

## 0.50mm Pitch FFC/FPC – F31N Series

### RIGHT ANGLE ZIF FLEX CONNECTOR

F31N series is a right angle ZIF flex connector with a back flip lock, surface mount termination, and double side contact. It features a small profile with 0.5mm pitch and 1.0mm height. This series features a cable thickness of 0.30mm and provide enhanced durability.

- Easy to operate
- Strong FFC/FPC retention force makes it vibration-proof
- Enhanced contact stability
- Ensures high solderability and high durability
- Double side contact & dual contact points at bottom side



#### TARGET MARKETS



#### FEATURES

- ZIF (Zero Insertion Force) mechanism
- Back flip locking function
- Double side contact and dual points at bottom
- Design against solder and flux wicking
- 30 to 50 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=0.15mm, 1~3µm Ni under plating
- Anchor-plate: Brass, T=0.20mm, 1~3µm Ni under plating, 2~4µm Tin plating
- Mylar: T=0.10mm, Thermostable, Yellow color

### MECHANICAL PERFORMANCE

- FFC/FPC Retention Force: 0.15N/pin
- Terminal Retention Force: 0.3N/terminal min.
- Fixed Plate Retention Force: 0.8N/plate min.
- Durability: 20 mating cycles

### ELECTRICAL PERFORMANCE

- Voltage Rating: 50VAC/VDC
- Current Rating: 0.5A
- Contact Resistance: 100mΩ max.
- Insulation Resistance: 500MΩ min.
- Dielectric Withstanding Voltage: No short or breakdown after 250VAC, 2mA, 1min.

### APPROVALS AND CERTIFICATIONS

- UL 94V-0
- RoHS compliant

### ENVIRONMENTAL

- Operating Temperature Range: -50°C to +85°C

### SPECIFICATION

- Aorora Product Specification: IS.EQC.186

### PACKAGING

- Tape & Reel

### 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

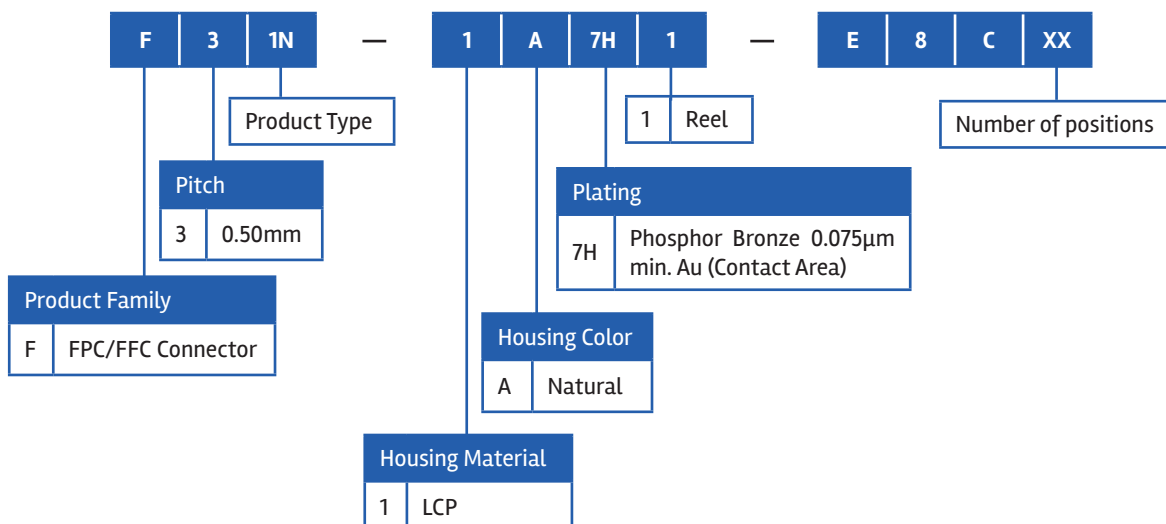


Sensing Element  
Monitoring Camera  
Human Machine Interface  
Industrial PC  
Robotics



Ultrasonic  
Patient Monitor  
MRI  
CT  
Infusion Pump

## PART NUMBER SELECTOR



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