Premo-Flex Cable Jumper Assemblies

molex

Premo-Flex LVDS Cable Jumper Assemblies provide offthe-shelf availability and deliver high data speeds with a robust connection, making them effective in a wide range of applications

Features and Benefits

Standard low-voltage differential signal (LVDS) FEC

| assemblies | assembly and connector through Molex. LVDS FFG connectors deliver a robust and superior signal integrity performance over long distances. Ideal for applications such as large displays and high-definition (HD) TVs |
|----------------------------|--|
| Off-the-shelf availability | Shortens design time. Simplifies manufacturing processes for LVDS applications |

processes for LVDS applications

Cable jumper assembly options include: 1-piece (15, 24 and 33 circuits), 2-piece (30, 50 and 80 circuits) and 1-touch LVDS (41 and 51 circuits) strong retention. One-piece available as notched and straight and with high circuit sizes

100-Ohms-controlled impedance Suitable for HD video displays

Higher data speed over standard FFC 50.80-to-254.00mm (2 -to-10-inch) cable jumper assemblies deliver 5 to 10 Gbps; 304.80-to-

355.60mm (12- to-24-inch) deliver 2 to 5 Gbps

Streamlined procurement of cable jumper

Notching feature available on cable

The notches offer positioning and locking assistance for proper connection to mating connectors



Premo-Flex Cable Jumper Assemblies with LVDS Connectors



Premo-Flex Cable LVDS Jumpers

Applications

Automotive

Radio, CD, DVD, GPS devices

Car Infotainment

Consumer / Home Appliance

Handheld devices

Videogaming Systems

Camcorders

Data / Computing

Notebooks

Printers

Scanners

Keyboards

LCD flat panels

Industrial

Medical

Aerospace and Defense



Series 15021 - not notched



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Series 15022 - notched



Series 15023 - notched



Flat-panel TVs



Videogaming systems



Car Infotainment

Premo-Flex Cable Jumper Assemblies



Specifications - LVDS Cable Assemblies with Flat Flexible Cable (FFC) or Etched Polyimide

REFERENCE INFORMATION

Packaging: Box

Flame Resistance: UL 758 WV-1

Use With: One piece: LVDS cable that mates with 0.50mm pitch LVDS connector series

502231 and 502244

Two piece: Notched cable that mates with connector series <u>501864</u> and <u>501786</u> using a plug jacket

and cover arrangement One touch: series 502908

RoHS: Yes Halogen Free: Yes

ELECTRICAL

Voltage: 30V AC max.

Dielectric withstanding voltage conductor to shield:

200 VAC RMS (for 1 minute)

Insulation resistance (min.): 10 Megaohms (200V DC)

Controlled impedance: 90 or 100 Ohm

PHYSICAL

Plating Material: Gold

Operating Temperature: -40 to +80°C

Humidity resistance: 48H -85C / 95% humidity

Black insulation available

Flexible construction for dynamic applications

Ordering Information

| Cable Jumper Series No. | Mates with Connector Series | Pitch (mm) | Speed | End Thickness (mm) | Impedance (Ohms) | Circuits | Notched | Cable Lengths (mm) |
|----------------------------|--|---------------|---|-----------------------|---------------------|--------------|---------|---|
| <u>15021</u> | 502231 502244 | 0.5 | 50.80-to-254.00mm (2 –to-10-inch) cable jumper assemblies deliver 5 to 10 Gbps; 304.80-to 355.60mm (12- to-24-inch) deliver 2 to 5 Gbps | 0.30 +/- 0.05 | 90 or 100 +/- 10 | 15, 24 or 33 | No | 50.80 (2") 101.60 (4") 152.40 (6") 203.20 (8") 254.00 (10") 304.80 (12") 609.60 (24") |
| <u>15022*</u> | 501786 using a plug jacket and cover 501864 using plug jacket and cover | | | | | 30, 50 or 80 | Yes | |
| <u>15023*</u> | 503908 | | | 0.33 +/- 0.03 | | 41 or 51 | | |

^{*}NOTE: Notching on the 15022 cable is used as a positioning and locking feature once assembled with the plug jacket (series 501783) and jacket cover (series 501784) to be a cable assembly. Plug jacket series 501783 has the locking latch on the housing.

^{*}NOTE: Notching on the 15023 cable is for the cable lock inserted into mating connector series 503908. The mating connector 503908 is a non-zif connector and does not require a plug jacket