



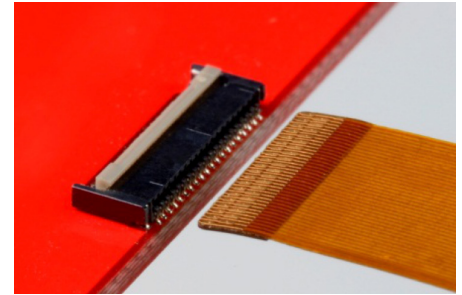
**Molex's 0.20mm pitch FPC connector offers optimum space savings in height, width and length for mobile and other tight-packaging applications.**

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



Digital Still Camera



Smart Phone



Potable Player



Notebook PC



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

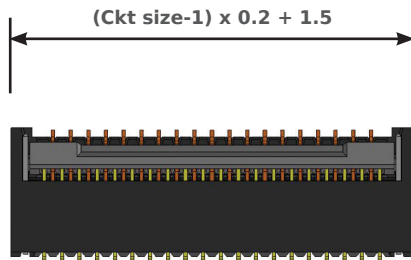
### MECHANICAL

Durability (min.): 10 cycles

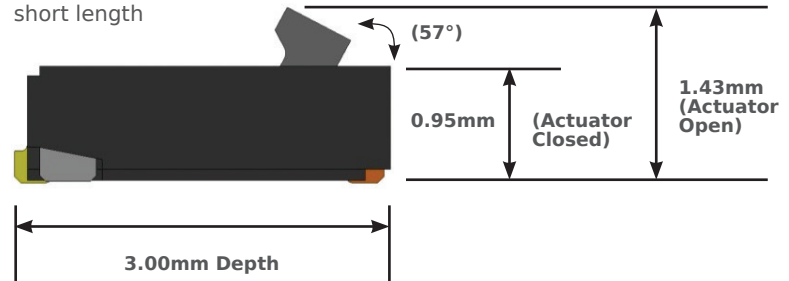
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## Dimensional Overview

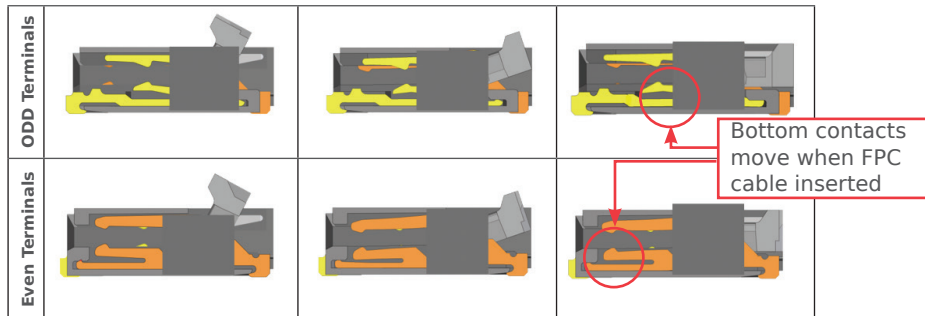


Optimum combination of low profile, narrow depth and short length



## 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