

# 1.00mm Pitch FFC/FPC – F51L Series

## RIGHT ANGLE ZIF FLEX CONNECTOR

F51L series is a 1.00mm pitch right angle ZIF flex connector with a front flip locking mechanism, double contacts, and surface mount termination. This connector features a height of 2.55mm and comes in 4 to 30 contacts. This series features a cable thickness of 0.30mm and provide enhanced durability of 30 mating cycles. The connectors come with a robust design and prevent solder and flux wicking. These are ideal for automotive, data, industrial, communication, consumer, and medical applications.

- Easy to operate and strong FFC/FPC retention makes it vibration-proof
- Double contact points provide enhanced contact stability
- Ensures high solderability and high durability
- USCAR-2 T3V2 qualified



### TARGET MARKETS



### FEATURES

- ZIF (Zero Insertion Force) mechanism
- Front flip locking function
- Double contact points
- Design against solder and flux wicking
- High temperature thermoplastic housing
- 4 to 30 contacts available
- Lead and halogen-free

### BENEFITS

- Absence of frictional mating wear resulting in high mating cycle life
- Easy to operate and strong FFC/FPC retention makes it vibration-proof
- Provides enhanced contact stability
- Ensures high solderability
- Wide operating temperature range of  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$
- Comprehensive range to satisfy different customer requirements
- Meets environmental, health and safety requirements

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### TECHNICAL INFORMATION

#### MATERIAL

- Housing: LCP, Natural color (UL94V-0)
- Actuator: PA9T, Black color (UL94V-0)
- Contact: Phosphor bronze, T=0.20mm
- Stator: Brass, T=0.20mm
- MYLAR: T=0.10mm, Thermostable, Yellow color

#### MECHANICAL PERFORMANCE

- FFC/FPC Retention Force: 40~70gf/pin
- Terminal Retention Force: 100gf/terminal min.
- Stator Plate Retention Force: 100gf/plate min.
- Durability: 30 mating cycles

#### ELECTRICAL PERFORMANCE

- Voltage Rating: 50V AC/DC
- Current Rating: 0.5A
- Contact Resistance: 30MΩ max.
- Insulation Resistance: 500MΩ min.
- Dielectric Withstanding Voltage: No short or breakdown after 500V AC, 2mA, 1min.

#### PACKAGING

- Tape & Reel

#### APPROVALS AND CERTIFICATIONS

- UL File Number:E41797
- RoHS compliant

#### SPECIFICATION

- Aorora Product Specification: IS.EQC.039

#### ENVIRONMENTAL

- Operating Temperature Range: -40°C to +105°C

#### TARGET MARKETS/APPLICATIONS



Car Multimedia  
Car Navigation  
Dashboard  
PND



Base Station  
Power  
Switches



Notebook  
Tablets  
Wearables  
Gaming  
DSC  
LCD & PDP TV



Router  
Server  
ODD  
HDD

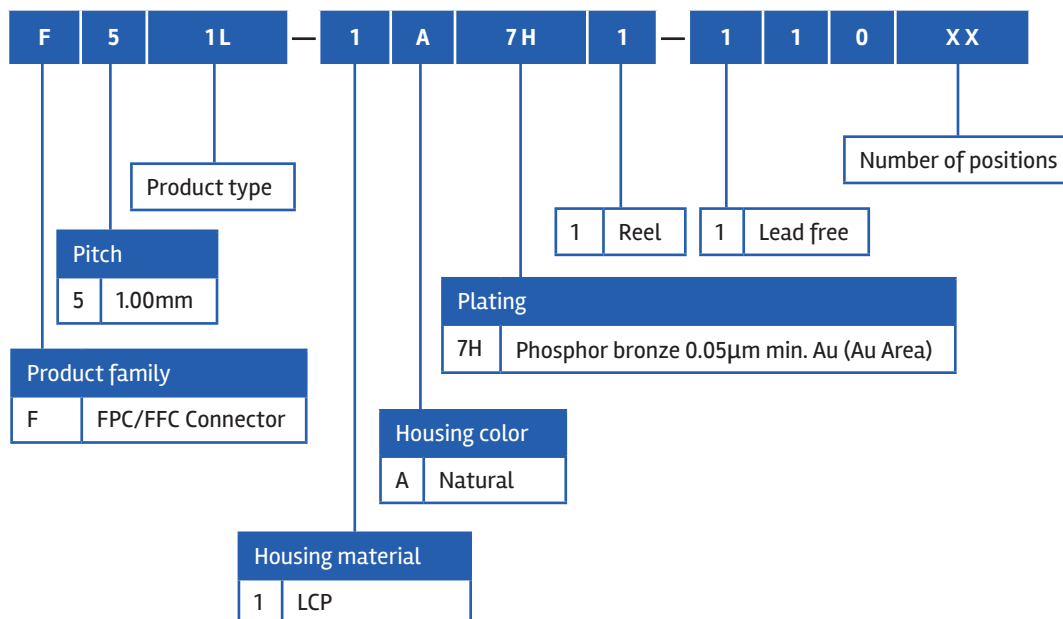


Sensing Element  
Monitoring Camera  
Human Machine Interface  
Industrial PC  
Robotics



Ultrasonic  
Patient Monitor  
MRI  
CT  
Infusion Pump

### PART NUMBER SELECTOR



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