

# 1.00mm Pitch FFC/FPC - F51L Series

# RIGHT ANGLE ZIF FLEX CONNECTOR

F51L series is a 1.00mm pitch right angle ZIF flex connector with front flip locking mechanism, double contacts and surface mount termination. This connector features a height of 2.55mm and comes in 4 to 30 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, communication, consumer and medical applications.

- Easy to operate and strong FFC/FPC retention makes it vibration-proof
- Double contact points provide enhanced contact stability
- Ensures high solderability and high durability



### **FEATURES**

- ZIF (Zero Insertion Force) mechanism
- Front flip locking function
- Double contact points
- Design against solder and flux wicking
- High temperature thermoplastic housing
- 4 to 30 contacts available
- Lead and halogen-free

### **BENEFITS**

- Absence of frictional mating wear resulting in high mating cycle life
- Easy to operate and strong FFC/FPC retention makes it vibration-proof
- Provides enhanced contact stability
- Ensures high solderability
- Wide operating temperature range of -40°C to +105°C
- 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
- Stator: Brass, T=0.20mm
- MYLAR: T=0.10mm, thermostable, yellow color

#### **MECHANICAL PERFORMANCE**

- FFC/FPC Retention Force: 40~70gf/pin
- Terminal Retention Force: 100gf/terminal min.
- Stator 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: 500M $\Omega$  min.
- Dielectric Withstanding Voltage: No short or breakdown after 500V AC, 2mA, 1min.

# **PACKAGING**

■ Tape & Reel

# **APPROVALS AND CERTIFICATIONS**

- UL file number E41797
- RoHS compliant

#### **SPECIFICATION**

Aorora Product Specification: IS.EQC.039

#### **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

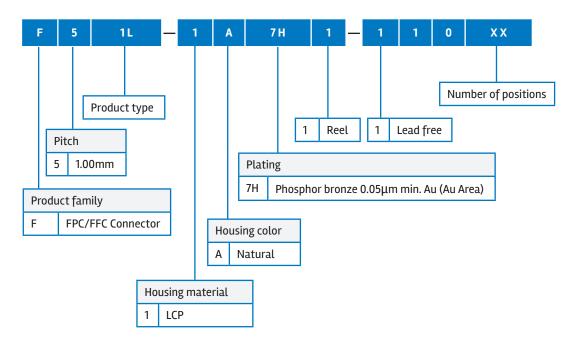


Sensing element Monitoring camera Human Machine Interface Industrial PC Robotics



Ultrasonic Patient Monitor MRI CT Infusion Pump

# PART NUMBER SELECTOR



**40R0RAF51L0719EA4**