

BergStak® 0.80mm Shielded Board-to-Board Connector

RELIABLE, HIGH-SPEED SHIELDED CONNECTORS

BergStak® 0.80mm connector family is known for its fast data transmission, high signal quality, and time-proven reliability under extended periods of application. Bergstak® shielded connector with 0.80mm pitch supports high-speed data applications up to 10Gb/s. These connectors feature a shielded design that provides superior EMC performance and significantly improved electromagnetic compatibility.

- Superior EMI protection
- Self-alignment features
- Open space for trace
- Free pin of use



TARGET MARKETS



FEATURES

- EMC shielding
- 64 positions , with 40–140 contact options
20mm stack height, with options from 9mm–20mm
- Supports data rate from 2.5Gb/s up to 10Gb/s
- Self-alignment feature
- Scoop-proof housings
- Available in UL94V-0 material
- Lead-free and RoHs compliant

BENEFITS

- Significantly reduced coupling inductance leading to excellent electromagnetic compatibility
- Application flexibility
- Meets PCIe® Gen 1 to Gen 3 and 10G Base KR specifications
- Prevents misalignment, delivers consistent reliability and high performance
- Prevents reverse mating
- High flammability rating
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Shell : Stainless Steel
- Housing: LCP UL94-V0
- Receptacle Terminal: Nickel Copper
- Plug Terminal: Brass
- Plating: – Solder area finish in matte pure Tin over Nickel
– Contact area PdNi+Gold

ELECTRICAL PERFORMANCE

- Current Rating: 0.8A
- LLCR: Initial 30mΩ; After Test: 50mΩ
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 100VAC
- Signal Integrity for PCIe® Gen 1 to Gen 3 and 10G Base KR
- Data Rate: 2.5Gb/s up to 10Gb/s

MECHANICAL PERFORMANCE

- Durability: 100 cycles
- Mating Force: 0.9N max. per contact
- Un-mating Force: 0.1N min. per contact
- Contact Retention Force: 1N min. per contact

ENVIRONMENTAL

- Operating Temperature Range: -40°C to 125°C
- High Temperature Life: 125°C for 96 hours
- Humidity: 90-95% relative for 240 hours
- Mixed Flow Gas: Duration 7 days

SPECIFICATIONS

- GS-12-1599

PACKAGING

- Tape & Reel

TARGET MARKETS/APPLICATIONS



Communication



Server / Storage



Industrial & Instrumentation



Medical

PART NUMBERS

Description	Part Numbers
Bergstak® Shielded 0.80mm, Vertical Receptacle, SMT, 64 Positions	10147212-644406LF
Bergstak® Shielded 0.80mm, Vertical Header, SMT, 64 Positions	10147213-644406LF

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PART NUMBER SELECTOR

10147212 — **AA** **B** **C** **D** **E** **LF**

AA	Position
04	2 X 20
06	2 X 30
64	2 X 32
08	2 X 40
10	2 X 50
12	2 X 60
14	2 X 70

B For Receptacle See Drawing 10147212				
MATED HEIGHT	PLUG 1	PLUG 2	PLUG 3	PLUG 4
RECEP 2				
RECEP 3				
RECEP 4				

E	Packaging	
6	T&R without metal cap (with kapton tape)	

D	Polarization Peg	Hold Down
0	YES	NO
2	NO	NO

C	Plating on contact area
4	Gold 0.2µm / pure tin 2.5µm min.(LF) Nickel under plate overall 1.27µm min.
5	Gold 0.38µm / pure tin 2µm min.(LF) Nickel under plate overall 1.27µm min.
6	Gold Flash 0.1µm min. over palladium Nickel 0.76µm min./pure tin 2µm min.(LF) Nickel under plate overall 1.27µm min.
9	Gold 0.2µm min./gold 0.05µm min. Nickel under plate overall 1.27µm min.(LF)

10147213 — **AA** **B** **C** **D** **E** **LF**

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