

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







## Datasheet for 76650-0232

**General Information** 

76650-0232

Kit Part Number:

**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 240V, 30V

Voltage Rating:

#### **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")	1
	Unmated Height, with Pegs	
46556-4145	1.27mm (.050") by 1.27mm (.050") Pitch, SEARAY*Slim 4-Row Plug, 160 Circuits, 2.00mm (.078") Unmated	1
	Height, 4 Rows, with Pegs	
45971-3111	1.27mm (.050") by 1.27mm (.050") Pitch, SEARAY* Receptacle, 300 Circuits, H = 5.05mm (.199") Unmated	1
	Height, 10 Rows	
45970-3211	1.27mm (.050") by 1.27mm (.050") Pitch, SEARAY* Plug, 300 Circuits, 2.85mm (.112") Unmated Height, 10	1
	Rows	

## **Recommended Molex Tool**

Molex Part No.

Descripition