

BergStak® 0.50mm Self-Alignment Board-to-Board Connector

FINE PITCH SOLUTION WITH SELF-ALIGNMENT FEATURE

The BergStak® 0.50mm self-alignment connectors come with a unique self-alignment feature that allows customers to use in the applications which needs blind mating. It can support $\pm 0.85\text{mm}$ in pitch direction and $\pm 1.29\text{mm}$ in width direction.

The 0.50mm fine pitch design supports high signal density applications where space is a constraint.

Scoop-proof housings ensure terminals are not damaged during mating and thus can minimize the contact damage with improving the manufacturing quality.

BergStak® 0.50mm self-alignment connector currently has a stack height of 3mm on 50 positions, and positions are extendable from 20 to 60 upon request.

- 0.50mm fine pitch
- Self-alignment feature supporting blind mating
- Suitable for parallel board stacker applications
- Scoop-proof feature



TARGET MARKETS



FEATURES

- Self-alignment feature
- 50 positions available, extendable from 20 to 60 positions in increments of 10
- Scoop-proof housings
- 0.50mm double row contacts
- Vertical mating configuration
- UL94V-0 high temperature LCP material
- RoHS compliant, halogen and lead free

BENEFITS

- Supports blind mating and automatic assembly cost effectively
- Application flexibility
- Prevents terminal mating damage
- High density connector, suitable for applications with space constraints
- Suitable for parallel board stacker applications
- High flammability rating
- Meets health, safety and environment requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: High temperature thermoplastic LCP, Black (UL94V-0)
- Terminal base material
- Receptacles: Copper Alloy
- Headers: Copper Alloy

ELECTRICAL PERFORMANCE

- Current Rating: 0.5A per contact
- Voltage Rating: 100VAC
- LLCR:
 - Initial: 30mΩ max.
 - After test: 50mΩ max.
- Insulation Resistance: 1000MΩ min.
- Support speed PCIe® Gen 1 with 2.5Gb/s

MECHANICAL PERFORMANCE

- Mating Force: 0.8N per pin max.
- Unmating Force: 0.15N per pin min.
- Retention Force: 0.98N per pin min.
- Durability: 50 mating cycles

ENVIRONMENTAL

- Thermal Shock: -40°C to +125°C
- High Temperature: 85 ± 2°C for 96 hours
- Salt Spray Test: 5 ± 1% salt concentration 48±4 hours 35±2°C
- The Housing can withstand exposure to 260°C for 40 seconds

SPECIFICATIONS

- Product Specification: GS-12-1298

PACKAGING

- Tape & Reel

TARGET MARKETS/APPLICATIONS



Automotive Camera



5G AAU



Home Automation
IoT Devices



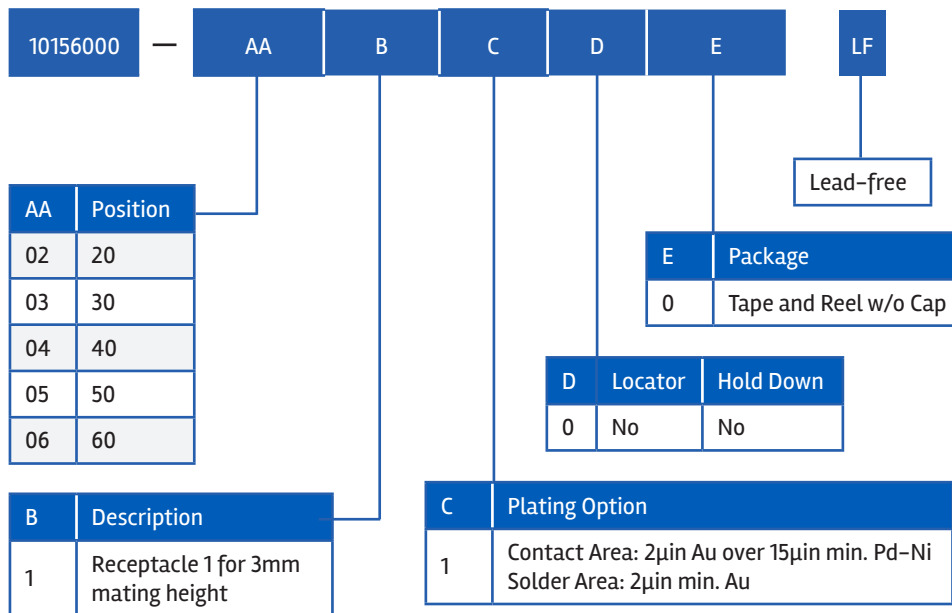
Factory Automation Camera
Embedded Computer

PART NUMBERS

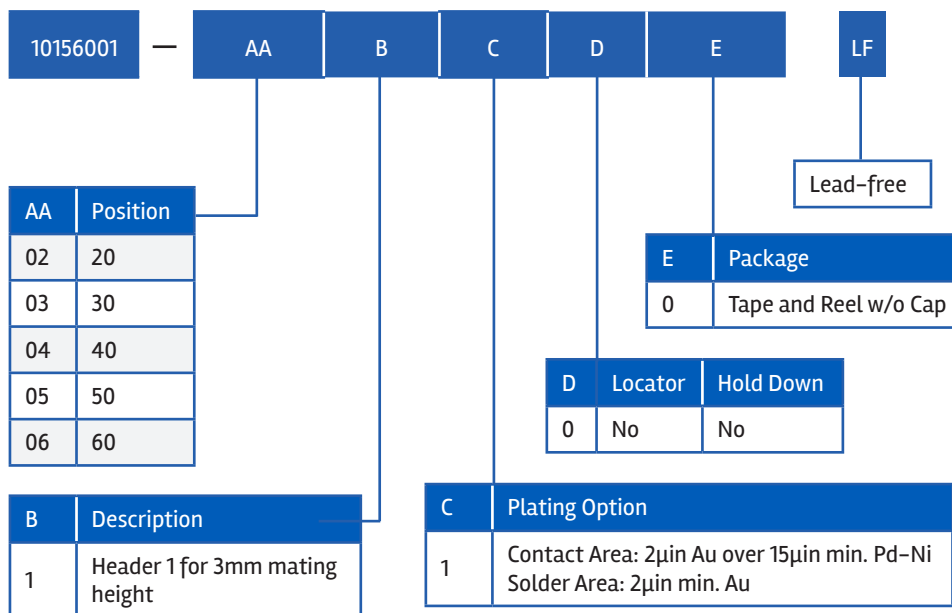
Description	Part Numbers
BergStak® 0.50mm Self-Alignment BTB Conn, Vertical Receptacle, 50 Positions	10156000-051100LF
BergStak® 0.50mm Self-Alignment BTB Conn, Vertical Header, 50 Positions	10156001-051100LF

▶ BergStak® 0.50mm Self-Alignment Board-to-Board Connector

PART NUMBER SELECTOR – RECEPTACLE



PART NUMBER SELECTOR – HEADER



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