

# 0.50mm Pitch FFC/FPC - F31E Series

# RIGHT ANGLE ZIF FLEX CONNECTOR

F31E series is a 0.50mm pitch right angle ZIF flex connector with front flip mechanism, double contact and surface mount termination. This connector features a height of 1.25mm and comes in 15 to 30 contacts. This connector comes 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
- Dual contact points, provide enhanced contact stability
- Ensures high solderability and high durability



#### **FEATURES**

- ZIF (Zero Insertion Force) mechanism
- Front flip feature
- Double contact points
- Design against solder and flux wicking
- · High temperature thermoplastic housing
- 15 to 30 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
- 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

Anchor-plate: Brass, T=0.15mm

#### **MECHANICAL PERFORMANCE**

• FFC/FPC Retention Force: 20gf/pin

Terminal Retention Force: 50gf/terminal min.

Anchor-plate Retention Force: 50gf/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 E106764

RoHS compliant

#### **SPECIFICATION**

Aorora Product Specification: IS.EQC.042

#### **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

