

## Datasheet for 76650-0145

### General Information

<b>Part Number:</b>	76650-0145
<b>Manufacturer:</b>	Molex / Waldom
<b>Title:</b>	LFH Matrix 50 Connector Kit
<b>Description:</b>	High Speed I/O Right Angle Plug, Receptacle and Hardware
<b>Product Family:</b>	LFH™ Matrix 50
<b>Certificates:</b>	(Molex Parts within this kit) - UL and CSA
<b>Country of Origin:</b>	Kit assembled in U.S.A.

### Specifications

<b>Design</b>	
<b>Configuration:</b>	(Wire-to-Board) and (Board-to-Board)
<b>Pitch:</b>	1.27mm (.050")
<b>Connector Type:</b>	Plugs and Receptacles
<b>Mounting</b>	
<b>Orientation:</b>	Right Angle and Vertical
<b>Current Rating:</b>	1 Amp
<b>Voltage Rating:</b>	40 Volts
<b>Wire size:</b>	36-28 AWG

### Product Highlights

The Low Force Helix (LFH) contact was designed for high-pin count signal applications where there is a need for reliability and performance. Designed for both cable-to-board and board-to-board applications, the system's low insertion forces make it ideal for situations where multiple single lines need to be terminated or packaged in a limited space. The patented "helix" plug pin interfaces with a split-beam receptacle contact giving a low insertion force with 2-point contact reliability. Rated at 4 Gbps.

### Features and Benefits

- High density contact interface, more terminals in a smaller package
- High pin count, flexibility in many different applications
- Low mating force, aids in the mating of the final product
- Wire termination by weld or solder of terminal sticks, ease of manufacturability and reliability
- Shielded, protects signal integrity
- High cycle life 5,000 cycles

### Applications

- Mainframe Computers
- Mass Storage
- Portable POS Units
- Network Interface Cards
- Routers
- Switches
- Audio, Video Editing and Storage
- Military Data Communication and Video Equipment (cots)
- Medical Devices

**For additional Molex / Waldom Design and Solution Kits please go to [www.molexkits.com](http://www.molexkits.com)**

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### Bill of Materials for Part No. 76650-0145

Molex Part No.	Country of Origin	Description	Quantity in Kit
70928-2001	USA	1.27mm (.050") Pitch LFH™ Matrix 50 Receptacle R.A. 60 Circuit	1
70982-1003	USA	Hex Screw (Panel Mount) Jackposts for LFH™ and TDP®	4
70929-2000	Mexico	1.27mm (.050") Pitch LFH™ Matrix 50 Plug (Cable) Subassembly 60 Circuit	1
51-24-2021	Mexico	LFH™ Terminal Stick with Carrier, 15 Circuits	4
71629-4000	USA	LFH™ Matrix 50 & 75 Docking Hardware Guide Sleeve	4
15-92-2250	USA	1.27mm (.050") Pitch LFH™ Matrix 50 Plug R.A. 60 Circuit	1

### Recommended Molex Tool(s) for Part No. 76650-0145\*

Molex Part No.	Country of Origin	Description
62200-1500 *	USA	LFH STICK LOAD TOOL
62200-1100 *	USA	LFH STICK PREP TOOL KIT

\*Tool(s) not included in kit. Tool(s) ordered separately.