

BERGSTAK® 0.8MM CONNECTORS

DESCRIPTION

FCI's compact BergStak® 0.8mm pitch connector series offers an extensive range of stack heights and circuit sizes to support a wide range of mezzanine, board-stacking applications. The connectors are available in sizes from 40 to 200 positions in increments of 20 positions. The available stack heights range from 5mm to 16mm in increments of 1mm. Options for wider board spacing can provide clearance for taller board-mounted components or increased air flow for cooling. Connector polarization at the mating interface and ample-lead-in angles produce easy, repeatable mating. All connectors in the BergStak® 0.8 product family feature a robust blade-on-beam contact design at the mating interface and surface-mount termination at the PCB interface. RoHS-compatible connectors are available today.

BergStak® connectors can be supplied in tubes or in tape-on-reel for automated placement. An optional cover provides sufficient area for pickup with a vacuum nozzle.



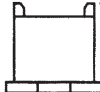
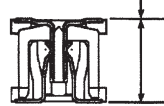
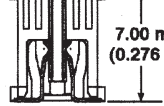
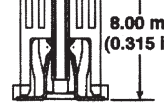
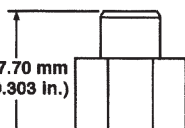
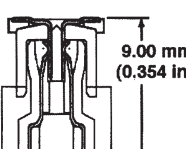
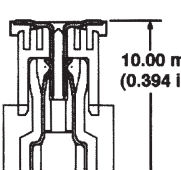
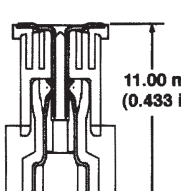
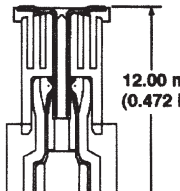
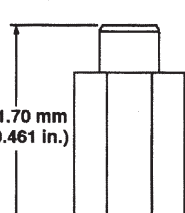
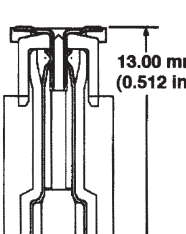
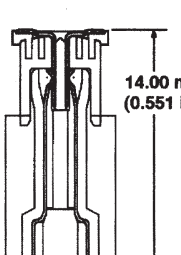
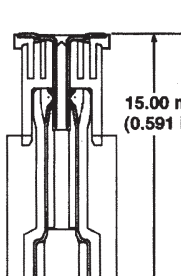
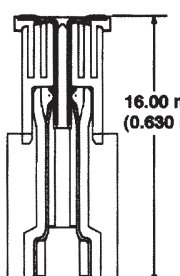
FEATURES & BENEFITS

- Dual rows of contacts on 0.8mm (0.031 in.) pitch
- Part sizes span from 40 to 200 contact positions, in increments of 20 positions
- Connector combinations for 5.0mm (0.197 in.) to 16.0mm (0.630 in.) mated height, in increments of 1.0mm (0.039 in.) to accommodate designs that require wider board spacing to provide clearance for larger components or increased air flow for cooling
- Blade-on-beam contact design prevents contact damage from the "peeling" during mating or unmating
- Gold or gold flash over palladium-nickel finish in the contact areas provides reliable electrical performance
- Tin-lead or pure tin over nickel plating in the solder areas provide excellent surface mount solder joint
- Connector polarization and ample lead in angles produce easy repeatable mating
- Liquid crystal polymer insulators withstand reflow soldering temperature
- Packaging tubes protect connectors from damage during handling

TARGET MARKETS / APPLICATIONS

- Routers
- Servers
- Telecom/Datacom equipment
- Mobile PCs
- PDAs
- Office equipment
- IP phones

MATED HEIGHT COMBINATIONS – PART NUMBER SELECTOR

		HEADERS				
		61083-XX1ABC	61083-XX2ABC	61083-XX3ABC	61083-XX4ABC	
RECEPTACLES		 4.70 mm (0.185 in.)	 5.70 mm (0.224 in.)	 6.70 mm (0.264 in.)	 7.70 mm (0.303 in.)	
	61082-XX1ABC	 3.70 mm (0.146 in.)	 5.00 mm (0.197 in.)	 6.00 mm (0.236 in.)	 7.00 mm (0.276 in.)	 8.00 mm (0.315 in.)
	61082-XX2ABC	 7.70 mm (0.303 in.)	 9.00 mm (0.354 in.)	 10.00 mm (0.394 in.)	 11.00 mm (0.433 in.)	 12.00 mm (0.472 in.)
	61082-XX3ABC	 11.70 mm (0.461 in.)	 13.00 mm (0.512 in.)	 14.00 mm (0.551 in.)	 15.00 mm (0.591 in.)	 16.00 mm (0.630 in.)

Use web link www.fciconnect.com/bergstak to obtain product drawings and additional technical information

ORDERING DATA

Surface Mount Receptacle, 61082-XXYABCDD	Surface Mount Plug, 61083-XXYABCDD
XX is the number of position 04 = 40 positions 06 = 60 positions 08 = 80 positions 10 = 100 positions 12 = 120 positions 14 = 140 positions 16 = 160 positions 18 = 180 positions 20 = 200 positions	XX is the number of positions 04 = 40 positions 06 = 60 positions 08 = 80 positions 10 = 100 positions 12 = 120 positions 14 = 140 positions 16 = 160 positions 18 = 180 positions 20 = 200 positions
Y is the housing height 1 = 3.70mm 2 = 7.70mm 3 = 11.70mm	Y is the housing height 1 = 4.70mm 2 = 5.70mm 3 = 6.70mm 4 = 7.70mm
A is the plating option (contact area/solder area) 0 = Gold (0.2 μ m min) / tin-lead 1 = Gold flash (0.1 μ m min) over palladium-nickel (0.76 μ m min) / tin-lead 4 = Gold (0.2 μ m min) / matte pure tin (lead-free) 5 = Gold (0.38 μ m min) / matte pure tin (lead-free) 6 = Gold flash (0.1 μ m min) over palladium-nickel (0.76 μ m min) / matte pure tin (lead-free)	A is the plating option (contact area/solder area) 0 = Gold (0.2 μ m min) / tin-lead 1 = Gold flash (0.1 μ m min) over palladium-nickel 0.76 μ m min / tin lead 4 = Gold (0.2 μ m min) / matte pure tin (lead-free) 5 = Gold (0.38 μ m min) / matte pure tin (lead-free) 6 = Gold flash (0.1 μ m min) over palladium-nickel (0.76 μ m min) / matte pure tin (lead-free)
B is the polarization peg option 0 = with polarization pegs 2 = without polarization pegs	B is the polarization peg option 0 = with polarization pegs 2 = without polarization pegs
C is the packaging option 0 = Tube without pick-up cap 2 = Tape and Reel with pick-up cap 9 = Tube with pick-up cap	C is the packaging option 0 = Tube without pick-up cap 2 = Tape-on-reel with pick-up cap 9 = Tube with pick-up cap
DD is lead-free option LF = lead free	DD is lead-free option LF = lead free

OPTIONS

- Headers and receptacles can be provided with polarization posts to assist with part orientation during manual placement
- Tape-on-reel packaging can be provided to supported automated connector placement
- The optional pickup cap provides a flat surface for pickup with standard vacuum nozzles without increasing the space required for the connector

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MATERIALS

- Housing
 - Glass filled LCP (UL94 V-0)
- Contact base metal
 - Copper alloy
- Contact area finish
 - Gold or Gold flash over palladium-nickel over nickel
- Solder area finish
 - Tin-lead or matte pure tin over nickel

MECHANICAL PERFORMANCE

- Durability: 100 cycles
- Mating force: 0.9N (90 gramf) maximum/contact
- Un-mating force: 0.1N (10 gramf) minimum/contact

ELECTRICAL PERFORMANCE

- Insulation resistance:
 - Initial: 500 M Ω minimum
 - After test: 100 M Ω minimum
- Current rating:
 - 0.5 amp/contact
- Contact resistance:
 - Initial: 30 m Ω maximum
 - After test: 50 m Ω maximum
- Voltage rating:
 - 100 V AC

ENVIRONMENTAL

- Temperature range: -40°C to +85°C
- High temperature life: 95 +/- 5°C for 96 hours
- Humidity: 90-95% relative humidity for 96 hours
- SO₂ gas exposure: 10 ppm and 90% relative humidity for 24 hours

SPECIFICATION

- GS-12-148 BergStak 0.8mm Product Specification

APPROVALS AND CERTIFICATIONS

- UL certificate, file no. E66906
- CSA, file no. LR46923

PACKAGING

- Tape and reel (with or without pickup cap)
- Tubes (with or without pickup caps)

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