

Applications



Automotive Entertainment



LiDAR & Sensing Cameras



Robotics/Factory Automation

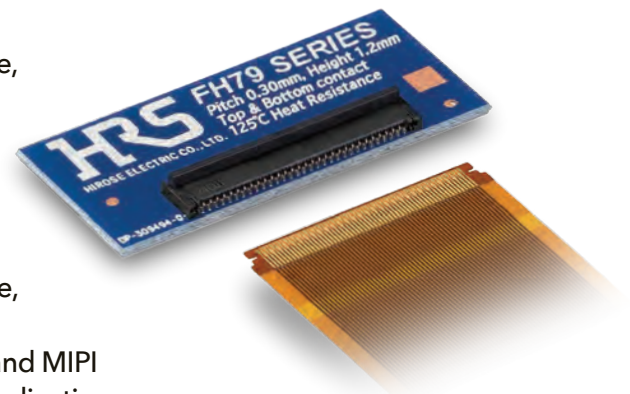


Discover Hirose's FH79 Series, an ultra-compact automotive FPC connector with a 0.3mm pitch and a low 1.2mm profile, ideal for high-density board layouts. Engineered for extreme conditions, it withstands temperatures up to 125°C, ensuring long-term durability.

The top and bottom contact enhances board flexibility, while the secure back-flip locking mechanism increases FPC retention force for stable, reliable connections. Optimized for high-speed signals, it supports eDP1.3 at 5.4Gbps and MIPI D-PHY at 4.5Gbps, making it ideal for advanced automotive applications.

KEY BENEFITS OF THE FH79 SERIES INCLUDE:

- An ultra-compact design with a 0.3mm pitch and low 1.2mm profile, optimizing space for high-density board layouts.
- Withstands temperatures up to 125°C, ensuring long-term durability in extreme conditions.
- A top and bottom contact design enhances board layout flexibility while simplifying assembly.
- A secure back-flip locking mechanism increases FPC retention force, preventing accidental openings and ensuring a stable connection.
- Optimized for high-speed signals, supporting eDP1.3 at 5.4Gbps and MIPI D-PHY at 4.5Gbps for seamless data transmission in automotive applications.



Dimensions

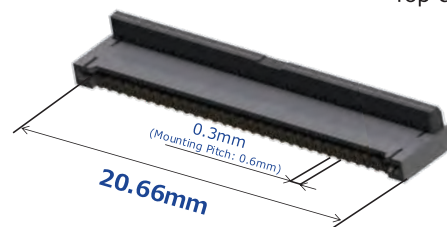
**Approximately 40%
Width Reduction
Compared to Existing
0.5mm Pitch Products**

FH79 (0.3mm Pitch)

Dimensions Example: 61pos.

Part No.: FH79-61S-0.3SHW

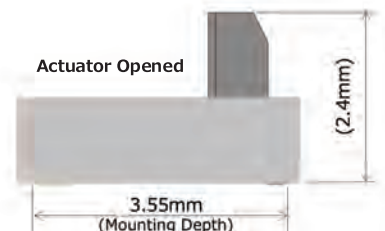
FPC Thickness = $0.2 \pm 0.02\text{mm}$
Top & Bottom Contact



Actuator Closed



Actuator Opened

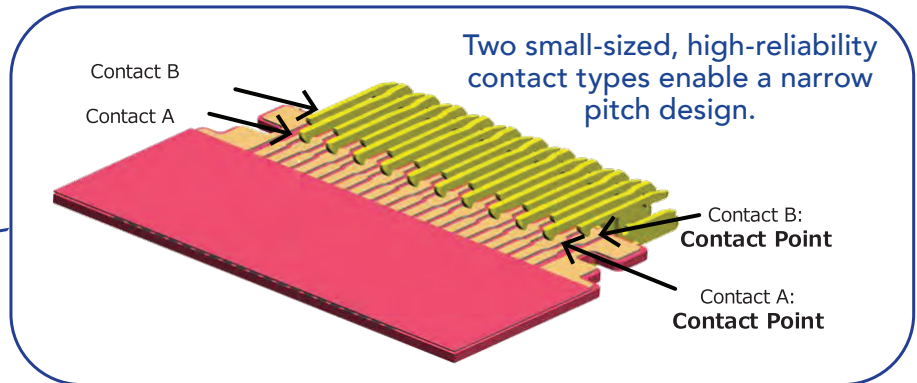


CLICK HERE
FOR MORE INFORMATION

CLICK HERE TO ORDER
SAMPLE NUMBER:
US-FH79SAMPLE-24

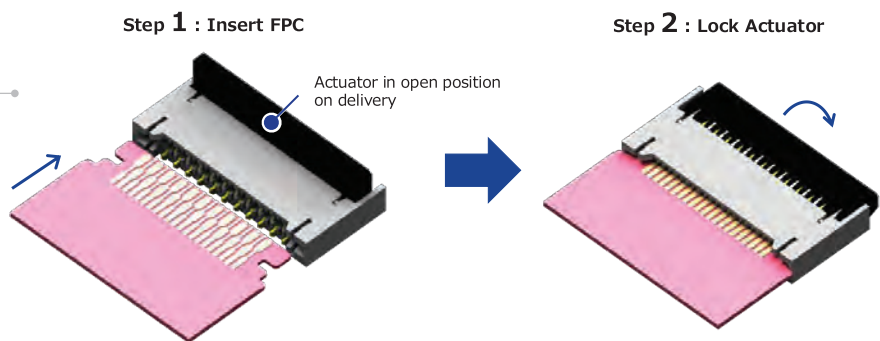
Narrowing Pitch by Staggered Array Design

Alternating the two A/B contact types narrows the pitch while maintaining the contact pattern width.



Enhanced Operability

Simple Two Step Actuator Operation



Specifications

Material and Finish

COMPONENT	MATERIAL	FINISH, REMARKS
Housing	LCP	UL94V-0, Gray
Actuator	PA 9T	UL94V-0, Black
Contact	Copper Alloy	Contact Area/Lead Area: Gold Plating (Nickle Underplating) Others: Nickle Underplating
Retention Tab	Copper Alloy	Pure Tin Reflow Plating (Nickle Underplating)

Performance Characteristics

Rated Current	0.3A	
Rated Voltage	50V AC/DC	
Operating Temperature	-55 to +125°C*1*2	*1 Includes the temperature rise due to current flow. *2 When the heat resistant temperature is less than 125°C for FPC, the heat resistant temperature of the FPC is applied.
Contact Resistance*3	Initial: 70mΩ Max. After Testing: 90mΩ Max.	*3 Includes FPC Conductor Resistance (L=8mm)
Withstanding Voltage	150V AC for 1 min.	
Insulation Resistance	500MΩ Min. (100V DC)	
Mating Durability	10 times	

- RoHS, Halogen-free*4 Compliant
- No. of Pos.: 61pos. (Mass Production)
11, 21, 31, 41, 51pos. (Under Planning)

*4 No chlorine or bromine exceeding the standard value is used in the connector.
Br: 900ppm Max., Cl: 900ppm Max., Br+Cl: 1,500ppm Max.



For additional information please go to
www.hirose.com/product/series/FH79

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

STAY CONNECTED

