Molex's 0.50mm pitch double-contact FFC/FPC connectors offer the best combination of signal reliability, compactness and cable style choices of any similar version in the market

Molex developed its 0.50mm pitch FFC/FPC double contact connectors for LCD/Plasma Display TV applications. The redundant contact helps remove dust and debris to provide superior electrical reliability for clear image resolution. Molex's 502790 and 104060 series offer robustness and more compact dimensions.

The ear-tab feature on both series provides cable alignment for correct cable insertion and secure contact retention. The feature also helps keep the cable firmly in place, which provides secure electrical contact even if subjected to vibration in applications like car infotainment.

The 502790 and 104060 series offer the same basic product features but accept different mating FFC/FPC designs. This provides variation and cable compatibility with different FFC/FPC connector designs.

Note: The 502790 series usually uses FPC but can also accept FFC, while the 104060 series usually uses FFC but can also accept FPC. Contact Molex for further details.

For additional information visit: www.molex.com/product/smt_ffc-fpc.html

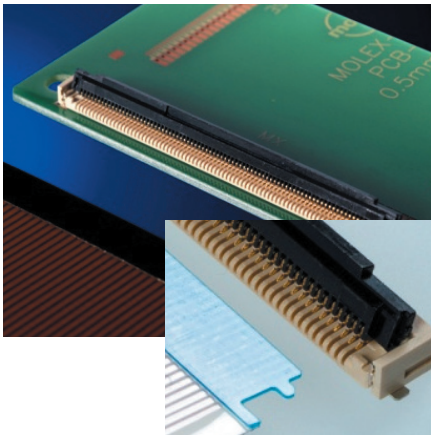
FFC/FPC Connectors, 0.50mm Pitch, SMT, Double Bottom Contact, 2.50mm Height, ZIF, Easy-On™ Front-Flip Actuator

502790

104060

FEATURES AND BENEFITS

Features	Benefits
• Double bottom contact	• Ensures a clean mating interface and provides superior contact reliability
• FFC/FPC ear-tab	• Provides temporary lock for cable alignment, complete mating and secure retention
• Accommodates two different FFC/FPC ear-tab designs	• Expands product variation
• Compact overall dimensions	• Space savings
• Vacuum pick-and-place area on top of housing	• Easier board assembly and cost savings versus separate pick-and-place tape
• Click sound when engaging actuator	• Audible mating assurance



502790 series (upper photo)
104060 series (lower photo)

SPECIFICATIONS

Reference Information

- Packaging: Embossed Tape
- Mating FFC/FPC thickness: 0.30mm
- Designed In: mm
- RoHS: Yes
- Halogen Status:
  - 104060: Low halogen
  - 502790: Not low halogen*

* Note: Low-halogen version for 502790 is also available. Contact Molex for details.

Electrical

- Voltage (max.): 50V
- Current (max.): 0.5A
- Contact Resistance: 40 milliohms max.
- Dielectric Withstanding Voltage:
  - 502790: 125V AC
  - 104060: 150V AC
- Insulation Resistance: 50 Megohms min.

Physical

- Housing: Glass-filled LCP, Beige
- Actuator: PPS, Glass-filled, Black
- Flammability: UL 94V-0
- Contact: Phosphor bronze
- Plating:
  - Contact Area: Gold
  - Solder Tail Area: Gold
  - Underplating: Nickel
- Operating Temperature: -20 to +85°C

MARKETS AND APPLICATIONS

- Flat-Panel TV
- Optical Disk Drive
- Car Audio
- Notebook PC
- Tablet PC
- Portable Game
- Portable Navigation Equipment

LCD and PDP Flat Panel Display

Optical Disk Drive

Car Audio

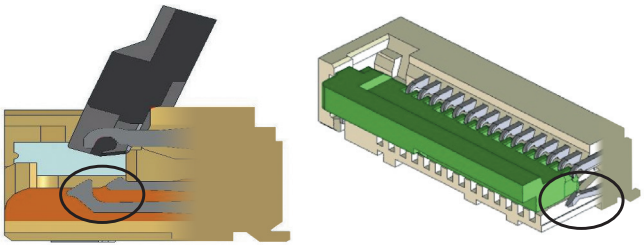
FFC/FPC Connectors, 0.50mm Pitch, SMT, Double Bottom Contact, 2.50mm Height, ZIF, Easy-On™ Front-Flip Actuator

502790

104060

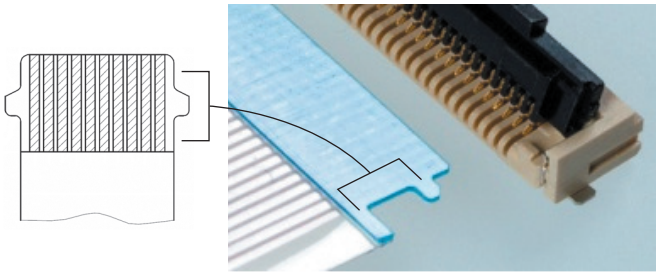
ADDITIONAL FEATURES

Double-Bottom Contact Versus Single-Bottom Contact



Molex's double-bottom-contact terminal design (left) removes dust and contaminants better than single-bottom-contact terminals (right) for superior signal reliability

Two Cable Design Choices



Cable for 502790 (left) and for 104060 (right).
Two different cable designs provide more design options.

ORDERING INFORMATION

Series 502790

Order No.	Circuits	Dielectric Withstanding Voltage
502790-3091	30	125V AC
502790-4091	40	
502790-5091	50	
502790-6091	60	
502790-6491	64	
502790-8091	80	

Note: The 502790 series usually uses FPC but can also accept FFC.
**Contact Molex for further details.*

Series 104060

Order No.	Circuits	Dielectric Withstanding Voltage
104060-2017	20	150V AC
104060-6017	60	
104060-8017	80	

Note: The 104060 series usually uses FFC but can also accept FPC.
**Contact Molex for further details.*

Order No. 987650-7401 Rev. 2 Printed in Singapore/pdf/RS/MMC/2013.01