

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 °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 °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



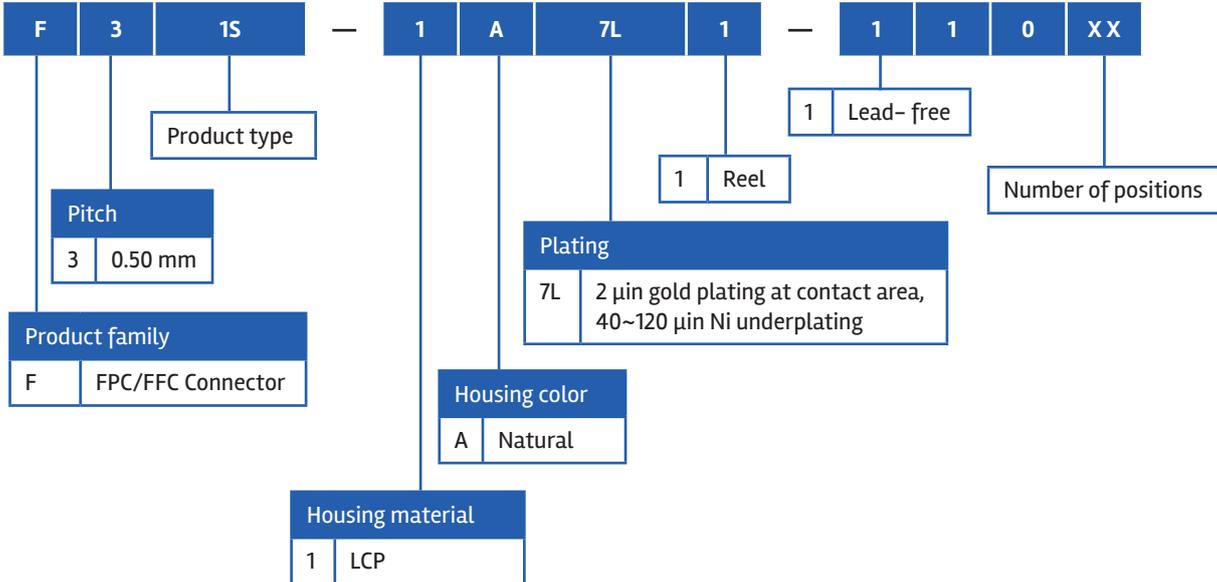
Sensing Element
Monitoring Camera
Human Machine Interface
Industrial PC
Robotics



Ultrasonic
Patient Monitor
MRI
CT
Infusion Pump

PART NUMBER SELECTOR

Find part number details using the search box on www.amphenol-cs.com



WHERE INNOVATION CONNECTS

Scan to learn more ▶



AORORAF31S0925EA4