

0.80mm Pitch Floating Board-to-Board - B406/B407/B410 Series

HIGH SPEED BOARD-TO-BOARD WITH FLOATING MECHANISM

Amphenol's B406/B407/B410 series is 0.80mm pitch floating board-to-board connectors which support stack heights up to 23mm and positions from 30 to 120. Its unique connector design has a floating range of ±0.50mm in the X, Y, and Z directions which make it resistant to vibration. It also supports speed performance up to 2.5Gb/s to meet high transmission requirements.

- Floating range of ±0.50mm in the X, Y and Z directions
- Double contact points
- B406 (vertical header) mated with B407 (right angle receptacle): 11.9mm
- B406 (vertical header) mated with B410 (vertical receptacle): 23mm
- USCAR-2 T3V1 qualified



FEATURES

- Floating range of ±0.50mm in the X, Y, and Z directions
- Double contact points
- Up to 2.5Gb/s data rates
- High temperature thermoplastic housing

BENEFITS

- Tolerates misalignments during surface mounting process or mating, and also improves overall contact reliability during vibration
- Ensures enhanced contact stability
- Meets high speed data transmission requirements
- Wide operating temperature range from -40°C to +105°C

TECHNICAL INFORMATION

MATERIAL

- Housing: LCP, Black color (UL94V-0)
- Cap: LCP, Natural color (UL94V-0)
- Contact: Phosphor bronze, T=0.15mm
- Plating: 15µin gold plated on contact
- Anchor-plate: Brass, T=0.20mm (vertical header and right angle receptacle),
 T=0.30mm (vertical receptacle)

MECHANICAL PERFORMANCE

- Insertion Force: 0.39N/pin max.
- Withdrawal Force: 0.05N/pin min.
- Terminal Retention Force: 2.9N/terminal min.
- Anchor-plate Retention Force: 2.9N/ terminal min.
- Durability: 30 mating cycles

ELECTRICAL PERFORMANCE

- Voltage Rating: 50V AC/DC
- Current Rating: 0.5A
- Contact Resistance: 80MΩ max.
- Insulation Resistance: $500M\Omega$ max. (initial); $100M\Omega$ max. (after each test)
- Dielectric Withstanding Voltage: No short or breakdown after 250V AC, 2mA, 1min.

PACKAGING

■ Tape & Reel

APPROVALS AND CERTIFICATIONS

- UL File Number: E478701
- RoHS compliant

SPECIFICATION

Aorora Product Specification: IS.EQC.134

ENVIRONMENTAL

■ Operating Temperature Range: -40°C to +105°C

TARGET MARKETS/APPLICATIONS



Car Multimedia Car Navigation Dashboard PND



Base Station Power Switches



Notebook Tablets Wearables Gaming DSC LCD&PDP TV



Router Server ODD HDD

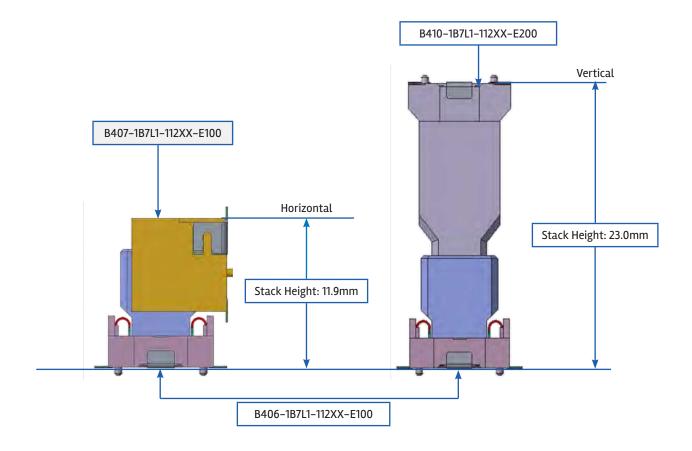


Sensing Element Monitoring Camera Human Machine Interface Industrial PC Robotics



Ultrasonic Patient Monitor MRI CT Infusion Pump

≥ 0.80mm Pitch Floating Board-to-Board - B406/B407/B410 Series



PART NUMBERS

| Description | Part Numbers |
|-------------------------------------------------------------------------------------|-----------------------|
| 0.80mm Floating BTB Vertical Header, 8.80mm height, 60 positions, with Mylar | B406-1B7L1-11260-E100 |
| 0.80mm Floating BTB Vertical Header, 8.80mm height, 80 positions, with Mylar | B406-1B7L1-11280-E100 |
| 0.80mm Floating BTB Vertical Header, 8.80mm height, 90 positions, with Mylar | B406-1B7L1-11290-E100 |
| 0.80mm Floating BTB Right Angle Receptacle, 60 positions, 7.05mm height, with Mylar | B407-1B7L1-11260-E100 |
| 0.80mm Floating BTB Right Angle Receptacle, 90 positions, 7.05mm height, with Mylar | B407-1B7L1-11290-E100 |
| 0.80mm Floating BTB Vertical Receptacle, 80 positions, 18.20mm height, with Mylar | B410-1B7L1-11280-E100 |