

Minitek® MicroSpeed 1.00mm Board-to-Board Connector

SHIELDED HIGH-SPEED BOARD-TO-BOARD CONNECTOR

Basics' Minitek® MicroSpeed connector family with 1.00mm pitch supports high-speed data applications with up to 25Gb/s. These connectors feature a shielded design that provides superior EMC performance and significantly improved electromagnetic compatibility. The poka-yoke polarization prevents visual mismatching, which makes it ideal for use in industrial environments

- Supports high-speed performance up to 25Gb/s
- EMC shielding reduces coupling inductance, providing excellent electromagnetic compatibility
- Dual-beam contact with a robust design for customer application
- Blind-mating feature
- Supports multiple PCB orientation applications



TARGET MARKETS



FEATURES

- High speed performance up to 25Gb/s
- EMI shielding
- Dual-beam receptacle contacts
- Blind-mating feature
- Vertical, right angle and combo solutions
- Licensed second source to ERNI with an exact mating cross-reference
- Lead-free and RoHS compliant

BENEFITS

- Can be used in high-end computing and signal transfer applications in data communication telecommunication, computing, medical technology and industrial automation segments
- Significantly reduced coupling inductance leading to excellent electromagnetic compatibility
- Provides high electrical reliability and withstands high level of vibration
- Suit for those tasks where visual and tactile tools are compromised during mating process
- Supports various applications
- Allows direct selection and usage of mating counterpart for ERNI's product
- Meets health, safety and environment requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: High temperature thermoplastic LCP, black (UL94V-0)
- Terminal & Shield Base Material: Copper alloy
- Plating Specification:
 - Mating Area: Gold and PdNi over nickel plating with lubrication
 - Termination Area: Tin plating over nickel

ELECTRICAL PERFORMANCE

- Current Rating: 1A per contact, 10A per shield
- Voltage Rating: 500V(AC RMS, 60Hz) for 60 seconds.
- LLCR: 50mΩ max.
- Insulation Resistance: 1x10¹⁰Ω min.
- Signal Integrity:
 - Data Rate: up to 25Gbps
 - Multiline Crosstalk: < 0.5% at 50ps (10–90%)
 - Differential Impedance: 100Ω
 - Single Ended Impedance: 50Ω

MECHANICAL PERFORMANCE

- Durability: 500 cycles
- Mating Force: 1N max. per contact
- Un-mating Force: 1N max. per contact
- Gauge Retention Force: 0.1N min. per contact
- Coplanarity: 0.1mm max. at termination area

ENVIRONMENTAL

- Operating Temperature: –55°C ~ 125°C.
- Industrial Atmosphere Durability: 10 days
- Vibration Sinusoidal: 20g
- Shock Half Sine: 50g

APPROVALS AND CERTIFICATIONS

- UL E66906

SPECIFICATIONS

- GS-12-1446

PACKAGING

- Tape & reel

TARGET MARKETS/APPLICATIONS



Factory automation
PLC



Server/Storage



MRI Machine
Computed Tomography



MCU
ADAS

PART NUMBER SELECTOR

Base Number

AA

B

C

D

LF

Base Number	Description
10146153	R/A Header, P
10150096	R/A Header, B&P
10147073	R/A Receptacle, P
10150095	R/A Receptacle, B&P
10147074	44P R/A Receptacle, P
10147075	R/A COMBO, P
10150097	VT Receptacle, 10MM Height, B&P
10150098	VT Header, 2.00MM Height, B&P

R/A	Right Angle
B	Blind Mating
P	POKA-YOKE

AA	Position
26	26
32	32
44	44
56	56

D

Package

0

Tape and Reel

C

Post

0

Yes

1

No

B

Plating option

0

Contact Area: Gold and PdNi over Nickel Plating
Termination Area: Tin over Nickel

PART NUMBERS

Description	Part Numbers
Minitek® MicroSpeed 26P R/A Header, P	10146153-2600RLF
Minitek® MicroSpeed 32P R/A Header, B&P	10150096-3200RLF
Minitek® MicroSpeed 26P R/A Receptacle, P	10147073-2600RLF
Minitek® MicroSpeed 32P R/A Receptacle, B&P	10150095-3200RLF
Minitek® MicroSpeed 44P R/A Receptacle, P	10147074-4400RLF
Minitek® MicroSpeed 26P R/A COMBO, P	10147075-2600RLF
Minitek® MicroSpeed 32P VT Receptacle,10MM HEIGHT, B&P	10150097-3200RLF
Minitek® MicroSpeed 32P VT Header, 2MM HEIGHT, B&P	10150098-3200RLF

Mouser Electronics

Authorized Distributor

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