## Amphenol

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# 0.50mm Pitch FFC/FPC – F31W/F31Z/F314/F336 Series

### **VERTICAL ZIF FLEX CONNECTOR**

F31W/F31Z/F314/F336 series are 0.50mm pitch vertical ZIF flex connectors with slider mechanism and surface mount termination. These connectors feature a height of 4.25mm and are offered 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.

- Easy to operate and strong FPC/FFC retention makes it vibration-proof
- Ensures high solderability and high durability



### **FEATURES**

- ZIF (Zero Insertion Force) mechanism
- Slider mechanism
- Design against solder and flux wicking
- High-temperature thermoplastic housing
- 4 to 60 positions available
- Lead and halogen-free

### **BENEFITS**

- Absence of frictional mating wear results in high mating cycle life
- Easy to operate and strong FPC/FFC retention makes it vibration-proof
- Ensures high solderablity
- 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)
- Slider: PA9T, black color (UL94V-0)
- Contact Terminal: Phosphor bronze, T=0.20mm
- Anchor-plate: Brass, T=0.40mm
- Mylar: T=0.10mm, thermostable, yellow color

#### **MECHANICAL PERFORMANCE**

- FFC/FPC Retention Force: 0.1~2.25kgf/min. (initial), after 30 cycles: 0.06~2.08kgf/min.
- Terminal Retention Force: 100gf/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: 30M  $\Omega$  max.
- Insulation Resistance: 500M $\Omega$  min.
- Dielectric Withstanding Voltage: No short or breakdown after 500V AC, 2mA, 1min.

### PART NUMBER SELECTOR

#### 7 H 10 хх F 3 ХХ 1 Α 1 Housing material Pitch 1 Reel Number of positions LCP 1 0.50mm 3 Lead free 1 1W 4~29P, without mylar Plating 1Z 4~29P, with mylar 7H Phosphor bronze 0.05µm min. Au (Au Area) 14 30~60P, with mylar Housing color 36 30~60P, without mylar A Natural Product family FPC/FFC connector F

### PACKAGING

Tape & Reel

### **APPROVALS AND CERTIFICATIONS**

- UL file number E106764
- RoHS compliant

#### **SPECIFICATION**

Aorora Product Specification: IS.EQC.012

### **ENVIRONMENTAL**

Operating Temperature Range: -40°C to +105°C

### **TARGET MARKETS/APPLICATIONS**



Car Multimedia Car Navigation Dashboard PND





Switches Notebook Tablets Wearables

LCD & PDP TV

Gaming

DSC



Router Server ODD HDD



Sensing element Monitoring camera Human Machine Interface Industrial PC Robotics



Ultrasonic Patient Monitor MRI CT

Infusion Pump

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### www.amphenol-icc.com

#### Disclaimer

Please note that the above information is subject to change without notice.