

# FFC/FPC Connectors Double-Bottom Contacts

0.50/1.00mm Pitch

Molex's FFC/FPC connectors with double the contacts per circuit offer the best combination of signal reliability, compactness, wide circuit size range and cable style choices of any similar version in the market

## Features and Benefits

Contact design with two lower contacts per circuit	Ensures a clean mating interface and provides superior contact reliability
Cable ear-tab locking feature	Provides cable alignment, high retention force and easy actuation
Zero insertion force	Facilitates easy cable insertion
Wide range of circuit sizes (4-80)	Offers design flexibility
Vacuum pick-and-place area on top of housing	Provides easier board assembly and cost savings versus separate pick-and-place tape

## Applications

### Automobile Infotainment

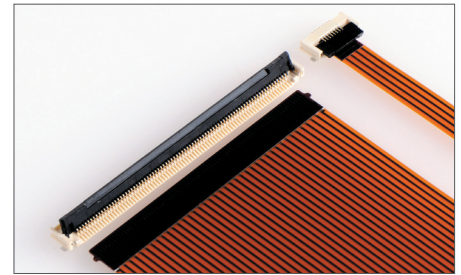
- Display Audio
- Car Navigation

### Consumer

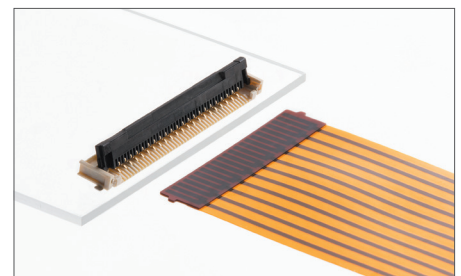
- Flat Panel TV
- Portable Game
- Personal Navigation Equipment

### Datacommunications

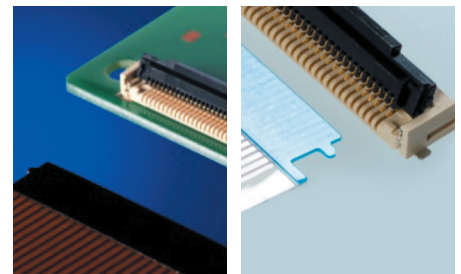
- Optical Disk Drives
- Tablet and Notebook PCs
- Printers and Copiers



0.50mm Pitch  
Standard Cable Type, 1.90mm Height (FD19)  
(505110 Series)



1.00mm Pitch  
Standard Cable Type, 1.90mm Height (FD19)  
(200528 Series)



0.50mm Pitch  
Standard Cable Type  
2.50mm Height  
(502790 Series)

0.50mm Pitch  
Non-standard Cable Type  
2.50mm Height  
(104060 Series)



Flat Panel TV



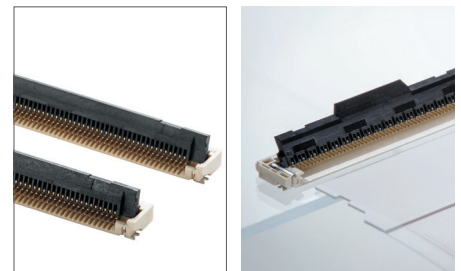
Car Navigation



Optical Disk Drives



Printer



0.50mm Pitch  
Standard Cable Type  
2.00mm Height  
5.00mm Width  
(104184 Series)

0.50mm Pitch  
Notched Cable Type  
0.50mm Height  
(104234 Series)

# FFC/FPC Connectors Double-Bottom Contacts

0.50/1.00mm Pitch

**molex**<sup>®</sup>

## Specification

### REFERENCE INFORMATION

Packaging: Embossed tape  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: Low Halogen

### ELECTRICAL

Voltage (max.): 50V  
Current (max.): 0.5A  
Contact Resistance: 40 milliohms max.  
104184: 50 milliohms max.  
Dielectric Withstanding Voltage:  
200528/505110/502790: 125V AC (rms)  
104184/104060/104234: 250V AC (rms)

Insulation Resistance: 50 Megohm min.  
104184: 500 Megohm min.

### MECHANICAL

Durability (min.): 25 cycles  
502790: 10 cycles

### PHYSICAL

Housing: LCP (Beige); 104234 Series (Natural)  
Actuator: Polyamide Glass Filled (Black)  
Terminal: Phosphor Bronze  
Fitting Nail: Phosphor Bronze

### PLATING

Contact Area: Separated Gold  
Solder Tail Area: Separated Gold  
Underplating: Nickel  
Operating Temperature:  
505110-\*\*96: -40 to +125°C  
200528/505110/502790: -40 to +105°C  
104060/104234: -20 to +85°C  
104184: -40 to +85°C

## Ordering Information

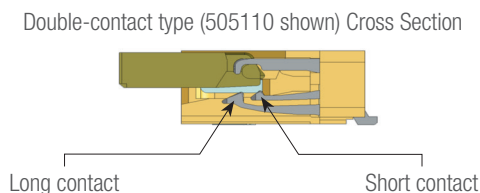
Order No.	Pitch (mm)	Mated Height (mm)	Mated Depth (mm)	Cable Type	Circuit Size	Operating Temperature	
<a href="#">200528-0**0 (FD19)</a>	1.00	1.90	5.30mm	Standard	04-19, 17,22	-40 to +105°C	
<a href="#">505110-**96 (FD19)</a>		1.90		Standard	20,22, 24, 26, 28, 30, 35, 40, 45, 50, 60, 64, 68, 70, 80	-40 to +125°C	
<a href="#">505110-**91 (FD19)</a>		1.90		Standard	20,22, 24, 26, 28, 30, 35, 40, 45, 50, 60, 64, 68, 70, 80	-40 to +105°C	
<a href="#">505110-**92 (FD19)</a>		1.90		Standard	04-19	-40 to +105°C	
<a href="#">502790-**91</a>		0.50	2.50	5.00mm	Standard	30, 40, 50, 60, 64, 80	-20 to +85°C
<a href="#">104060-**17</a>			2.50		Non-standard	20, 60, 80	-20 to +85°C
<a href="#">104234-**17</a>			1.50	Notched	51	-20 to +85°C	
<a href="#">104184-**17</a>			2.00	Standard	50, 68	-40 to +85°C	

(Replace \*\* with circuit size)

## Additional Product Features

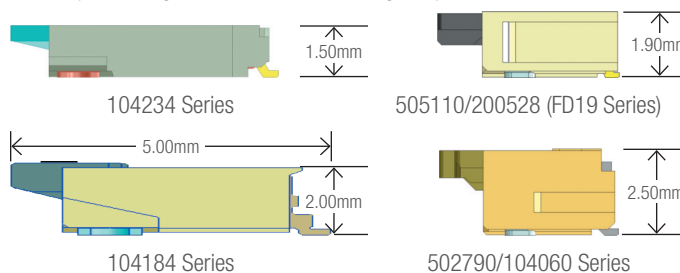
### Double-Bottom-Contact Terminal Design

The double-bottom-contact terminal design (right) removes dust and contaminants better than than single-bottom-contact terminals, while providing stable redundant contact forces for secure electrical reliability.



### Ultra-Low-Profile Feature

Various profile heights to meet different design requirements.

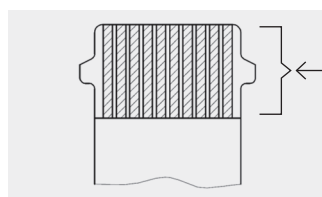


### Cable Locking Features

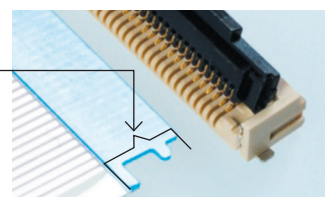
Various cable locking features to meet different design requirements.



104234 series cable style



505110/200528 and  
502790/104184 series cable style



104060 series cable style

[www.molex.com/product/smt\\_ffc-fpc.html](http://www.molex.com/product/smt_ffc-fpc.html)