

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: 500MΩ 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

F	3	XX	—	1	A	7X	1	—	1	1	0	XX
Pitch			Housing material				1	Reel	1	Lead free	Number of positions	
3 0.50mm			1 LCP									
1G A type, with fixed plate							7H	Phosphor Bronze 0.05μm min. Au (Au Area)				
1K B type, with fixed plate							7A	Phosphor Bronze matte tin				
2P B type, without fixed plate												
2Y A type, without fixed plate												
			Housing color									
			A Natural									
Product family												
F	FPC/FFC Connector											

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