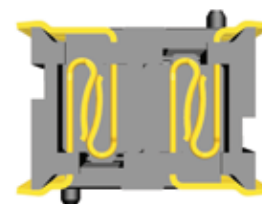


PRELIMINARY

MEZZOSTAK™ 0.5MM MEZZANINE CONNECTORS

Hermaphroditic, “mates-to-itself” design simplifies business



Dual-point mating

DESCRIPTION

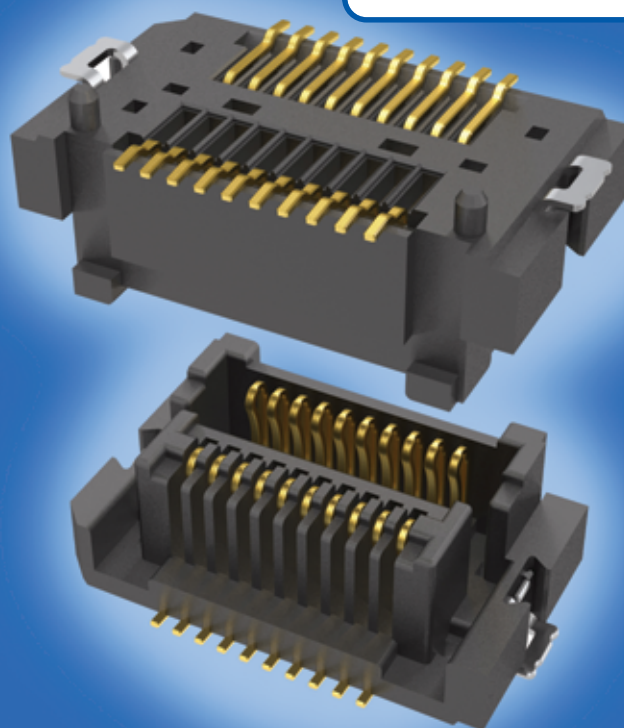
Robust 0.5mm fine pitch mezzanine connector suitable for a wide range of high reliability applications and demanding environments.

Innovative hermaphroditic design provides a precise mating interface. Reduced product mix simplifies customer connector qualification, documentation and maintenance.

Precisely oriented surface-mount solder leads, metal hold-downs and alignment pegs enable highest quality assembly to printed circuit boards.

Two versions offer a choice between supplemental PCB hold-downs and pegs or short overall length.

MezzoStak™ connectors are supported by MezzSelect™ services and web-based design tools.



FEATURES & BENEFITS

- Hermaphroditic design “mates to itself”.
 - Consolidates connector selection and documentation
 - Polarization prevents mis-mating
- Pressure-managed, dual-point contact mating interface provides easier use, fault tolerance and added reliability.
- Long 1mm minimum wipe assures reliable contact and accommodates system mechanical tolerances.
- High un-mating force insures connection security.
- Extreme operating temperature range assures reliable performance between -40 and 125 degrees C.
- Precise 0.08mm maximum SMT lead co-planarity eases attachment of connector leads to PCBs.
- Optional hold-downs increase strength of PCB solder attachment.
- Optional alignment pegs aid and quicken hand assembly.
- Footprint compatible with major competitors.
- 0.5mm high density contact pitch in two rows
 - 7 Stack heights: 4mm to 7mm (0.5mm increments)
 - 7 Sizes: 10 to 70 positions (10 position increments)

TARGET MARKETS / APPLICATIONS

- Portable and mobile electronic equipment
- Medical and Instrumentation
- Point-of-Sale/Retail equipment
- Hand-held terminals
- Automatic Identification and Data Capture
- Sensors
- Military
- Communications and Networking
- Data and mass-storage
- Motor Vehicle

PRELIMINARY

TECHNICAL INFORMATION

MATERIALS

- Housing: LCP, 94V-0, Color: Black
- Contacts: Copper Alloy
- Plating: Performance-based with gold
- All Materials lead-free RoHS compatible per GS-22-008

ELECTRICAL PERFORMANCE

- Current rating per contact: 0.35 amps (de-rated)
- DWV: 500 volts
- Voltage Rating: 50 volts
- Contact resistance: 30 milliohm maximum
- Signal Integrity
 - (Differential pairs; 7mm stack height; Connectors with SMT pads and anti-pads/voids underneath)
 - 10+ Gbs capable
 - Impedance: 100 Ohms +/- 10% @ 50 ps edge
 - Insertion Loss: < 1 dB to 5+ GHz
 - NEXT and FEXT: < / = 1.0% @ 50 ps edge (10-90%)

ENVIRONMENTAL PERFORMANCE

- Operating Temperature: -40 to +125 deg.C
- Processing Temperature: 260 deg.C peak for 30 seconds

MECHANICAL PERFORMANCE

- Durability: 30 mating cycles in environment
- Mating Force: 42g max per contact pair
- Un-mating force: 25g min per contact pair
- Wipe length: 1.0 mm minimum
- SMT lead co-planarity: 0.08mm maximum

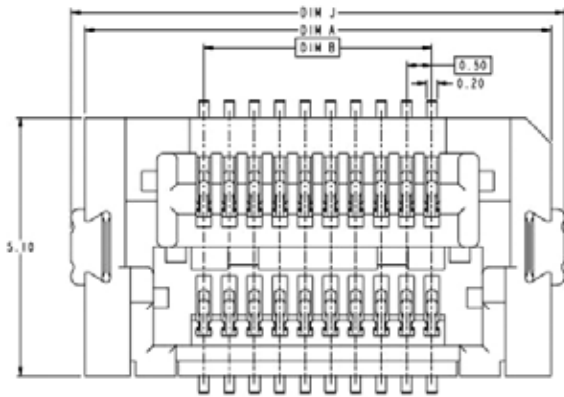
SPECIFICATIONS

- Product Specification: GS-12-577; Packaging Specification: GS-14-1320
- Drawing Numbers: 10090503 (Standard); 10090504 (Short Length)
- UL and CSA pending

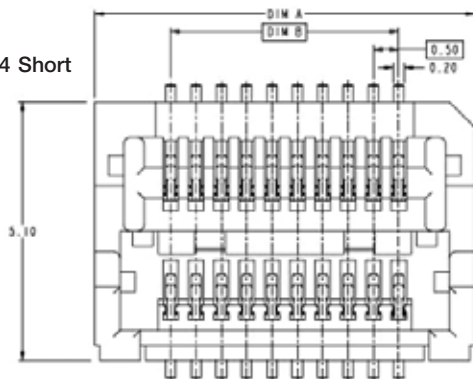
PACKAGING

- Tape and reel, pickup cap pre-installed

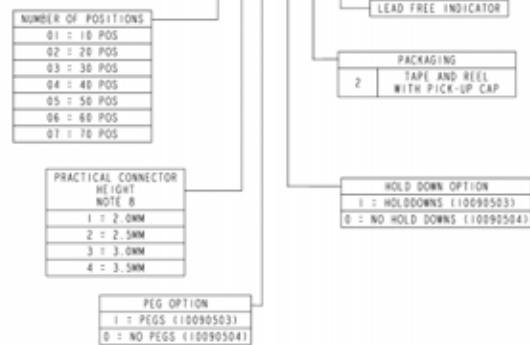
10090503 Standard, with alignment pegs and metal hold-downs



10090504 Short



BASE PART NUMBER-XX X X X 2 LF



Add practical connector heights of two mated connectors to determine final PCB stack height

PCB footprint dimensions available on customer drawing at: www.fciconnect.com/mezzostak

MM/IN	10090503 STANDARD LENGTH			10090504 SHORT LENGTH	
	DIM J	DIM A	DIM B	DIM A	DIM B
10	7.24/ 285	6.70/ 274	2.00/ 078	5.00/ 197	2.00/ 078
20	9.74/ 383	9.20/ 362	4.50/ 177	7.50/ 295	4.50/ 177
30	12.24/ 482	11.70/ 461	7.00/ 276	10.00/ 394	7.00/ 276
40	14.74/ 580	14.20/ 559	9.50/ 374	12.50/ 492	9.50/ 374
50	17.24/ 679	16.70/ 657	12.00/ 472	15.00/ 591	12.00/ 472
60	19.74/ 777	19.20/ 756	14.50/ 571	17.50/ 689	14.50/ 571
70	22.24/ 876	21.70/ 854	17.00/ 669	20.00/ 787	17.00/ 669

MezzoStak™ is a trademark under registration of FCI