



FFC/FPC Connectors: Easy-On FFC/FPC Connectors, FD19 Series

Reliable and Robust Connections for In-Vehicle Infotainment and ADAS Applications

Molex is a leading supplier of high-speed interconnect solutions supporting tier customers in the development of in-vehicle advanced driver assistance system (ADAS) capabilities that are secure and reliable and provide high bandwidth. In support of the increased demand for ADAS car cameras, radars and LiDARs as well as in-vehicle infotainment devices, Molex offers a broad range of Easy-On FFC/FPC Connectors with a wide variety of circuit sizes, high operating temperatures, contact reliability, low heights and robustness.

Molex provides small pitch sizes from 0.20 to 2.00mm that are crucial for space-constrained ADAS applications. Additionally, positive locking features and a dual-contact design ensure a reliable connection. A wide variety of actuator options, including zero insertion force (ZIF), slider and flip, help establish a secure connection between the FFC/FPC connectors and terminals.

KEY CAPABILITIES

- Meets automotive temperature requirements: up to 150°C
- 40 to 80 circuits with the 0.50mm-pitch version
- 4 to 30 circuits with the 1.00mm-pitch version
- Vibration resistant with 2 independent contact points
- Secure contact reliability in harsh environments with dual-contact terminal and FFC/FPC latch

KEY ADVANTAGES

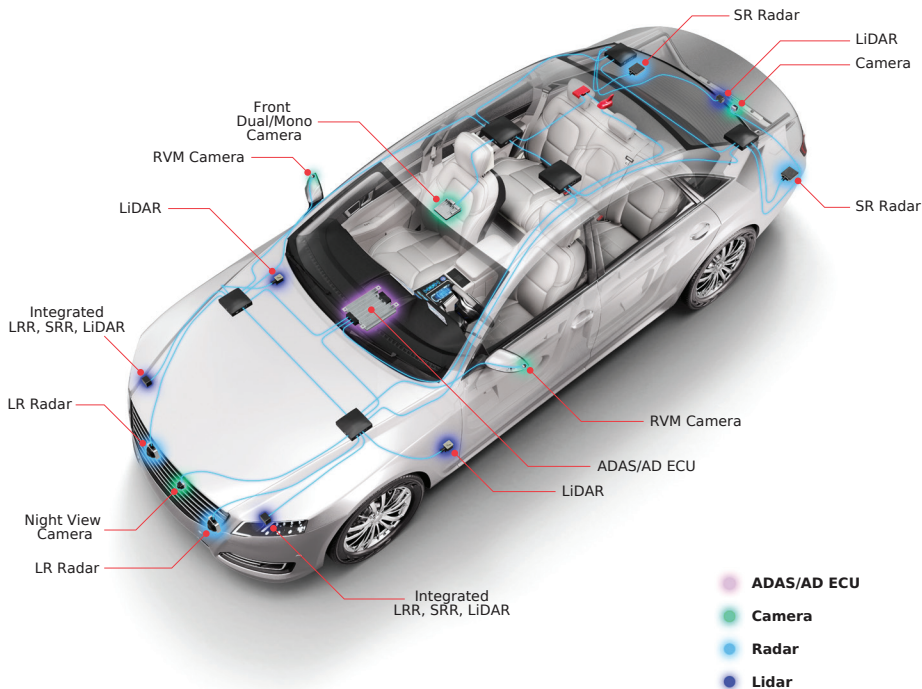
- Wide circuit size variety provides maximum design flexibility
- Mechanical and stress reliability

MARKETS

Connected and automated vehicles

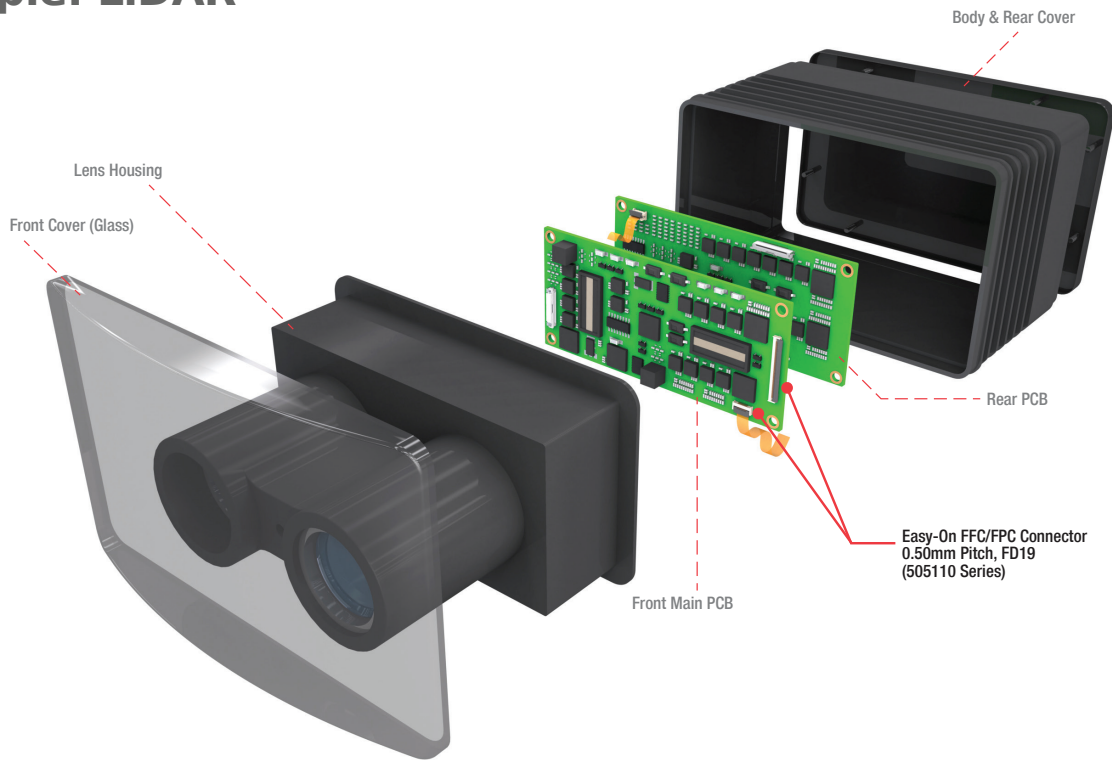
KEY APPLICATIONS

- Advanced driver assistance system
 - Camera
 - Radar
 - LiDAR
- Digital cockpit and in-vehicle infotainment
 - Digital cluster
 - Central information display
 - Head up display
 - Driver monitoring system
 - Digital rear view system
- Battery management system
- Human machine interface



FFC/FPC Connectors: Easy-On FFC/FPC Connectors, FD19 Series Supporting In-Vehicle Infotainment and ADAS Applications

Example: LiDAR



Part Number	Pitch (mm)	Height (mm)	Current	Voltage	Orientation	Contact Position	Circuit size	Operating Temperature	Plating	Durability
505110-**92	0.50	1.90	0.5A (Max.)	50V (Max.)	Right Angle	Bottom	4 to 19	-40 to +105°C	Gold	20 Cycles
505110-**91							20 to 80			
505110-**97							4 to 19	-40 to +150°C		
505110-**96							20 to 80			
200528-0**0	1.00		1.0A (Max.)				4 to 30	-40 to +105°C		
200528-0**1							-40 to +150°C			

Replace ** with circuit size

COMPLETE SOLUTIONS TO ACHIEVE YOUR VISION

Our capabilities are constantly evolving to meet the demanding requirements for autonomous driving, infotainment and connectivity.

molex

www.molex.com/micro-products-automotive

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