

Datasheet for 76650-0145

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

Configuration:	(Wire-to-Board) and (Board-to-Board)
Pitch:	1.27mm (.050")
Connector Type: Mounting	Plugs and Receptacles
Orientation:	Right Angle and Vertical
Current Rating:	1 Amp
Voltage Rating:	40 Volts
Wire size:	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	Applications
 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 	 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

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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.