Specifications: GS-12-180, 453
- Application Specifications: BUS-20-073, 061

MECHANICAL PERFORMANCE

• Mating Force: 0.45N max. per pin

PART NUMBERS

• Unmating Force: 0.15N min. per pin

APPROVALS AND CERTIFICATIONS

- IEC 61076-4-104
- GR-1217-CORE

PACKAGING

- Tube for Press-fit and Solder-to-Board terminations
- Tape and Reel for Pin-in-Paste termination

TARGET MARKETS/APPLICATIONS



Telecom



Data

Industrial & Instrumentation



Medical

Right Angle Receptacle (RAR)			Termination	Vertical Header (VH)	
Row		Module		Row	
4	5			4	5
88945-102LF	89047-102LF	1	Press-fit	70232-116LF	89006-116LF
88946-102LF	89093-102LF	2	Press-fit	70233-116LF	89007–116LF
88947-102LF	89094-102LF	4	Press-fit	70234-116LF	89008-116LF
88948-102LF	89095-102LF	8	Press-fit	70235-116LF	89009-116LF
89035-102LF	85863-102LF	1	Solder-to-Board	88951-101LF	74741-101LF
89036-102LF	85864-102LF	2	Solder-to-Board	88952-101LF	74742-101LF
89037-102LF	85865-102LF	4	Solder-to-Board	88953-101LF	74743-101LF
89038-102LF	85866-102LF	8	Solder-to-Board	88954-101LF	74744-131LF
-	10126372-102LF	1	Pin-in-Paste	-	-

Note: The above table captures only a representative list of parts. Please refer our website, <u>www.amphenol-cs.com</u> or contact Amphenol for other part number details.

Lead-free and RoHS compliant products are designed by the addition of LF as a suffix to the dash number.

WHERE INNOVATION CONNECTS Scan to learn more



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