

# BergStak® FX10 0.50mm Board-to-Board Connector

## HIGH SPEED HIGH DENSITY MINIATURE CONNECTOR

The BergStak® product range is expanded to include 0.50mm BergStak® FX10 board-to-board connector known for its fast data transmission and high signal quality. This connector is offered in 144 positions and is available in 4.30mm and 6.00mm stack height options. Product position is extendable up to 168 positions.

BergStak® FX10 supports speed performance up to 15Gb/s+ and is available in vertical SMT configuration. This high density connector saves space on PCB and is highly suitable for high-density applications in automotive, data, medical, communication and industrial markets.

- Licensed to Hirose FX10 series
- Data transmission speed up to 15Gb/s+
- Suitable for high density applications



### TARGET MARKETS



### FEATURES

- Authorized second source to Hirose FX10 series
- High speed performance up to 15Gb/s+
- Suitable for high-density applications
- OIF MSA-100GLH electrical interface
- Hold-down feature
- Halogen-free and RoHS compliant

### BENEFITS

- Fully compatible with Hirose product offering
- Meets next generation high speed transmission requirements
- Saves space
- Standard connector for OIF
- Robust and steady design for customer application
- Meets environmental, health and safety requirements

## TECHNICAL INFORMATION

### MATERIAL

- Housing:
  - Glass filled LCP (UL94V-0, MSL level 1)
  - High temperature thermoplastic
- Contact Base Metal:
  - Receptacles: Copper alloy
  - Headers: Copper alloy
- Plating:
  - Solder area finish in gold flash tin over nickel
  - Contact Area: Gold

### MECHANICAL PERFORMANCE

- Durability: 100 cycles
- Mating and Un-mating Force: 86.4N max. and 11.5N min.

### ELECTRICAL PERFORMANCE

- Current Rating: 0.4A per contact
- Contact Resistance: 60mΩ max.
- Voltage Resistance: 150V AC applied for 1 minute
- Signal Integrity:
  - Data Rate: Up to 15Gb/s+
  - Differential Impedance: 100Ω
  - Single Ended Impedance: 50Ω

### SPECIFICATIONS

- Amphenol Product Specification: GS-12-1529

### ENVIRONMENTAL

- Industrial Atmosphere: Duration 14days
- Vibration Sinusoidal: 10g
- Shock Halfsine: 50g

### APPROVALS AND CERTIFICATIONS

- UL/CSA E66906

### PACKAGING

- Tape & Reel

### TARGET MARKETS/APPLICATIONS



Display Module Camera  
Body Control



IP Phones  
Datacom  
Telecom  
Router



Drone



Server  
Storage



Measurement Equipment  
POS Equipment  
Portable Industrial Terminal  
Security Systems  
Test Equipment  
Embedded Computer

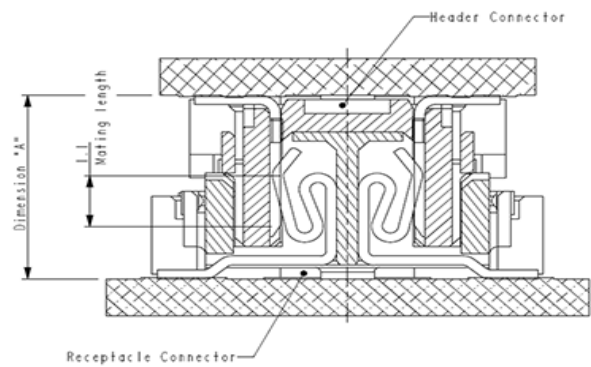


Laser System

➤ **BergStak® FX10 0.50mm Board-to-Board Connector**

Stack Height Dimension "A"	Receptacle 1 10147523-XXX-1HLF
Header 1 10147520-XXX-SHLF	4.30mm
Header 2 10147520-XXX-THLF	6.00mm

XXX denotes the number of positions



**PART NUMBERS**

Description	Part Numbers
BergStak® FX10 0.50mm board-to-board header for 4.30mm stack height	10147520-144-SHLF
BergStak® FX10 0.50mm board-to-board header for 6.00mm stack height	10147520-144-THLF
Bergstak® FX10 0.50mm board-to-board receptacle	10147523-144-1HLF

BAS/CSBERGFX100819EA4

# Mouser Electronics

Authorized Distributor

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