

# 1.00mm Pitch FFC/FPC - F51H Series

# VERTICAL A-TYPE NON ZIF FLEX CONNECTORS

F51H series is a 1.00mm pitch vertical Non-ZIF flex connector with surface mount termination and no locking mechanism. This connector features a height of 4.20mm and comes in in 4 to 30 contacts. This series features a cable thickness of 0.30mm and provide a durability of 20 mating cycles. The connectors comes with a robust design and prevent solder and flux wicking. These are ideal for automotive, data, industrial, communication, consumer and medical applications.

- Single action low-force FFC/FPC insertion and removal
- Ensures high solderability and durability



#### **FEATURES**

- Non-ZIF (Zero Insertion Force) mechanism requires some force for insertion
- No locking mechanism
- Design against solder and flux wicking
- · High temperature thermoplastic housing
- 4 to 30 positions available
- Lead and halogen-free

#### **BENEFITS**

- Strong FPC retention makes it vibration-proof
- Single action low-force FFC/FPC insertion and removal
- 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)
- Contact: Phosphor bronze, T=0.20mm
- Mylar: T=0.10mm, thermostable, yellow color

#### **MECHANICAL PERFORMANCE**

- FFC/FPC Insertion Force: Initial: 2.45~6.35Kgf/ max., After 20 cycles: 1.9~5.8Kgf/max.
- FFC/FPC Withdrawal Force: Initial:0.24~0.54Kgf/ min., After 20 cycles: 0.23~0.53Kgf/min.
- Terminal Retention Force: 300gf/terminal min.
- Durability: 20 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.135

#### **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

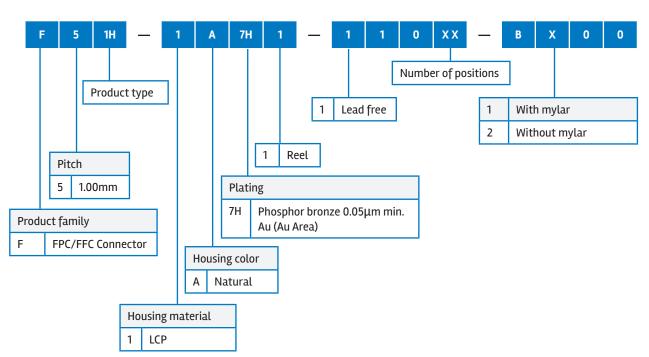


Sensing element Monitoring camera Human Machine Interface Industrial PC Robotics



Ultrasonic Patient Monitor MRI CT Infusion Pump

## PART NUMBER SELECTOR



AORORAF51H0719EA4

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## Amphenol:

<u>F51H-1A7H1-11004-B100</u> <u>F51H-1A7H1-11006-B100</u> <u>F51H-1A7H1-11007-B100</u> <u>F51H-1A7H1-11004-B200</u> <u>F51H-1A7H1-11004-B200</u> <u>F51H-1A7H1-11006-B200</u>