

## DATENBLATT

# HIROSE DF52 Series



**ES&S**  
MIT SICHERHEIT VERBUNDEN

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## BESCHREIBUNG

SignalBee™ is a small but robust wire-to-board or wire-to-wire connector of the DF52 series from **HIROSE**. With a pitch of 0.8 mm it delivers up to 2.5 A per contact and with a height of only 1.75 mm and a width of 3.2 mm it offers savings in PCB manufacturing.

SignalBee™ connectors of the DF52 series offer high-end performance despite their compact size. The range of applications is wide and with their powerful features they are even suitable for industrial machines.

### SignalBee™ – the compact and robust connector

The connector's housing is thick-walled yet small. This results in a strong connector that ensures high reliability and robustness in applications and resists damage. The box-shaped crimp contact prevents deformation during assembly, snapping or breaking is prevented and contributes to the stability and robustness of the connector. Furthermore, the connector is suitable for high current applications. The maximum current of 2.5 A (when using a 2-pole 28 AWG cable) is achieved by using highly conductive material and suitable contact force. The required contact force is generated by the C-shaped pin header design with two contact points at the top and bottom.

The connector is available in other pole numbers, we are happy to offer you customer-specific solutions at any time. Maybe you are looking for a ready to use cable assembly? You can order the suitable product from us under the following order number: **KAB-DF52-04P-0.8C-0500LI**.

### Technical specifications:

- SignalBee™, pitch: 0.8 mm, black
- connector dimensions: 1.75 mm height, 3.2 mm width
- current rating: up to 2.5 A at max. AWG 28 on 2 contacts
- contact coating: copper alloy, tin plated 1.0 µm, UL94V-0
- mating cycles: 10 to 20
- AWG28 to AWG32
- RoHS compliant
- halogen-free
- temperature range: -40 °C to 85 °C
- weight: 1.76 g

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**Electrical characteristics:**

- nominal voltage: 100 V AC/DC
- contact resistance: max. 10 m $\Omega$ , measured at max. 20 V DC, 1 mA (DC or 1000 Hz)
- insulation resistance: min. 100 M $\Omega$ , measured at 100 V DC
- dielectric voltage: 300 V AC for 1 minute
- vibration resistance: no electrical discontinuity for more than 1?s, 10 cycles in each of the three axes at a frequency of 10-55 Hz, half amplitude 0.75 mm
- shock resistance: no electrical discontinuity for more than 1?s, acceleration of 490 m/s<sup>2</sup>, 11 ms, 3 directions (semi-sinusoidal), 3 cycles each
- humidity resistance: contact resistance: max. 20 m $\Omega$ , insulation resistance: min. 100 M $\Omega$ , temperature: 40  $\pm$  2  $^{\circ}$ C; humidity: 90 to 95%, for 96 hours

**Advantages:**

- very small-sized connector - is suitable for small applications
- housing walls are thick while the connector remains small in its dimensions
- the robust connector design prevents cable damage and allows flexible cable routing
- The Box shaped structure of the crimp contact prevents deformation.
- The mated condition can be visually checked.
- suitable for cables with diameter: 0.5 to 0.6 mm, AWG 32 to AWG 28
- other pole numbers are available: 2, 3, 4, 5, 6, 8, 10, 12, 14, 15, 16, 17, 20 - please find the article descriptions in the attached information PDF from HIROSE

**Fields of application:** Consumer electronics, multifunction or printer office machines, image processing, wearables: Smart Watch, Bracelets, Glasses etc. ...

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## BILDER



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