

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

### VERTICAL NON-ZIF FLEX CONNECTOR

HRS-F31G/HRS-F31K/HRS-F32P/HRS-F32Y series are 0.50mm pitch vertical Non-ZIF flex connectors with surface mount termination and no locking mechanism. HRS-F31G and HRS-F31K connectors are offered in 4 to 50 contacts and HRS-F32P and HRS-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  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

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

- 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

