

Applications



Smart Wearables



Tablet PCs, Laptop



Security Systems



Discover Hirose's DF53 Series, the industry's smallest 0.6mm pitch crimp connector, designed for space-constrained applications where reliability is critical.

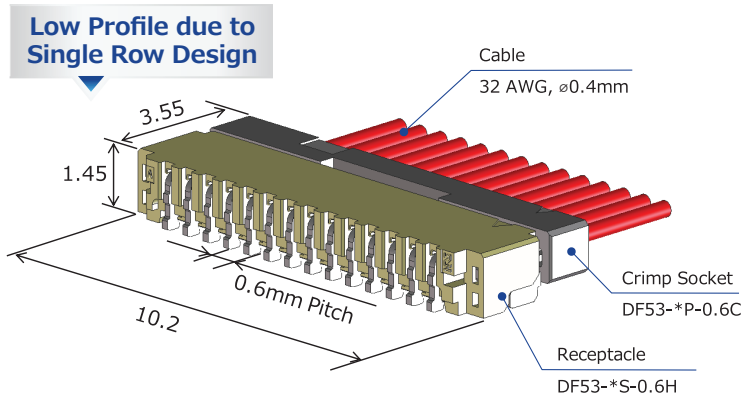
Meet Hirose Electric's DF53 Series: Featuring a compact 0.6mm pitch, this small, robust wire-to-board connector provides high current capacity up to 1.3A. Its box-shaped contact design and visual confirmation prevent incomplete mating, making it ideal for compact devices and wire-to-board applications.

KEY FEATURES OF THE DF53 SERIES INCLUDE:

- High energy efficiency thanks to crimp structure with low contact resistance
- Ultra-compact design with a 0.6mm pitch, 1.45mm height, and 3.55mm depth, perfect for compact devices.
- Supports up to 1.3A max current using two positions for power, enabling robust power delivery.
- High lance strength prevents wire disconnect during wiring, ensuring secure and stable connections.
- Box-shaped contact design prevents deformation, improving contact stability during handling.
- Halogen-free construction

0.6mm Pitch, Small, Low-Profile Connector

Dimensions (14pos.)



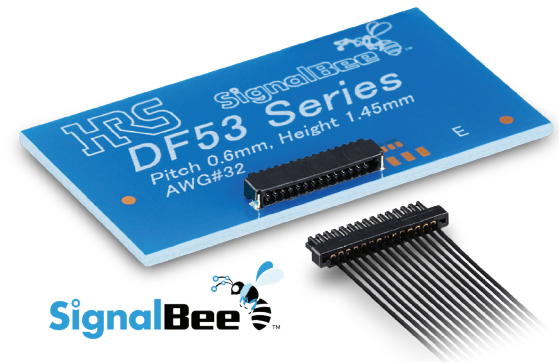
Low Profile due to Single Row Design

[CLICK HERE TO ORDER](#)
SAMPLE NUMBER:
US-DF53SAMPLE-24

[CLICK HERE](#)
FOR MORE INFORMATION

Crimp Design Enables a Narrower Pitch

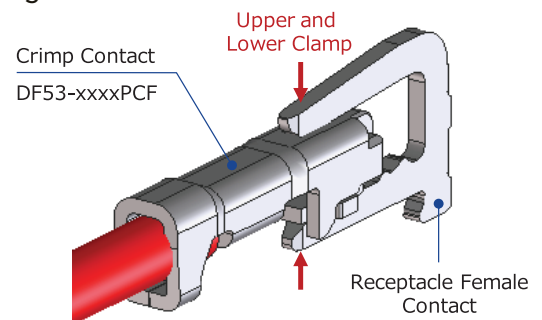
Occupied PCB Space:
 $3.55 \times 10.2 = 36.21\text{mm}^2$



Box Shaped Contact Design

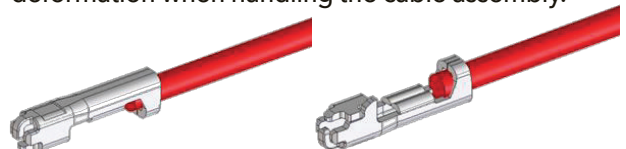
Contact Stability

The box-shaped contact ensures high contact stability by clamping from both above and below.



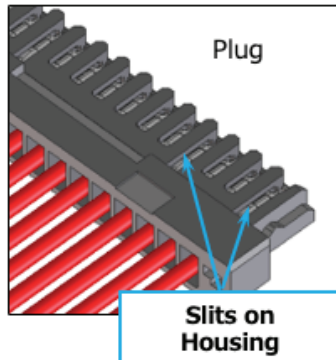
Deformation Prevention

Use of a box-shaped contact on the cable side prevents deformation when handling the cable assembly.

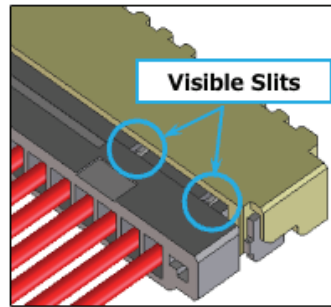


Prevents Incomplete Mating

Crimp case slits allow mating condition to be checked.



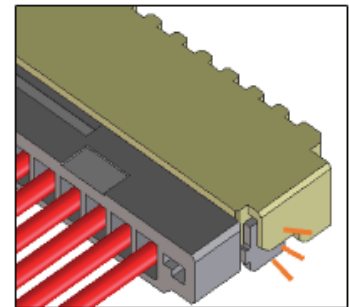
Half Mated



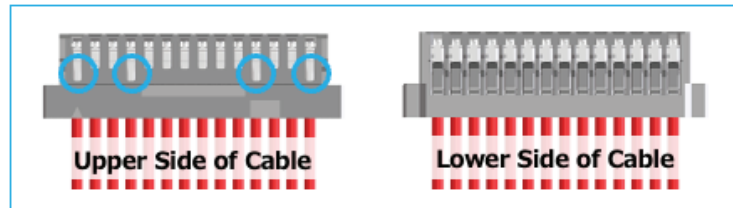
Contacts Remain Visible from Slit

Fully Mated

OK



Contacts are No Longer Visible



Mating condition can be visually checked, improving assembly operation.

Specifications

Material and Finish

COMPONENT		MATERIAL	FINISH, REMARKS
Receptacle	Housing	Polyamide* ¹	UL94V-0, Black
	Contact	Copper Alloy	Tin Plating
	Retention Tab	Brass	Tin Plating
Plug	Housing	Polyamide* ¹	UL94V-0, Black
Crimp Contact		Copper Alloy	Tin Plating

Performance Characteristics

Rated Current	When Using All Positions	0.7A
	When Using 2 Positions (Power)	Power: 1.3A, Signal: 0.5A
Rated Voltage	50V AC/DC	
Operating Temperature	-55 to +85°C	
Contact Resistance	20mΩ Max. (1mA DC)	
Withstanding Voltage	300V AC for 1 min.	
Insulation Resistance	100MΩ Min. (100V DC)	
Mating Durability	20 times	
Applicable Cable	32 AWG, ø0.4mm	

Variation: 2,3,4,5,6,8,10,12,14,16,18,20pos.

*¹ This product satisfies halogen free requirements defined as 900ppm maximum chlorine, 900ppm maximum bromine, and 1500ppm maximum total of chlorine and bromine.



For additional information please visit:
www.hirose.com/product/series/DF53

Specifications herein are subject to change without notice.
Contact Hirose for latest specifications, drawings, or availabilities.

STAY CONNECTED

