1801 Morgan Street Rockford, Illinois 61102 800-435-2931 www.molexkits.com



# **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: Plugs and Receptacles

Mounting

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**

- 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



# **Datasheet for 76650-0145**

#### Bill of Materials for Part No. 76650-0145 Country Quantity in Molex Part No. of Origin Description Kit 1.27mm (.050") Pitch LFH™ Matrix 50 Receptacle R.A. 60 70928-2001 USA Circuit 1 Hex Screw (Panel Mount) Jackposts for LFH™ and TDP® 4 70982-1003 USA 1.27mm (.050") Pitch LFH™ Matrix 50 Plug (Cable) Subassembly 60 Circuit Mexico 70929-2000 1 Mexico LFH™ Terminal Stick with Carrier, 15 Circuits 4 51-24-2021 71629-4000 USA LFH™ Matrix 50 & 75 Docking Hardware Guide Sleeve 4 **USA** 15-92-2250 1.27mm (.050") Pitch LFH™ Matrix 50 Plug R.A. 60 Circuit 1

# Recommended Molex Tool(s) for Part No. 76650-0145\* Country Molex Part No. of Origin Description 62200-1500 \* USA LFH STICK LOAD TOOL 62200-1100 \* USA LFH STICK PREP TOOL KIT

<sup>\*</sup>Tool(s) not included in kit. Tool(s) ordered separately.