

# 0.50mm Pitch FFC/FPC – F31W/F31Z/F314/F336 Series

## VERTICAL ZIF FLEX CONNECTOR

F31W/F31Z/F314/F336 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 60 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 and strong FPC/FFC retention 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 60 positions available
- Lead and halogen-free

### BENEFITS

- Absence of frictional mating wear results in high mating cycle life
- Easy to operate and strong FPC/FFC 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), after 30 cycles: 0.06~2.08kgf/min.
- Terminal Retention Force: 100gf/terminal min.
- Anchor-plate Retention Force: 400gf/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.012

### ENVIRONMENTAL

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

### TARGET MARKETS/APPLICATIONS



Car Multimedia  
Car Navigation  
Dashboard  
PND



Base Station  
Power  
Switches



Notebook  
Tables  
Wearables  
Gaming  
DSC  
LCD & PDP TV



Router  
Server  
ODD  
HDD

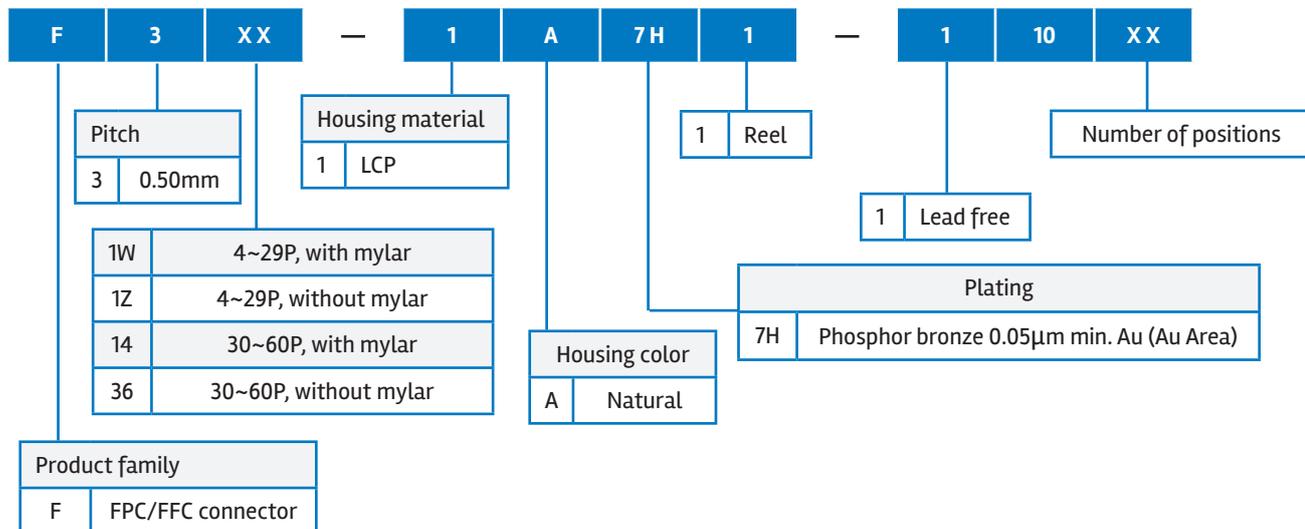


Sensing element  
Monitoring camera  
Human Machine Interface  
Industrial PC  
Robotics



Ultrasonic  
Patient Monitor  
MRI  
CT  
Infusion Pump

## PART NUMBER SELECTOR



AORORAF31W31Z3143360819EA4