

0.50 mm Pitch FFC/FPC – F31S Series

VERTICAL ZIF FLEX CONNECTOR

The F31S series is a 0.50 mm pitch vertical ZIF flex connector with a vertical flip locking mechanism, surface mount termination, and dual contacts. It features a height of 5.80 mm and comes in 10 to 70 contacts. This series features a cable thickness of 0.30 mm and provides 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.

- Strong FFC/FPC retention makes it vibration-proof
- Dual contact points ensure enhanced contact stability
- Ensures high solderability and high durability
- Wide operating temperature range of -40°C to $+105^{\circ}\text{C}$
- USCAR-2 T3V2 qualified



TARGET MARKETS



FEATURES

- ZIF (Zero Insertion Force) mechanism
- Vertical flip locking mechanism
- Dual contact points
- Design against solder and flux wicking
- High-temperature thermoplastic housing
- 10 to 70 positions available

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
- Wide operating temperature range of -40°C to $+105^{\circ}\text{C}$
- Comprehensive range to satisfy different customer requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: LCP, Natural color (UL 94 V-0)
- Actuator: LCP, Black color (UL 94 V-0)
- Contact: Phosphor bronze, T=0.15 mm
- Anchor-plate: Brass, T=0.40 mm
- Mylar: T=0.10 mm, Thermostable, Brown color

MECHANICAL PERFORMANCE

- FFC/FPC Retention Force: 20 gf/pin
- Terminal Retention Force: 100 gf/terminal min.
- Anchor-plate Retention Force: 500 gf/plate min.
- Durability: 30 mating cycles

ELECTRICAL PERFORMANCE

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

PACKAGING

- Tape & Reel

APPROVALS AND CERTIFICATIONS

- UL File Number: E106764
- RoHS compliant

SPECIFICATION

- Aorora Product Specification: IS.EQC.034

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



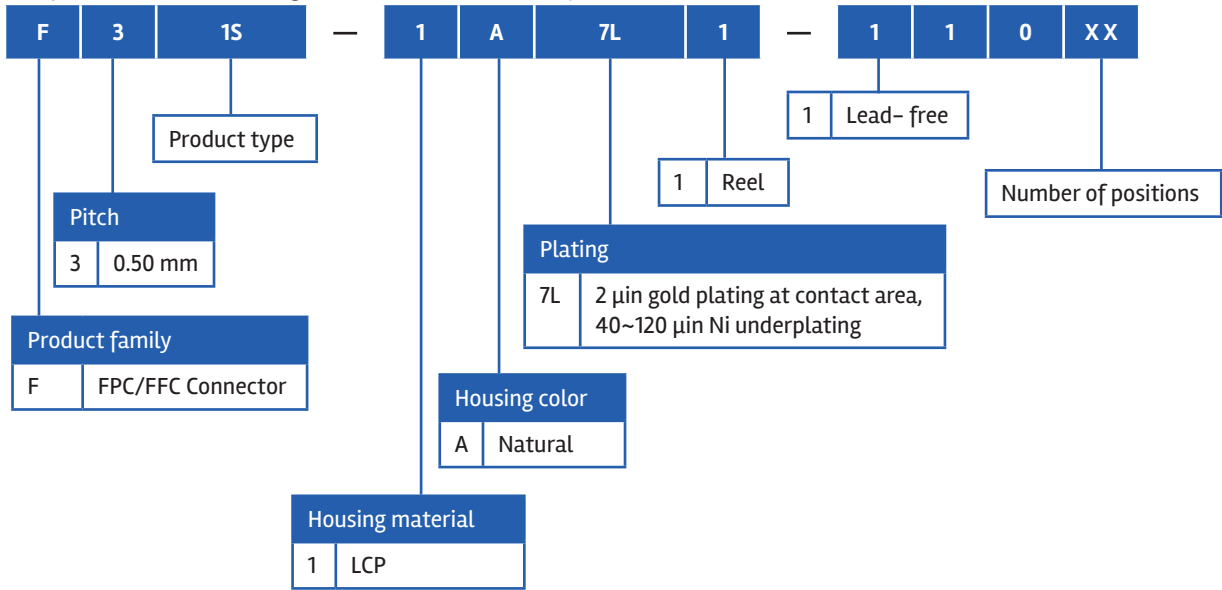
Sensing Element
Monitoring Camera
Human Machine Interface
Industrial PC
Robotics



Ultrasonic
Patient Monitor
MRI
CT
Infusion Pump

PART NUMBER SELECTOR

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