



Molex's 0.30mm pitch narrow-depth FPC connector provides an optimal combination of space savings, contact retention assurance and ease-of-use for tight-packaging applications.

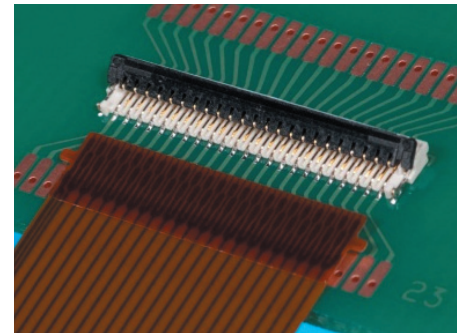
The 503566 FPC connector offers the narrowest depth (2.85mm) of any Molex 0.30mm pitch version. The connector was designed for tight-packaging mobile applications such as smart phones or digital still cameras to allow manufacturers to reduce size while adding increased functionality. The 503566 series connector incorporates some of the proven features of other Molex FPC connectors such as a robust Easy-On™ actuator for stable mating functionality and reliable contact retention. The new series also includes other new or improved design features such as: housing design that highlights the FPC ear tabs more to help assure proper cable seating; wider gap for easier cable insertion; and a longer area to hold onto the actuator to make assembly easier and quicker for operators.

Movable contacts provide both lower cable insertion force as well as more secure contact retention force. This is achieved by odd-numbered contacts moving with the cable in case it is pulled up or down to assure electrical contact is still maintained. While certain competitive versions may have a narrower depth or lower profile, the Molex 503566 version offers one of the best combinations of compact size, contact retention assurance and ease of use.

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

**FPC Connector,
0.30mm Pitch,
Bottom Contact,
0.95mm Height,
Easy-On™ Front-
Flip Actuator,
2.85mm Depth**

503566 ZIF Type



503566 FPC Connector with narrow depth

Features and Benefits

2.85mm depth

Space savings to allow for other components or tracing

Movable contacts

Provide lower insertion force and higher contact retention force

FPC ear tabs

Facilitate cable insertion for proper alignment and assured electrical reliability

Longer area to access actuator

Easier locking for faster assembly

Housing design and color that highlights cable ear tabs

Better visibility to ensure proper cable alignment

9-45 circuits

Lowest circuit size options amongst competitors, and wide range for design flexibility

Applications

- Smart Phone/Mobile Phone
- Tablet PC
- Portable Audio
- Digital Still Camera/Video Camera
- Portable Navigation Equipment
- Portable game
- Notebook PC



Audio Player



Smart Phone



DSC



Tablet



Note PC

Specifications

REFERENCE INFORMATION

Packaging: Embossed Tape
Use With: 0.20mm thick FPC
Designed In: mm
RoHS Compliant: Yes
Halogen Status: Low-Halogen

ELECTRICAL

Voltage (max.): 50V
Current (max.): 0.2A
Contact Resistance:
80 milliohms max. (Odd terminal)
50 milliohms max. (Even terminal)
Dielectric Withstanding Voltage:
250V (rms) AC
Insulation Resistance:
50 Megohms min.

PHYSICAL

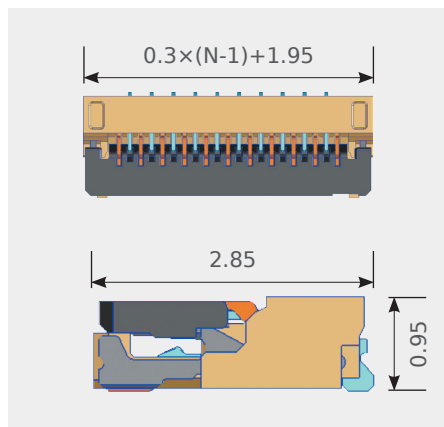
Housing:
Glass-filled LCP,
Natural, UL 94V-0
Actuator:
Glass-filled Polyamide,
Black, UL 94-HB
Contact: Phosphor bronze
Plating:
Contact Area — Gold
Fitting Nail — Gold
Underplating — Nickel
Temperature: -40 to +85°C

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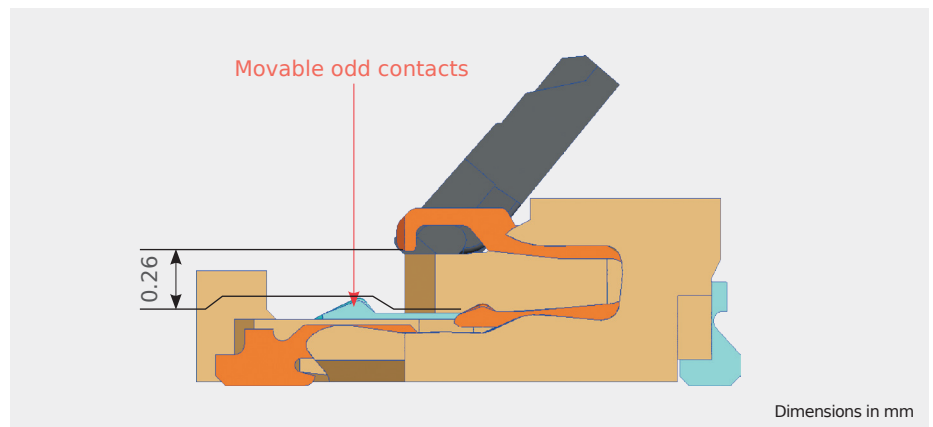
Additional Product Features

Space Savings



Narrowest depth (2.85mm) of any Molex 0.30mm pitch FPC connector

Movable Contacts for Lower Insertion Force and Higher Retention Force



Movable bottom odd contacts provide lower cable insertion force, and also higher contact retention force as terminals move and maintain electrical contact with cable pads even if cable is pulled up or down.

Ordering Information

Order No.	Circuits
503566-0900	09
503566-1100	11
503566-1300	13
503566-1500	15
503566-1700	17
503566-1900	19
503566-2100	21
503566-2300	23
503566-2500	25

Order No.	Circuits
503566-2700	27
503566-2900	29
503566-3100	31
503566-3300	33
503566-3500	35
503566-3700	37
503566-3900	39
503566-4100	41
503566-4300	43
503566-4500	45

www.molex.com/product/smt_ffc-fpc.html