

0.50mm Pitch FFC/FPC – F31L Series

RIGHT ANGLE ZIF FLEX CONNECTOR

F31L series is a right angle ZIF flex connector with a front flip lock, surface mount termination, and double contact points. It features 2.55mm in height and comes in 4 to 80 contacts. This series features 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, and medical applications.

- Easy to operate
- Strong FFC/FPC retention force makes it vibration-proof
- Enhanced contact stability
- Ensures high solderability and high durability
- USCAR-2 T3V2 qualified



FEATURES

- ZIF (Zero Insertion Force) mechanism
- Front flip locking function
- Double contact point
- Design against solder and flux wicking
- 4 to 80 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=0.20mm, 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: 40gf ~70gf /pin
- Terminal Retention Force: 100gf/terminal min.
- Fixed Plate Retention Force: 100gf/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.039

ENVIRONMENTAL

- Operating Temperature Range: -40°C to +125°C

TARGET MARKETS/APPLICATIONS



Car Multimedia
Car Navigation
Dashboard
PND



Router
Server
ODD
HDD



Base Station
Power
Switches



Sensing Element
Monitoring Camera
Human Machine Interface
Industrial PC
Robotics



Notebook
Tablets
Wearables
Gaming
DSC
LCD & PDP TV



Ultrasonic
Patient Monitor
MRI
CT
Infusion Pump

PART NUMBER SELECTOR

