

# 0.50mm Pitch FFC/FPC - F31N Series

#### RIGHT ANGLE ZIF FLEX CONNECTOR

F31N series is a right angle ZIF flex connector with a back flip lock, surface mount termination, and double side contact. It features a small profile with 0.5mm pitch and 1.0mm height. This series features a cable thickness of 0.30mm and provide enhanced durability.

- Easy to operate
- Strong FFC/FPC retention force makes it vibration-proof
- Enhanced contact stability
- Ensures high solderability and high durability
- Double side contact & dual contact points at bottom side



#### **FEATURES**

- ZIF (Zero Insertion Force) mechanism
- Back flip locking function
- Double side contact and dual points at bottom
- Design against solder and flux wicking
- 30 to 50 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=0.15mm, 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: 0.15N/pin
- Terminal Retention Force: 0.3N/terminal min.
- Fixed Plate Retention Force: 0.8N/plate min.
- Durability: 20 mating cycles

#### **ELECTRICAL PERFORMANCE**

- Voltage Rating: 50VAC/VDC
- Current Rating: 0.5A
- Contact Resistance:  $100m\Omega$  max.
- Insulation Resistance: 500M $\Omega$  min.
- Dielectric Withstanding Voltage: No short or breakdown after 250VAC, 2mA, 1min.

#### **APPROVALS AND CERTIFICATIONS**

- UL 94V-0
- RoHS compliant

#### **ENVIRONMENTAL**

Operating Temperature Range: -50°C to +85°C

#### **SPECIFICATION**

Aorora Product Specification: IS.EQC.186

#### **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

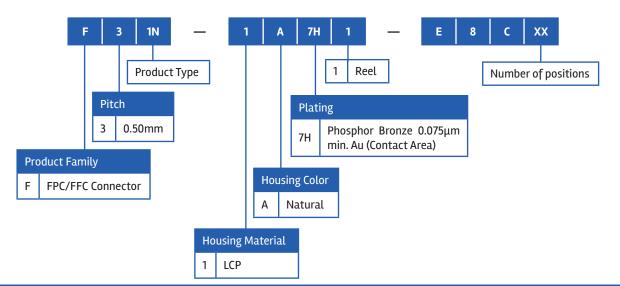


Sensing Element Monitoring Camera Human Machine Interface Industrial PC Robotics



Ultrasonic Patient Monitor MRI CT Infusion Pump

## **PART NUMBER SELECTOR**



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