

## 0.50mm Pitch FFC/FPC – F31X/F31Y Series

### VERTICAL ZIF FLEX CONNECTOR

F31X/F31Y series are 0.50mm pitch vertical ZIF flex connectors with slider mechanism and surface mount termination. These connectors feature a height of 4.25mm and are offered in 4 to 29 contacts. These series feature 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
- Strong FFC/FPC retention force makes it vibration-proof
- Ensures high solderability and high durability



#### TARGET MARKETS



### FEATURES

- ZIF (Zero Insertion Force) mechanism
- Slider mechanism
- Design against solder and flux wicking
- High-temperature thermoplastic housing
- 4 to 29 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 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

## TECHNICAL INFORMATION

### MATERIAL

- Housing: LCP, Natural color (UL94V-0)
- Slider: PA9T, Black color (UL94V-0)
- Contact Terminal: Phosphor Bronze, T=0.20mm
- Anchor-Plate: Brass, T=0.40mm
- Mylar: T=0.10mm, Thermostable, Yellow color

### MECHANICAL PERFORMANCE

- FFC/FPC Retention Force: 0.1~2.25kgf/min. (initial)  
0.06~2.08kgf/min. (after 30 cycles)
- Terminal Retention Force: 100gf/terminal min.
- Anchor-Plate Retention Force: 400gf/plate min.
- Durability: 30 mating cycles

### ELECTRICAL PERFORMANCE

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

### APPROVALS AND CERTIFICATIONS

- UL File Number: E106764
- RoHS compliant

### ENVIRONMENTAL

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

### SPECIFICATION

- Aurora Product Specification: IS.EQC.012

### 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

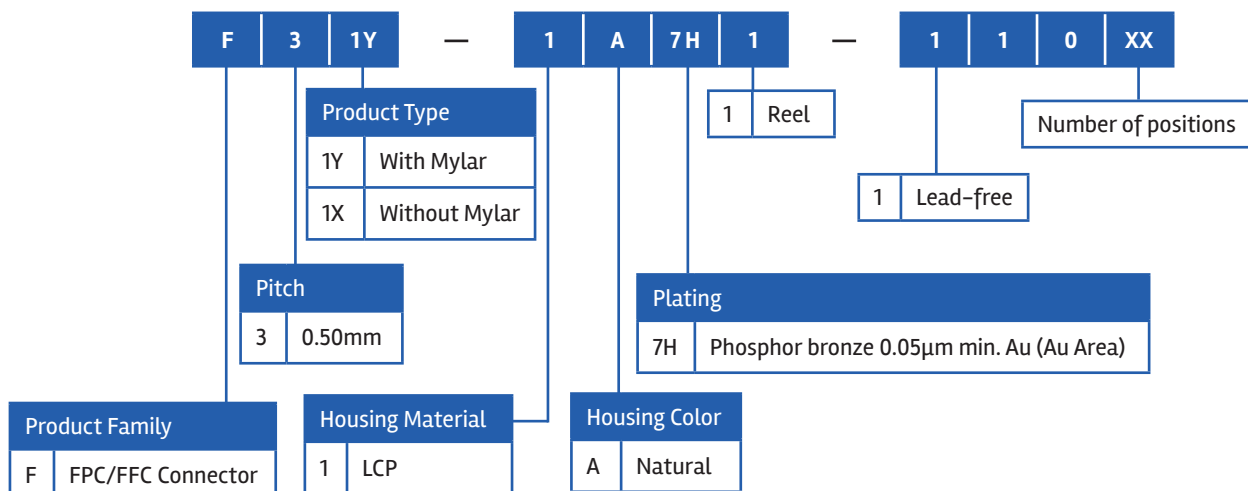


Sensing Element  
Monitoring Camera  
Human Machine Interface  
Industrial PC  
Robotics



Ultrasonic  
Patient Monitor  
MRI  
CT  
Infusion Pump

## PART NUMBER SELECTOR



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