

Applications



Automotive HUDs



HMI Devices



Infotainment Systems



Discover Hirose's FH52C Series, a compact and robust Carbon-Ink-Circuit connector designed to meet the rigorous demands of automotive applications.

Meet Hirose Electric's new FH52C Series: A robust 1.0mm pitch and 2.0mm height Carbon-Ink-Circuit connector, designed for reliable performance. Featuring a unique contact design that prevents carbon ink damage and a flip-lock mechanism for quick, secure assembly, the FH52C Series is ideal for CIC applications.

KEY BENEFITS OF THE FH52C SERIES INCLUDE

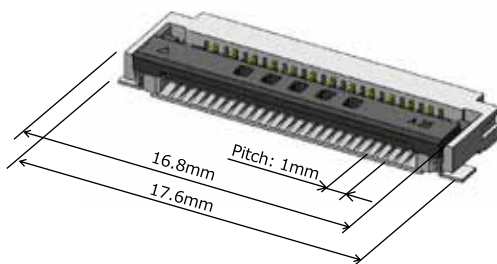
- Features a modified contact shape to prevent carbon ink scraping, ensuring long-lasting performance.
- Compact 1.0mm pitch and 2.0mm height using the popular FH52 platform.
- Improves operation with a 110° flip-lock actuator for quick and secure assembly.
- High-strength, L-shaped retention tabs that provide 1.8x higher PCB retention force.
- Accommodates 0.3mm thick flexible Carbon-Ink-Circuits for simplified designs.
- Supports automated pick-and-place mounting for streamlined production.



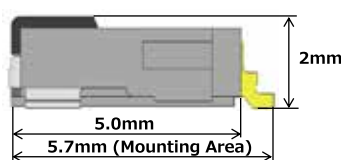
Compact & Light Weight

Dimensions: 12pos.

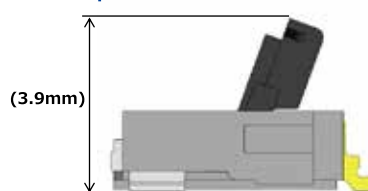
CIC Thickness = 0.3 ± 0.05 mm
Bottom Contact



Closed Actuator



Opened Actuator



Depth (mm)
When the actuator is Open/Closed: 5.7mm

CLICK HERE
FOR MORE INFORMATION

CLICK HERE TO ORDER
SAMPLE NUMBER:
US-FH52CSAMPLE-24

High Connection Reliability

Improved CIC Insertion

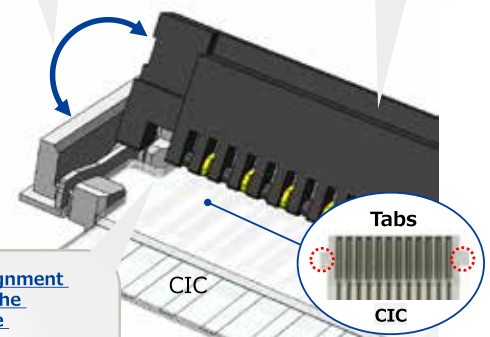
Front flip actuator opens up to 110° for easy insertion.

Secure Locking


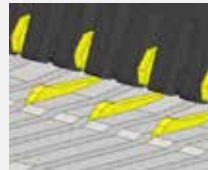



The firm & clear tactile click confirms lock completion

CIC positioning alignment mechanism holds the tabbed CIC in place and enabling:

- Reliable temporary CIC holding
- Precise CIC insertion
- Stable connection with any user
- Consistent connection across users



Variations

Series	FH52		FH52K	FH52C	FH52
	FH52	FH52E			FH52T
Operating Temperature	-40 to +105℃		-40 to +125℃	-40 to +105℃	-40 to +105℃
Contact Design	1-point 			1-point 	2-point 
Retention Tabs	I-shaped 	L-shaped 			
PCB Layout	For I-shaped	For L-shaped			
FPC/FFC/CIC	FPC/FFC			CIC	FPC/FFC

Specifications

Materials and Finish

COMPONENT	MATERIAL	FINISH, REMARKS
Housing	LCP*1	Gray
Actuator	LCP*1	Black
Contact	Copper Alloy	Contact & SMT lead: Gold plated over Nickel under plating. Other: Nickel under plating
Retention Tabs	Bras	Tin plated over Nickel under plating

*1 This product satisfies halogen free requirements
Br : 900ppm Max., Cl : 900ppm Max., Br+Cl : 1,500ppm Max

Performance Characteristics

Rated Current	3mA
Rated Voltage	50V AC/DC
Operating Temperature	-40 to +105°C
Contact Resistance	Initial: 50Ω Max., After Testing : 70Ω Max.
Withstanding Voltage	150V AC for 1 min.
Insulation Resistance	500MΩ Min. (100V DC)
Mating Durability	5 times

- RoHS compliant



For additional information please visit:
www.hirose.com/en/product/series/FH52C
Specifications herein are subject to change without notice.
Contact Hirose for latest specifications, drawings, or availabilities.

STAY CONNECTED

