

# 0.50mm Pitch FFC/FPC – F31L Series

## RIGHT ANGLE ZIF FLEX CONNECTOR

F31L series is a right angle ZIF flex connector with front flip lock, surface mount termination and double contact points. It features 2.55mm height and comes in 4 to 80 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 prevents solder and flux wicking. These are ideal for automotive, data, industrial and medical applications.

- Easy to operate
- Strong FFC/FPC retention force makes it vibration-proof
- Enhanced contact stability
- Ensures high solderability and high durability



### TARGET MARKETS



### FEATURES

- ZIF (Zero Insertion Force) mechanism
- Front flip locking function
- Double contact point
- Design against solder and flux wicking
- 4 to 80 positions available
- Lead and halogen-free

### BENEFITS

- Absence of frictional mating wear results in high mating cycle life
- Easy to operate and strong FFC/FPC retention makes it vibration-proof
- Ensures enhanced contact stability
- Ensures high solderability
- Comprehensive range to satisfy different customer requirements
- Meets environmental, health and safety requirements

## TECHNICAL INFORMATION

### MATERIAL

- Housing: LCP, natural color (UL94V-0)
- Actuator: PA9T, black color (UL94V-0)
- Contact: Phosphor Bronze, T=0.20mm, 1~3um Ni under plating
- Anchor-plate: Brass, T=0.20mm, 1~3um Ni under plating, 2~4um tin plating
- Mylar: T=0.10mm, thermostable, yellow color

### MECHANICAL PERFORMANCE

- FFC/FPC Retention Force: 20gf/pin
- Terminal Retention Force: 100gf/terminal min.
- Fixed 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 E106764
- RoHS compliant

### SPECIFICATION

- Aorora Product Specification: IS.EQC.039

### ENVIRONMENTAL

- Operating Temperature Range: -40°C to +85°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

