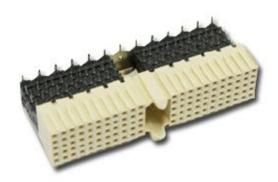


# Millipacs High Speed Right Angle Receptacle

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### Millipacs High Speed Right Angle Receptacle



#### **Overview**

■ Product: Millipacs High speed series 2 mm hardmetric 5 row Right angle receptacle suitable for data rate upto **10Gbps** with **mating compatibility** with standard IEC **61076-4-101** series 2mm HM vertical header



- Range: Millipacs HS series Receptacle share are offered in 5 row versions - Type A & C with broad side coupling
- Advantage: Delivers low cross talk performance at higher frequencies and offers industry's most cost effective upgrade to higher data rate while retaining existing vertical headers in backplane and most of the backplane system architecture

## Features and Benefits



- Backward mating compatibility to IEC 61076-4-101 2mm HM header
  - Cost effective upgrade as it retains the existing backplane architecture & Connector
  - Co-exists along with all Hardmetric compatible connectors and accessories
- Broad side coupling or Horizontal pinning
  - Efficient use of board length and maximizes the differential pairs
  - Differential pair count: 24 for type A, 12 per Type C, 30 per type AB
- 2-beam tulip contact
  - Equalized signal path and contact reliability
- Staggered PCB terminals
  - Reduces crosstalk at higher frequencies
- IMLA construction
  - Unique design enhances SI performance
- Small press-fit compliant section
  - Lower impedance resulting in faster signal speeds
  - Allowance for an additional trace between holes

### **Technical Information**



#### MATERIALS

Insulator : High temperature polymer

Contact : Copper Alloy

Contact plating: Gold / Palladium nickel on mating areas and Tin over Nickel on press-fit area

#### ELECTRICAL PERFORMANCE

Operating current : 1.5 A at 20°C; 1.0 A at 70°C

Test voltage : 750 Vrms

Contact resistance : 25 m $\Omega$  max

Insulation resistance :  $10^4 M\Omega$  min

Operating temperature : -55°C to +125°C

#### ■ MECHANICAL PERFORMANCE

Mating force : 0.50 N max per contact pair

Withdrawal force : 0.15 N min per contact pair

Misalignment: Longitudinal  $\pm$  2.0 mm, Transversal  $\pm$  2.5 mm

Inclination :  $\pm 2.0^{\circ}$ 

#### ■ PCB HOLE DIA

Signal pins 0.40 +/-0.05mm

Shielding pins 0.60+/-0.05 mm

### Standard pinning recommendation



f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
е	G	G	S	S	G	G	S	S	G	G	LS	X	X	$\times$	G	G	S	S	G	G	S	S	G	G	LS
d	S	S	G	G	S	S	G	G	S	S	G	X	X	$\times$	S	S	G	G	S	S	G	G	S	S	G
С	G	G	S	S	G	G	S	S	G	G	LS	X	$\times$	$\times$	G	G	S	S	G	G	S	S	G	G	LS
b	S	S	G	G	S	S	G	O	S	S	G	$\times$	$\times$	$\times$	S	S	G	G	S	S	G	G	S	S	G
а	G	G	S	S	G	G	S	S	G	G	LS	$\times$	$\times$	$\times$	G	G	S	S	G	G	S	S	G	G	LS
Z												·													
A Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

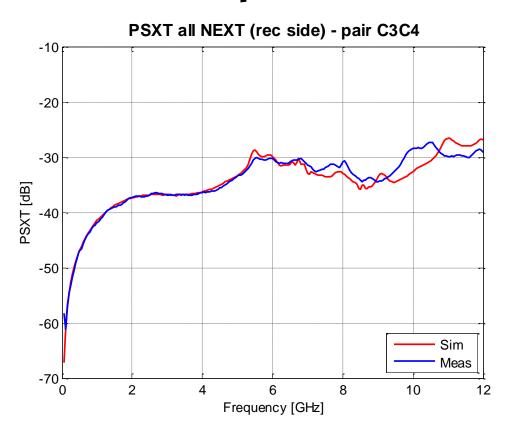
### ■ Typical pinning for 5 row Type A row product

- G Ground pins
- S High speed signal pins
- LS Low speed signal pins
- 24 Differential pair + Optional low speed signal pins

Please tell us your pinning requirement, FCI can recommend you the right solutions

## PSXT all NEXT receptacle side





Delivers :- All power summed Cross Talk -30Db at 5GHz