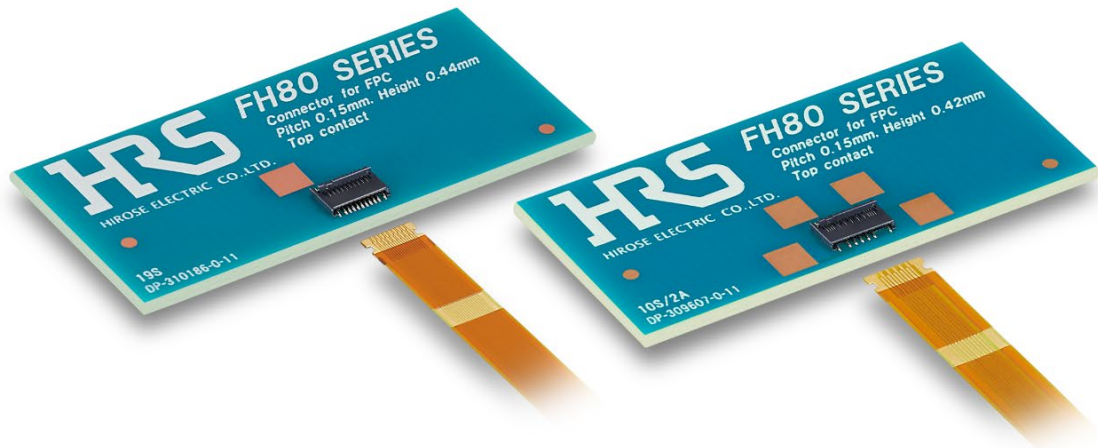


[Press] [April 15, 2025]

Hirose Electric Develops FH80: *Industry's Lowest Height 0.44mm**, Ultra-Narrow Pitch Backflip FPC Connector

Powerful Support for the Evolving Needs of Smartwatches and Wearable Devices

**As of April 2025, based on Hirose research.*



Hirose Electric Co., Ltd. has introduced the FH80 backflip FPC connector, featuring the *industry's lowest profile height* of just 0.44mm* and an ultra-narrow 0.15mm pitch.

Engineered to meet the demands of increasingly compact wearable devices such as smartwatches, the FH80 enables thinner designs without sacrificing performance—solving key design challenges in the rapidly growing wearables market.

In addition, a version equipped with power contacts supporting up to 2A is available, helping meet the demand for higher-capacity batteries and power-hungry functions in next-generation devices.

**As of April 2025, based on Hirose research.*

● Current Status and Challenges in Wearable Device Design

The demand for smartwatches and other wearable devices has grown rapidly in recent years. In fact, the smartwatch market is expected to grow about 1.5 times in 2026 compared to 2022.

As the wearable market expands, manufacturers face increasing pressure to make products thinner, integrate larger batteries, and support more advanced functionality. However, conventional connectors often present limitations—such as height restrictions, limited mounting space, and insufficient power handling—making it difficult to achieve the design flexibility and performance required for next-generation devices.

● Supports Slimmer, More Functional Device Layouts

Hirose Electric Co., Ltd. announced the new Item FH80. This FPC connector has an ultra-low height ultra-narrow pitch design that is ideal for wearable devices such as smartwatches and contributes to the thinning of devices. The FPC connector is also available with power contacts and is suitable for connecting wearable devices to batteries.

[Inquiries from media]

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Features

1. Ultra-Low Height Design: only 0.44mm high

Enables greater design flexibility without compromising connector height—supporting the development of more functional, compact wearables.

2. Ultra-Narrow Pitch: pitch 0.15mm

Supports high-density layouts by preserving module mounting space as devices become increasingly multifunctional.

3. High Current Capability: Power Contact Supports 2A

Ideal for connecting batteries in wearable and compact IoT devices where higher battery capacity is required.

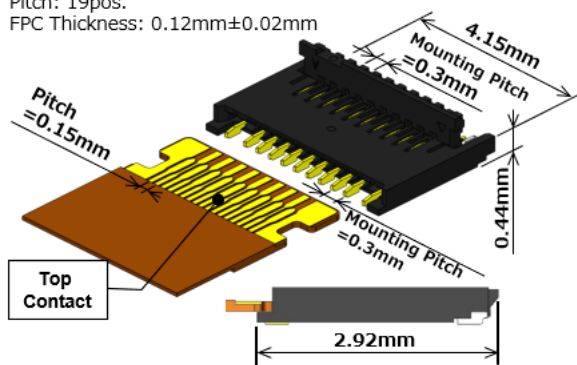
4. Back Flip Structure with Resistance to Vertical Stress

Designed with a retention tab to prevent actuator disengagement—ensuring high reliability even under upward or downward pulling forces, while maintaining an ultra-low profile.

Without Power Contact (FH80A)

Dimension Example: 19pos.

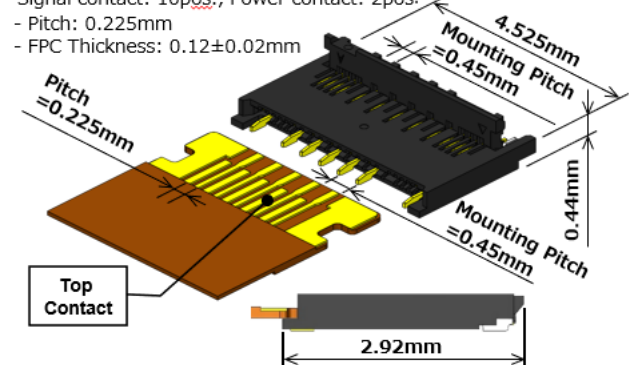
Pitch: 19pos.
FPC Thickness: 0.12mm±0.02mm



With Power Contact (FH80BA)

Dimension Example: 10pos.

Signal contact: 10pos., Power contact: 2pos.
- Pitch: 0.225mm
- FPC Thickness: 0.12±0.02mm



● Future Product Development

The FH80 Series, now available, will continue to expand to meet the evolving needs of various wearable devices.

Current Mass Production Lineup

- Without power contact: 10 pos., 19 pos.
- With power contact: 6 pos., 10 pos

Under Development

- Without power contact: 34pos.
- With power contact: 3pos.

● Company Overview, Related Information

■ Company Overview

Hirose Electric Co., Ltd., a company specializing in connector design and manufacturing, is known for its innovative technology and high-quality Item. We provide connectors that best meet customer needs through our advanced technology and quality control system.

[Inquiries from media]

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https://www.hirose.com/corporate/en/about/corporate_data/

■ Item Series Page

[FH80](#)

■ Item image

https://prd-4s-public.s3.ap-northeast-1.amazonaws.com/sys-master/public/h8e/h4c/9686698229790/FH80%28shadow%29_25.2.26_rgb_trimming.png

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