

# 0.50mm Pitch FFC/FPC - F31G/F31K/F32P/F32Y

# VERTICAL NON-ZIF FLEX CONNECTOR

F31G/F31K/F32P/F32Y series are 0.50mm pitch vertical Non-ZIF flex connectors with surface mount termination and no locking mechanism. F31G and F31K connectors are offered in 4 to 50 contacts and F32P and F32Y comes in 4 to 60 contacts. These series feature 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.

- Strong FFC/FPC retention makes it vibration-proof
- Single action low-force FFC/FPC insertion and removal
- Ensures high solderability and high durability



#### **FEATURES**

- Non-ZIF (Zero Insertion Force) mechanism requires some force for insertion
- No locking mechanism
- Design against solder and flux wicking
- 4 to 60 positions available
- High-temperature thermoplastic housing
- Lead and halogen-free

#### **BENEFITS**

- Strong FPC retention makes it vibration-proof
- Single action low-force FFC/FPC insertion and removal
- Ensures high solderability
- Comprehensive range to satisfy different customer requirements
- Wide operating temperature range of -40°C to +105°C
- Meets environmental, health and safety requirements

### **TECHNICAL INFORMATION**

#### **MATERIAL**

- Housing: LCP, natural color (UL94V-0)
- Contact: Phosphor bronze, T=0.20mm
- F31G and F31K Series: Anchor-plate: brass, T=0.40mm
- F32P and F32Y Series: Anchor-plate: Brass, T=0.20mm

#### **MECHANICAL PERFORMANCE**

- FFC/FPC Retention Force: 20gf/pin
- Terminal Retention Force: 300gf/terminal min.
- Anchor-plate Retention Force: 400gf/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.035

#### **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**

