



Metabee DaiMax Series High-speed Backplane Connector System Catalog

DaiMax Series High-speed Backplane Connector System

1. Introduction

Metabee designed these DaiMax series high-speed backplane connectors with your need for high-performing, high-bandwidth systems in mind. They Provide a migration path to 25Gb/s per differential pair. We designed them with a shieldless design with closely coupled pairs. They are mating-compatible with Amphenol's AirMax VS, VS2, and VSE series connectors.

2. Features

- Provides a transmission path to 25 Gb/s per differential pair.
- Compatible with Amphenol's AirMax VS, VS2, and VSe series connectors.
- Open pin field design provides enormous flexibility.
- Shieldless design using strongly linked pairs.
- Modular, shieldless, no metal plate and tightly coupled differential pair design, with low loss and crosstalk.
- 3 4 and five-pair backplane and coplanar versions are available.
- Available with 0.5mm or 0.4mm compliant pins.
- Right angle and vertical receptacles and headers are suitable for backplane, midplane, and coplanar applications.

3. Technical Information:

Material	
Contact Material	High-performance Copper Alloy
Contact Finish:	<ul style="list-style-type: none"> ✓ Performance-based plating at the separable interface ✓ Tin over Nickel on press-fit tails ✓ Tin-lead option
Housings:	High-performance Thermoplastic, 94-V0
Electrical Performances	
Contact Resistance:	≤60 mΩ initial in backplane application, ≤120 mΩ initial in coplanar application
Current Rating (with ≤30°C temperature rise above ambient):	0.5 A/contact with all contacts powered
Mechanical Performance	
Durability:	200 cycles
Mating Force:	0.50N max./contact
Unmating Force:	0.15N min./contact
Average Compliant Pin Insertion Force/ pin:	0.4mm PCB hole: 15N max. 0.5mm PCB hole: 30N max.
Approvals And Certifications	
Approvals:	UL approved
Packaging	
Packaging:	Trays or Tubes

4. Part Numbers

DaiMax Traditional Mother-Daughter Board Connectors 0.5mm PTH Press-Fit

Product Variation			2.0mm Column Pitch		Differential Impedance
Pairs	Columns	Differential Pairs	Mating Connector System		
			Vertical Header	Right Angle Receptacle	
3	6	18	10122769-101LF	10122643-101LF	100 OHMS
	8	24	10127937-101LF	10124355-101LF	100 OHMS
	10	30	10127939-101LF	10124420-101LF	100 OHMS
4	6	24	10130556-101LF	10130565-101LF	100 OHMS
	8	32	10130557-101LF	10130566-101LF	100 OHMS
	10	40	10122770-101LF	10122655-101LF	100 OHMS
5	8	40	10130558-101LF	10128702-101LF	100 OHMS
	10	50	10122771-101LF	10122665-101LF	100 OHMS

DaiMax Inverse Mother-Daughter Board Connectors 0.5mm PTH Press-Fit

Product Variation			2.0mm Column Pitch		Differential Impedance
Pairs	Columns	Differential Pairs	Mating Connector System		
			Vertical Header	Right Angle Receptacle	
3	6	18	10124469-102LF	10123543-101LF	100 OHMS
	8	24	10125811-102LF	10124408-101LF	100 OHMS
	10	30	10127116-102LF	10124422-101LF	100 OHMS
4	6	24	10127117-102LF	10125538-101LF	100 OHMS
	8	32	10126796-102LF	10125530-101LF	100 OHMS
	10	40	10125559-102LF	10123536-101LF	100 OHMS
5	8	40	10127118-102LF	10128706-101LF	100 OHMS
	10	50	10124470-102LF	10123529-100LF	100 OHMS

DaiMax Coplanar Connectors 0.5mm PTH Press-Fit

Product Variation			2.0mm Column Pitch		Differential Impedance
Pairs	Columns	Differential Pairs	Mating Connector System		
			Vertical Header	Right Angle Receptacle	
3	6	18	10122643-101LF	10123543-101LF	100 OHMS
	8	24	10124355-101LF	10124408-101LF	100 OHMS
	10	30	10124420-101LF	10124422-101LF	100 OHMS
4	6	24	10130565-101LF	10125538-101LF	100 OHMS
	8	32	10130566-101LF	10125530-101LF	100 OHMS
	10	40	10122655-101LF	10123536-101LF	100 OHMS
5	8	40	10128702-101LF	10128706-101LF	100 OHMS
	10	50	10122665-101LF	10123529-101LF	100 OHMS

DaiMax Traditional Mother-Daughter Board Connectors 0.4mm PTH Press-Fit

Product Variation			2.0mm Column Pitch		Differential Impedance
Pairs	Columns	Differential Pairs	Mating Connector System		
			Vertical Header	Right Angle Receptacle	
3	6	18	10123358-101LF	10123420-101LF	100 OHMS
	8	24	10127979-101LF	10124756-101LF	100 OHMS
	10	30	10129300-101LF	10126913-101LF	100 OHMS
4	6	24	10130559-101LF	10130567-101LF	100 OHMS
	8	32	10124957-101LF	10124997-101LF	100 OHMS
	10	40	10123359-101LF	10123421-101LF	100 OHMS
5	8	40	10130013-101LF	10129941-101LF	100 OHMS
	10	50	10123360-101LF	10123422-101LF	100 OHMS

DaiMax Inverse Mother-Daughter Board Connectors 0.4mm PTH Press-Fit

Product Variation			2.0mm Column Pitch		Differential Impedance
Pairs	Columns	Differential Pairs	Mating Connector System		
			Vertical Header	Right Angle Receptacle	
3	6	18	10130665-102LF	10124149-101LF	100 OHMS
	8	24	10128101-102LF	10124755-101LF	100 OHMS
	10	30	10130666-102LF	10126918-101LF	100 OHMS
4	6	24	10130667-102LF	10130571-101LF	100 OHMS
	8	32	10130668-102LF	10130572-101LF	100 OHMS
	10	40	10130669-102LF	10124150-101LF	100 OHMS
5	8	40	10130670-102LF	10129940-101LF	100 OHMS
	10	50	10127982-102LF	10124151-101LF	100 OHMS

DaiMax Coplanar Connectors 0.5mm PTH Press-Fit

Product Variation			2.0mm Column Pitch		Differential Impedance
Pairs	Columns	Differential Pairs	Mating Connector System		
			Vertical Header	Right Angle Receptacle	
3	6	18	10123420-101LF	10124149-101LF	100 OHMS
	8	24	10124756-101LF	10124755-101LF	100 OHMS
	10	30	10126913-101LF	10126918-101LF	100 OHMS
4	6	24	10130567-101LF	10130571-101LF	100 OHMS
	8	32	10124997-101LF	10130572-101LF	100 OHMS
	10	40	10123421-101LF	10124150-101LF	100 OHMS
5	8	40	10129941-101LF	10129940-101LF	100 OHMS
	10	50	12123422-101LF	10124151-101LF	100 OHMS

- 0.4mm PTH press-fit pins maximize signal integrity performance
- 0.5mm PTH press-fit pins maximize aspect ratio

Thank You!