



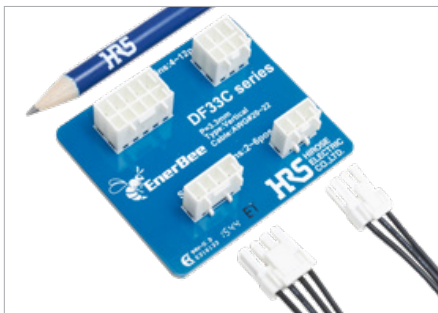
Hirose medical connectors

Hirose medical connectors

Designed to meet the evolving and specific requirements of the medical industry, Avnet Abacus offers a broad portfolio of Hirose connectors. Providing the latest technological solutions for demanding medical applications, Hirose connectors are robust, efficient and highly reliable.

For more information and to download datasheets visit avnet-abacus.eu/hirose-medical-connectors

DF33C



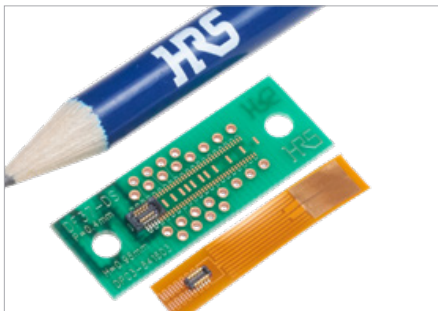
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Hirose's DF33C series of compact wire-to-board connectors, provides superior reliability for internal power supplies. The robust connector range consists of crimp sockets and vertical headers in single or double row and a current rating of up to 5A can be applied. The DF33C series is part of the EnerBee product family featuring wire-to-board and wire-to-wire power connectors to provide technically advanced connectivity solutions for industrial power sources.

FEATURES

- Number of contacts:
 - > Single row: 2, 3, 4, 5, 6,
 - > Double row: 4, 6, 8, 10, 12
- Contact pitch: 3.3
- Rated current: 5A
- Termination AWG: 20-22
- Rated voltage: AC-DC 500V
- Temperature: -35°C to +85°C
- Mating cycles: 30

DF37



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With a mated height of 0.98/1.5mm, width of 2.98mm and length of 8.22mm (30 positions) Hirose's DF37 series is one of the smallest in its class. Whilst providing a space saving and a shock resistant design, the unique 2-point contact configuration and effective mating length of 0.25mm provides a highly reliable connection with a tactile mating confirmation.

FEATURES

- Number of contacts: 10, 16, 20, 24, 30, 34, 40, 44, 50, 60, 70, 74
- Contact pitch: 0.4mm
- Mated height: 0.98mm, 1.5mm
- Solder technology: SMT
- Rated current: 0.3A
- Rated voltage: AC-DC 30V
- Temperature: -35°C to +85°C
- Mating cycles: 10

DF81



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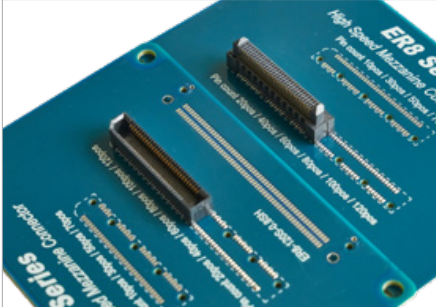
Utilising its 0.4mm pitch, Hirose's DF81 horizontal connector offers a space saving design and a low height of 0.9mm in a single row connector. This series is designed to optimise transmission speeds and provide superior signal characteristics: eDPTM (Embedded DisplayPort™) Ver. 1.3 compatible 5.4Gbps.

FEATURES

- Number of contacts: 30, 40, 50
- Contact pitch: 0.4mm
- Mated height: 0.9mm
- Rated current: 0.3A
- Rated voltage: AC 100V
- Termination AWG:
 - > Micro coax: 36 - 46
 - > Discrete wire: 34, 36
- Temperature: -35°C to +85°C
- Mating cycles: 30
- Halogen free (IEC61249-2-21)

ER8

FunctionMAX



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Part of the FunctionMAX product family, the ER8 series of connectors is designed to meet the requirements of the industrial market with maximum functionality. Contacts are optimised for signal integrity to ensure reliable high-speed transmission performance. The connector also features an excellent insertion loss-to-crosstalk ratio with a 5-aggessor differential far end crosstalk (FEXT) that meets the IEEE802.3ap specification for 10+Gbps and more. It is a licensed second source for the Samtec Edge Rate® Series. Edge Rate is a trademark of Samtec, Inc.

FEATURES

- Number of contacts: 10, 20, 30, 40, 50, 60, 70, 80, 100, 120
- Contact pitch: 0.8mm
- Rated current: 0.5A
- Transfer speed: 10Gbps
- Solder technology: SMT
- Mated height: 7-12mm
- Rated voltage: AC 100V
- Temperature: -55°C to +85°C
- Mating cycles: 100

FH28K



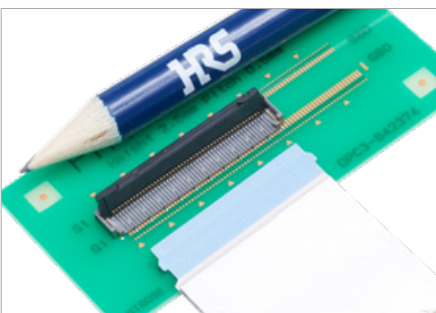
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The FH28K series has been designed to withstand higher operating temperatures than standard FFC/FPC connectors with an operating temperature range up to 125°C. Capable of accepting a tabbed FFC/FPC, insertion into the connector is user-friendly due to the wide 116° opening range of the rotating actuator.

FEATURES

- Number of contacts: 10, 15, 20, 28, 30, 40, 50, 55, 60, 64, 68, 80
- Contact pitch: 0.5mm
- Contact position: bottom
- Height: 2.55mm
- Rated current: 0.5A
- Rated voltage: AC-DC 50V
- Temperature: -40°C to +125°C
- Mating cycles: 20
- FPC design same as Hirose FH28

FH41



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Hirose's FH41 has the capacity to handle high transmission speeds of up to 3.75Gbps. Using shielded impedance matched FFC cables with ground contacts, this series can be used for effective impedance matching (differential impedance: 100 Ω \pm 10%).

FEATURES

- Number of contacts: 15, 20, 28, 30, 31, 40, 50, 60, 68
- Contact pitch: 0.5mm
- Height: 2.5mm
- Contact position: bottom
- Robust lock structure
- Shielded
- Rated current: 0.5A
- Rated voltage: AC-DC 50V
- Temperature: -40°C to +105°C
- Mating cycles: 20
- Halogen free (IEC61249-2-21)

FH48



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The FH48 series fits requirements for Flat Flexible Cable (FFC) connectors with higher transmission speed. The capacity for high-speed transmission is achieved by the innovatively designed impedance-controlled contacts (differential impedance: $100\Omega \pm 10\%$). The connector fully supports next generation chip V-by-One[®] HS by THine digital signalling standard.

FEATURES

- Number of contacts: 20, 21, 30, 31, 40, 50, 68
- Contact pitch: 0.5mm
- Height: 6.18mm
- Rated current: 0.5A
- Rated voltage: AC-DC 50V
- Temperature: -40°C to $+105^{\circ}\text{C}$
- Mating cycles: 20
- Halogen free (IEC61249-2-21)

FH58/M



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The FH58/M series offers excellent impedance characteristics and delivers high-speed transmission required to support USB 3.0, Embedded DisplayPort ver1.3 and MIPI D-PHY ver1.1 standards. The dimensions are compact with a short mounted depth of 3.1mm, and a height of only 0.9mm. The fine pitch of 0.2mm/0.25mm minimises the required mounting to save valuable board space.

FEATURES

- Number of contacts: 7, 21, 31, 35, 41, 51
- Contact pitch: 0.2mm, 0.25mm
- Height: 0.9mm
- Contact position: top/bottom
- Rated current: 0.2A
- Rated voltage: AC-DC 30V
- Temperature: -55°C to $+85^{\circ}\text{C}$
- Mating cycles: 10
- Halogen free (IEC61249-2-21)

FH72

OneAction **FH**



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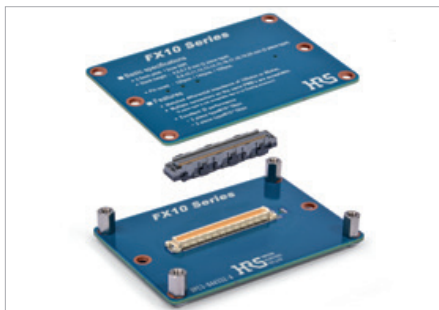
The innovative and compact FH72 has been designed with a small pitch of 0.3mm and is ideal for smaller applications. Including a unique one action lock and high FPC retention force, the FH72 series can be inserted into the connector without opening the actuator. This can be done with one hand or by automated machinery to save valuable assembly time and reduce mating failure.

FEATURES

- Number of contacts: 11
- Contact pitch: 0.3mm
- Height: 0.9mm
- Contact position: top
- Rated current: 0.2A
- Rated voltage: AC-DC 30V
- Temperature: -55°C to $+85^{\circ}\text{C}$
- Mating cycles: 10

FX10

FunctionMAX



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Hirose's FX10 series meets the high demand for connectors that require up to 15+ Gbps high-speed transmission capability. The series is designed for applications that need multiple stacking connectors on the same board and is part of the FunctionMAX product family, consisting of board-to-board connectors designed to meet the requirements of the industrial market with maximum functionality.

FEATURES

- Number of contacts: 80, 96, 100, 120, 140, 144, 168, 80/8, 100/10, 120/12, 140/14, 200/20
- Contact pitch: 0.5mm
- Rated current: 0.3A
- Transfer speed: 10Gbps (2 piece), 15Gbps (3 piece)
- Solder technology: SMT
- Mated height: 4-13mm
- Rated voltage: AC 50V
- Temperature: -55°C to +85°C
- Mating cycles: 50

FX18

FunctionMAX



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Part of the FunctionMax family, the FX18 series meet the requirement for connectors that are suitable for high speed applications; delivering an impressive 10+Gbps of high speed transmission. The innovative structure of this connector features advanced multi-functional contacts that consist of ground contacts, power supply contacts and three-step sequential contacts.

FEATURES

- Number of contacts: 40, 60, 80, 100, 120, 140, 160, 180
- Contact pitch: 0.8mm
- Rated current: 0.5A
- Transfer speed: 10Gbps
- Solder technology: SMT
- Mated height: 10-45mm
- Rated voltage: AC 100V
- Temperature: -55°C to +85°C
- Mating cycles: 500

U.FL



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Hirose's U.FL series is an ultra-miniature coaxial connector range featuring superior performance characteristics for wireless communication modules. Though compact and lightweight, the U.FL can handle high transmission speeds of up to 6GHz.

FEATURES

- Characteristic impedance: 50Ω
- Voltage Standing Wave Ratio frequency range: 1.3 or less (DC to 6GHz)
- Mated height: 1.9, 2.3, 2.4
- Temperature: -40°C to +90°C
- Mating cycles: 30

ASK AN EXPERT

Our Europe wide team of product specialists work closely with Hirose to offer you the highest levels of engineering support for your design. To arrange a visit or to discuss your design requirements, contact this team in your local language or at avent-abacus.eu/ask-an-expert

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