

BergStak® 0.8mm Mezzanine Connector

FLEXIBLE SOLUTION FOR HIGH DENSITY APPLICATIONS

Amphenol's BergStak® 0.8mm is a flexible solution designed for high speed and high density, parallel board-to-board connector system with 16 PCB stack heights in 9 sizes up to 200 positions.

- Housing and terminal profile guarantees support of up to 12Gb/s
- Vertical versus vertical mating configuration
- 40 to 200 position sizes in 20 position increments
- 5mm to 20mm stack heights in 1mm increments



FEATURES

- Housing and terminal profile guarantees support of up to 12Gb/s
- Vertical versus vertical mating configuration
- 40 to 200 position sizes in 20 position increments
- 5mm to 20mm stack heights in 1mm increments
- 0.8mm double-row contact pitch conserves printed circuit board space
- Scoop-proof feature housings
- Multiple plating options available
- Multiple packaging options available
- PCB locator pegs option
- Available in UL94-V0 material
- RoHS compliant and lead-free

*The PCIe® mark is a registered trademark of the PCI-SIG Corp

BENEFITS

- Compatible with PCIe® Gen 2/3 and SAS 3.0 high speed performance on selected stack heights
- Suitable for parallel board stacking applications
- Comprehensive range of sizes and stack heights to satisfy all needs
- High density for all electrical applications needs
- Prevents reverse mating
- Satisfies different application requirement
- Suitable for varies feeding processing
- Facilitates ease and accuracy during manual assembly
- High flammability rating
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: Glass filled LCP, UL94V-0
- Contact Base Metal
- Receptacle: Copper Alloy, High Spring
- Plug: Brass
- Contact Area Finish: Gold or Gold flash over Palladium-nickel (GXT®) over Nickel
- Solder Area Finish: Matte pure Tin over Nickel

ELECTRICAL PERFORMANCE

- Insulation Resistance:
 - Initial: 1000MΩ min.
 - After Test: 100MΩ min.
- Current Rating: 0.8A/contact
- Contact Resistance:
 - Initial: 30mΩ max.
 - After Test: 50mΩ max.
- Voltage Rating: 100VAC
- Signal Integrity (Differential pairs, connector and SMT pads only)
 - Impedance Range: 81 to 108Ω @ 50 ps edge (10-90%)
 - Return Loss: < 10dB up to 5GHz
 - Insertion Loss: < 1.5dB up to 5GHz
 - NEXT: ≤ 4.0% for a 50 ps edge (10-90%)
 - FEXT: ≤ 2.4% for a 50 ps edge (10-90%)

MECHANICAL PERFORMANCE

- Durability: 100 mating cycles
- Mating Force: 0.9N max./contact
- Unmating Force: 0.1N min./contact

PART NUMBERS

Description	Part Numbers
Minitek® 0.80mm Vertical Header SMT	10144042*
Minitek® 0.80mm Right Angle Header SMT	10144041*
Minitek® 0.80mm Receptacle Housing	10145492*
Minitek® 0.80mm Crimping Terminal	10145493*

*denotes base part number. Please contact Amphenol for complete part numbers.

ENVIRONMENTAL

- Temperature Range: -40°C to +125°C
- High Temperature Life: 105°C ± 5°C for 1000 hours
- Humidity: 90-95% relative humidity for 96 hours
- Mixed Flowing Gas Class 2a (30 GXT®)

APPROVALS AND CERTIFICATIONS

- UL E66906
- File no. LR46923

SPECIFICATIONS

- Product Specification: GS-12-547
- Test Report: DGS-29-010

PACKAGING

- Tape & Reel
- Tubes

TARGET MARKETS/APPLICATIONS



IP Phone Router



Server

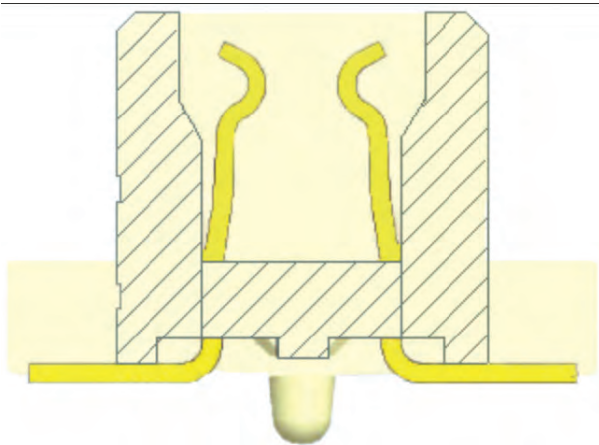


Industrial and Instrumentation
Office Equipment
Point-Of-Sale Terminal
Portable Industrial Terminal
Test and Measurement



Diagnostics Systems

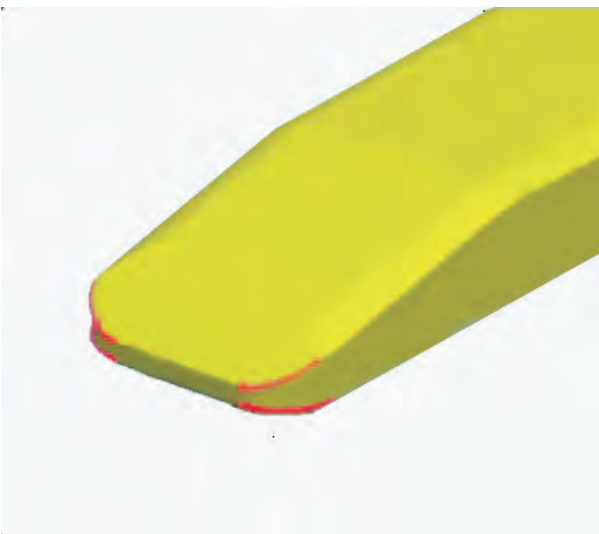
RECEPTACLE



Early-contact point allows early engagement/ late disengagement and increases mating wipe

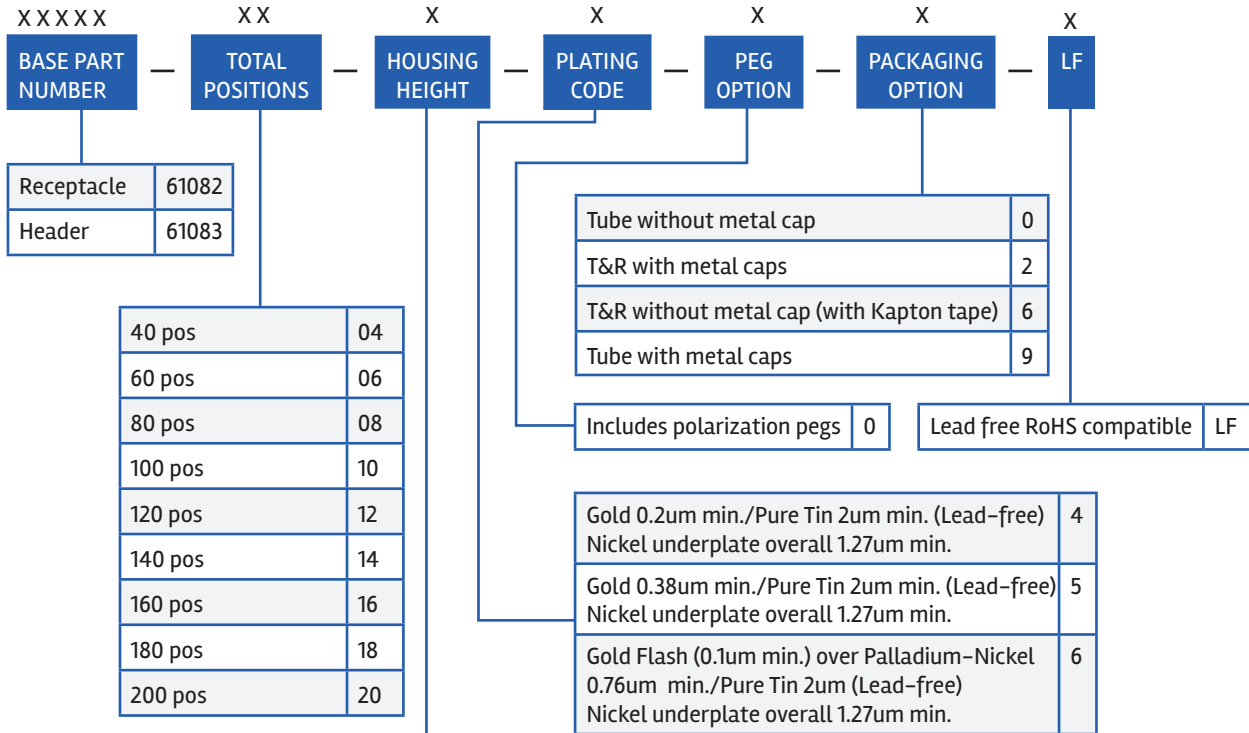
Precision-tapered contacts control mating stress while providing reliable, high normal force

HEADER



Coined contact tips assure smooth, safe wiping action during connector mating

PART NUMBER SELECTOR



X	FOR PLUG, SEE DWG. NO. 61083			
COMBINATION OF MATED HEIGHT	Plug 1	Plug 2	Plug 3	Plug 4
Recep 1				
Recep 2				
Recep 3				
Recep 4				