



# **Hirose Interconnects for Board-to-Wire Applications**

*"Creative Links to World Electronics"*

**HRS** **Hirose  
Electric  
(USA), Inc**

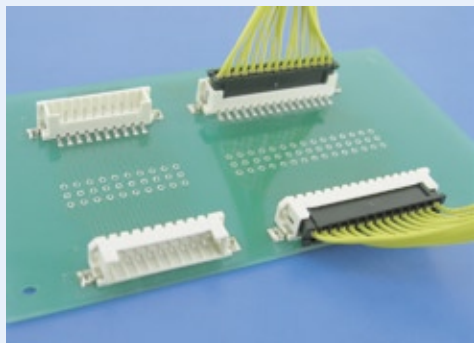
# A World Leader in Interconnect Technology

Hirose provides innovative, cutting edge solutions to your interconnect requirements. With over 70 years experience in design, development and manufacturing of interconnect solutions for the consumer, medical, industrial, and automotive markets, Hirose has established itself as the technology leader. Hirose remains at the forefront of interconnect technology; working closely with customers to develop innovations in miniaturization, high speed data transmission, signal integrity and mechanical design.

## Board-to-Wire Connectors

Engineers often face issues with getting signals from one point to another within their design. Hirose's Board-to-Wire connectors offer innovative, cost effective answers to their problems. With contact pitches ranging from 1mm to 3.3mm, multiple pin counts, locking features, and various termination styles, Hirose has the interconnect solution to solve your application's demands.

For detailed information on the complete line of Board-to-Wire connectors, please go to the following URL: [www.HiroseUSA.com/BTWseries.htm](http://www.HiroseUSA.com/BTWseries.htm)



### DF3 Series

Pitch: 2mm

Mounting styles: Through-hole and SMT

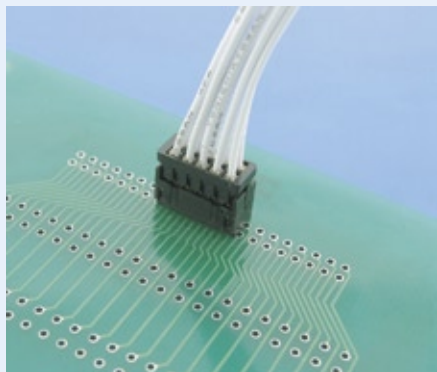
Mounting orientation: Right angle and vertical

Contact positions (single row): 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15

Mounted heights: Several height combinations possible, please consult Hirose for specifics.

Small, but robust, connectors that can handle up to 3A of current.

Versatile, with board-to-board, wire-to-board and inline variations.



### DF11 Series

Pitch: 2mm

Mounting styles: Through-hole and SMT

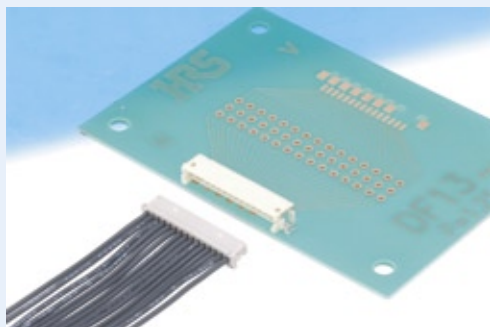
Mounting orientation: Right angle and vertical

Mounted heights: Many options. Please consult Hirose for specifics

Contact positions (double row): 4, 6, 8, 10, 12, 14, 15, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 40

A very popular connector that lends itself well to many applications.

The DF11 is available in both board-to-wire and board-to-board variations



### DF13 Series

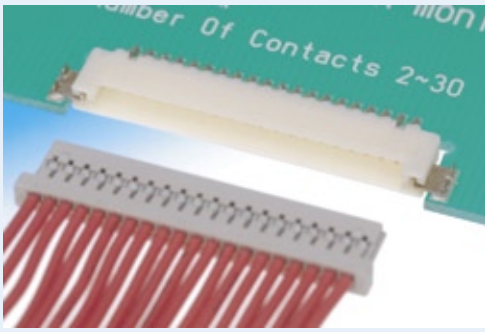
Pitch: 1.25mm

Mounting styles: Through-hole and SMT

Mounting orientation: Right angle and vertical

Mounted heights: 3.6mm (right angle). 5.8mm and 5.3mm (vertical)

Contact positions (single row): 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15  
(double row): 10, 20, 30, 40



### **DF14 Series**

**Pitch: 1.25mm**

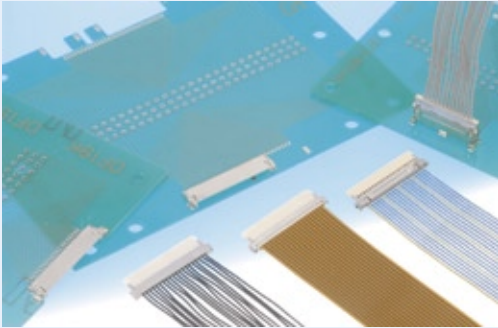
**Mounting styles: SMT**

**Mounting orientation: Right angle**

**Mounted height: 2.5mm and 1.6mm**

**Contact positions (single row): 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 25, 30**

**Super low profile connectors. The 1.6mm mounted height connector is off-set and requires the PCB to be notched.**



### **DF19 Series**

**Pitch: 1mm**

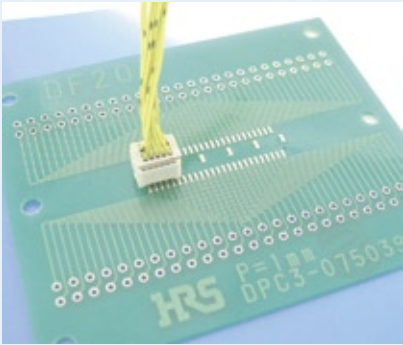
**Mounting style: SMT**

**Mounted heights: 1.65mm, 1.1mm or 1mm**

**Mounting styles: Right angle and vertical**

**Contact positions: 8, 14, 20, 30**

**High performance connectors for LVDS high speed differential signals. Variations for discrete wire, FPC, and micro-coax cable are available.**



### **DF20 Series**

**Pitch: 1mm**

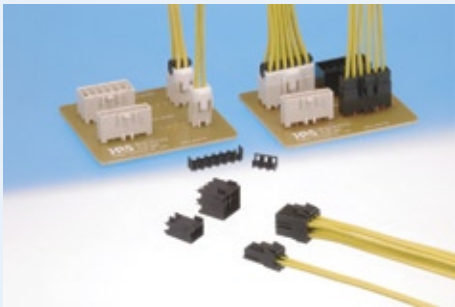
**Mounting styles: SMT**

**Mounting orientation: Right angle and vertical**

**Mounted height: 5.5mm (right angle), 5.8mm (vertical)**

**Contact positions: 10, 20, 30, 40, 50**

**Small in size, but big on performance. The DF20 fits well with applications in small electronic devices.**



### **DF33 Series**

**Pitch: 3.3mm**

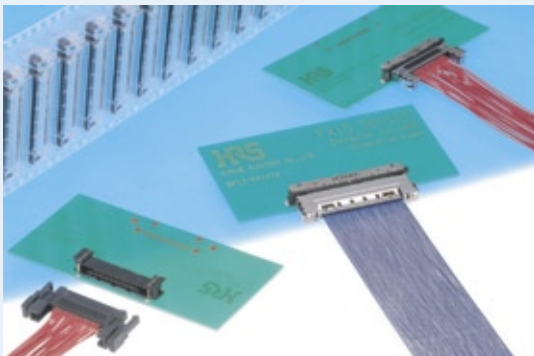
**Mounting styles: Through-hole**

**Mounting orientation: Vertical**

**Mounted height: 11.5mm**

**Contact positions: 2, 3, 4, 5, 6, 8, 10, 12**

**DF33 feature a secure latch mechanism and can handle up to 5A of current with #20 AWG wire.**



### **FX15 Series**

**Pitch: 1mm**

**Mounting styles: SMT**

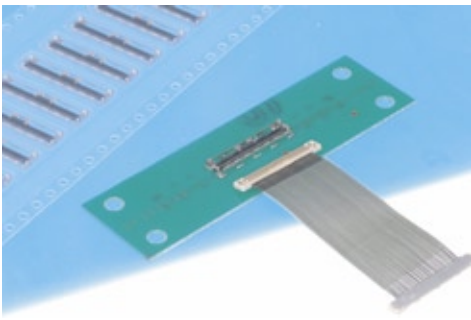
**Mounting orientation: Right angle and vertical**

**Mounted heights: 4.4mm (right angle) and 4.8mm (vertical)**

**Contact positions: 21, 31, 41, 51**

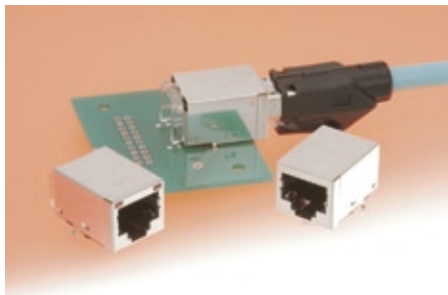
**Designed for LVDS applications using FPD displays and FPD televisions. The design of the connector allows equal length transmission lines and prevents additional loss of the signal within the connector.**

**Versions for both discrete wire and micro-coax cable are available.**



**Hirose Electric is a leading, global interconnect manufacturer specializing in a wide range of solutions for advanced technologies.**

**We have connectors for: automotive, fiber optic, circular, power, mobile/cellular telephones, board-to-board, wire-to-board, microwave, telecomm, flex circuit (FPC/FFC), memory card connectors, ribbon cable, mini/micro USB, HDMI and other connectors.**



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**Hirose is an ISO 9001 company**