Datasheet for 76650-0232

General Information	
Kit Part Number:	76650-0232
Connector Type:	Board-to-Board, Wire-to-Board
Solution:	High Speed
Molex Family:	Plateau HS Mezz™, SEARAY*, SEARAY* Slim
Certificates:	N/A
Country of Origin:	Kit assembled in U.S.A
Specifications	
Circuit Size:	18, 200, 300, 400, 48
Current Rating:	1.5A, 2.7A
Mounting Style:	PCB Through Hole, SMT (Surface Mount Technology)
Orientation:	Plugs, Vertical Receptacles
Pitch:	1.20mm (.047"), 1.27mm (.050") by 1.27mm (.050")
Speed:	10 Gbps (Gigabits Per Second)
Stack Height:	Assorted Stack Heights from 4.5mm-17mm
Style:	Mezzanine
Voltage Rating:	240V, 30V
Product Hightlights	

SEARAY* Slim is a solution armed with the benefits of the standard SEARAY* family but with a width similar to 2 row mezzanine products. The design gives a system a highly compact solution but with speed capabilities of 12.5 Gbps, a level of performance most other 2 row products cannot achieve today. As system level speeds approach 5Gbps and beyond, SEARAY* is an enticing mezzanine architecture that provides headroom for future generation iterations as protocol speeds continue to increase. Plateau HS Mezz™ utilizes proprietary Plateau Technology™ (plated gold housing) to provide a high-speed high-density mezzanine connector system for differential and single-ended signal applications. The gold-plated plastic shields each differential pair from neighboring pairs, lowering crosstalk and improving signal clarity. Different stack heights and circuit sizes provide flexibility in design and grounding the conductive housing eliminates the need for individual ground pin designations within the connector. The SEARAY* board-to-board connector is designed for computer, networking, telecom, storage and general market applications with high pin-count devices or memory modules that are mounted on mezzanine or module PC Boards (PCBs). The design of our SEARAY* has superior electrical and mechanical features that are cost competitive. The unique, Molex patented, solder charge technology results in better process yields a lower applied cost versus equivalent BGA connector products. Circuit sizes range from 160 through 500 positions, and mated stack heights cover 7mm (.276") to 13mm (.512").

Features and Benefits

- Advanced gold-plated housings with integrated shielding system
- Two points of contact on each signal
- Multiple stack heights
- Data rates up to 12.5Gbps provide excellent signal clarity and large bandwidth
- Narrow body width comparable to 2 row SMT has a minimal PCB footprint for high density board designs
- Robust contact design prevents stubbing and damage in mating interface
- Unique patented solder attach is more cost effective and reliable than BGA
- SEARAY* footprint is compatible with other 1.27mm(.050") by 1.27mm(.050") products

Applications

- Mezzanine add-on cards
- Storage Devices
- Switches and Hubs
- Medical scanning equipment
- Memory expansion
- Servers and Blade Servers
- Military
- High and mid-range computers and servers
- Mobile base stations
- Controller cards

Bill of Materials

Molex Part No.	Description	Quantity
75005-0104	1.20mm (.047") Pitch Plateau HS Mezz™ Receptacle, 48 Circuits	1
75003-0110	1.20mm (.047") Pitch Plateau HS Mezz™ Plug, 48 Circuits, 13.25mm (.522") Unmated Height	1
46557-4345	1.27mm (.050") by 1.27mm (.050") Pitch, SEARAY* Slim 4 Row Receptacle, 160 Circuits, 6.50mm (.255") Unmated Height, with Pegs	1
46556-4145	1.27mm (.050") by 1.27mm (.050") Pitch, SEARAY*Slim 4-Row Plug, 160 Circuits, 2.00mm (.078") Unmated Height, 4 Rows, with Pegs	1
45971-3111	1.27mm (.050") by 1.27mm (.050") Pitch, SEARAY* Receptacle, 300 Circuits, H = 5.05mm (.199") Unmated Height, 10 Rows	1
45970-3211	1.27mm (.050") by 1.27mm (.050") Pitch, SEARAY* Plug, 300 Circuits, 2.85mm (.112") Unmated Height, 10 Rows	1

Recommended Molex Tool

Molex Part No.	Descripition