Molex's 0.20mm pitch FPC connector offers optimum space savings in height, width and length for mobile and other tight-packaging applications.

This 504070 series FPC connector includes a spring terminal design that provides more secure contact retention force. This is achieved by bottom terminals that move with the cable in case it is pulled up or down to assure that electrical contact is maintained between the cable pads and terminals. A dual-contact design can accept cable in the top or bottom position. This provides design flexibility to mate with the same connector or a different top-or bottom-mount type.

The 504070 series also includes clearance between the housing and solder tails to prevent flux intrusion, and low-halogen housing material to meet environmental requirements.

FPC Connector, 0.20mm Pitch, SMT, Dual Contact, 0.95mm Height, BackFlip™ Actuator, 3.00mm Depth

504070 Right Angle, SMT



0.20mm Pitch BackFlip™ FPC Connector, 504070 Series

Features and Benefits

Ultra-fine-pitch, low profile, short length and narrow depth design	Offers greater space savings for tight- packaging applications
Dual-contact terminal design	Provides more design flexibility for PCB layout
BackFlip™ actuator	Ensures ease of use in tight mobile device designs
No prohibited pattern area under housing	Allows for no restrictions on PCB pattern design
Moving contact structure	Maintains secure electrical connection even if cable is pulled up or down

Clearance between housing and solder tails

Prevents flux wicking

Markets and Applications

- > Smart phone/mobile phone
- > Tablet PC
- > Digital still camera/video camera
- > Portable navigation equipment
- > Portable game
- > Notebook PC



Potable Player



Digital Still Camera



Notebook PC



Smart Phone



Tablet PC



Specifications

REFERENCE INFORMATION

Packaging: Embossed Tape Use With: 0.20mm thick FPC Designed in: Millimeters RoHS: Compliant

Low Halogen: Yes

ELECTRICAL

Voltage (max.): 50V Current (max.): 0.2A Contact Resistance: 120 milliohm max (Odd circuits) 90 milliohm max (Even circuits) Dielectric Withstanding Voltage: 250V AC for 1 minute Insulation Resistance: 50 Megohm min.

PHYSICAL

Housing: LCP, Black, UL94 V-0 Actuator: PA, Grey, UL94 HB Contact: Phosphor Bronze Plating:

Contact Area — Gold Solder Tail Area — Gold Underplating — Nickel

PCB Thickness:

Operating Temperature:

-25 to +85°C

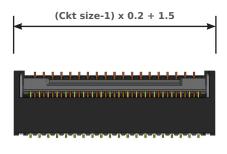
MECHANICAL

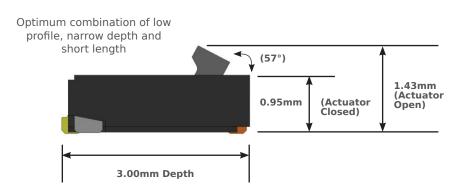
Durability (min.): 10 cycles

FPC Connector, 0.20mm Pitch, SMT, Dual Contact, 0.95mm Height, BackFlip™ Actuator, 3.00mm Depth

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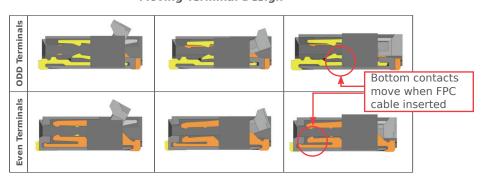
Dimensional Overview





Additional Product Features

Moving Terminal Design



Bottom contacts move to maintain secure electrical contact even if cable is pulled up or down

Ordering Information

Series No.	Circuit Size
504070-3991	39
504070-5191	51
504070-6191	61

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