



#### FLAT FLEX CABLE ASSEMBLIES

MJM Industries offers a complete line of 31 and 41 position flat flex cable assemblies for the flat panel display industry. Each connector is over-molded in a liquid crystal polymer to ensure the highest level of ingress protection for your application. The folding and flexing features of the laminated cable will easily solve your most difficult mechanical routing requirements and are easy to install. Flat flex cable is ideal for board-to-flat panel display and board-to-board connections.

#### Standard Features

- Made in USA
- RoHS Compliant
- 31 & 41 position male and female connectors
- 0.5mm pitch laminated polyester ribbon cable
- Optional ZIF ends with traditional tape backing to mate with 0.5mm pitch ZIF connectors
- One piece over-molded strain reliefs
- Custom length and fold options available
- Shielding, grounding, drain wire options and ferrites available
- Meets FPDI-1 and VESA standards
- Materials are UL listed
- Pinout: One-to-one or reverse
- Connector orientation: Same or opposite side
- Connector direction: Both out, both in, one out

#### Optional Features:

- Ferrites
- Separated lead ends
- Foil shields
- Specialty pinouts
- Selective grounding
- Custom cable lengths
- Transition boards

#### Connectors:

- Hirose DF9 connectors, 31 & 41 positions

#### Electrical Connector Specifications:

- Contact resistance: 50 milliohm (maximum)
- Dielectric withstanding voltage: 300V RMS (minimum) @ 60 HZ/250V AC / 1 minute
- Current rating: 0.50 amps
- Insulation resistance: >109 @ 500V DC

#### Cable:

- Insulator: Polyester
- Conductor: Flat solid 33 AWG equivalent
- Plating: Tin
- Length Tolerances (under 12"): +/- 0.10" (over 12"): +/- 0.25"
- Length is measured from end to end in inches including connectors

#### Contacts:

- Material: Phosphor copper
- Finish: Tin or gold plate
- Insertion Force: 197 g / 6.94 oz (.4343 lbs nominal)
- Withdraw Force: 30 g

#### Environmental:

- Materials: UL flame rating 94V-1
- Temperature rating: -40 C to +105C
- RoHS, REACH and WEEE compliant

#### Separated Leads:

MJM Industries also offers an assortment of separated lead assemblies primarily used for prototyping with liquid crystal displays and display controller boards. They are ideal for transitioning from DF9 series connectors using 0.5mm pitch flat flex cable to any other style of connector.

Features include:

- Available in 31 and 41 position sizes
- Eliminates need for transition board
- Allows wire assembly with any pin out
- Optional split length allows for ample length to handle any routing issues
- Connector meets FPDI-1 standards
- Low profile of connector for limited space allocations

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