

Applications:



Industrial Robotics



Medical



Consumer Electronics



P = 0.5mm



Back Flip



Top/Bottom Contact

Hirose Electric Proudly Introduces the TF07V Series

Our latest innovation in connector technology. With a 0.5mm pitch and a height of just 2.1mm, it's perfectly suited for the confined spaces of industrial robotics, offering a robust actuator design. The dual-contact functionality simplifies flex routing in medical applications, while its superior retention force makes it a reliable choice for the intricate assemblies of consumer electronics. Experience the perfect blend of size, performance, and reliability with the TF07V Series, designed for the precise demands of modern technology.

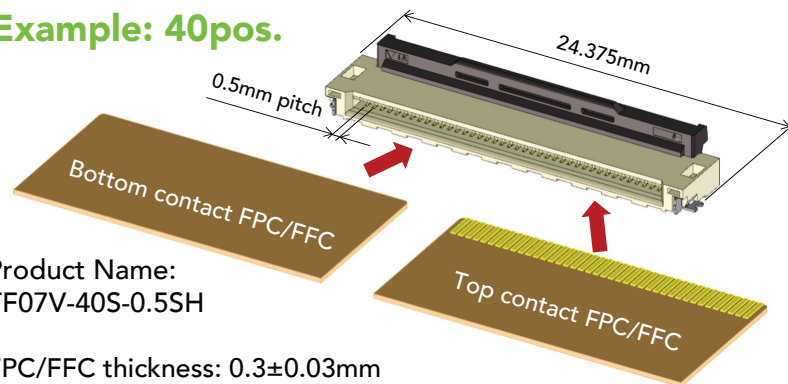


0.5mm Pitch, 2.1mm Height, Top & Bottom Contact, Back Flip FPC/FFC Connector

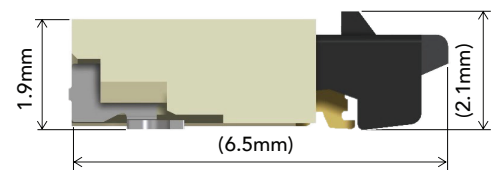
- Space-saving: - 0.5mm pitch, 6.5mm depth, 2.1mm height
- Available for various module designs with top & bottom contact design
- Superior retention force by back flip design
- Actuator design prevents separation from the connector body
- High workability - Delivered with the actuator open for easy two-step mating
- Suitable for FPC/FFC standard thickness $0.3 \pm 0.03\text{mm}$

Dimensions

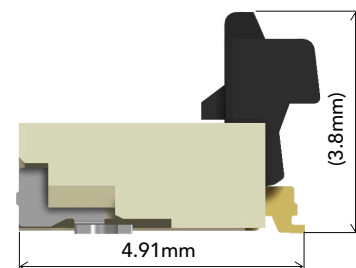
Example: 40pos.

Product Name:
TF07V-40S-0.5SHFPC/FFC thickness: $0.3 \pm 0.03\text{mm}$
Top & Bottom ContactCLICK HERE
FOR MORE INFORMATIONCLICK HERE TO ORDER
SAMPLE NUMBER:
US-TF07VSAMPLE-24

Closed Actuator



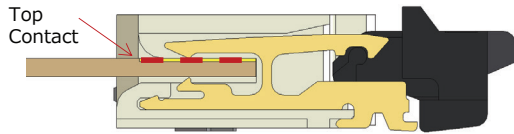
Open Actuator

0.5mm pitch, Top and bottom contact,
Back flip connector

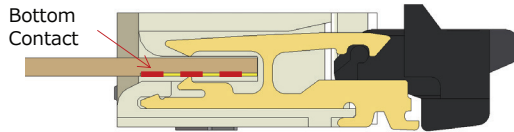
Board Design Flexibility: Universal Use Regardless of Contact Direction

Horizontal Connection Design

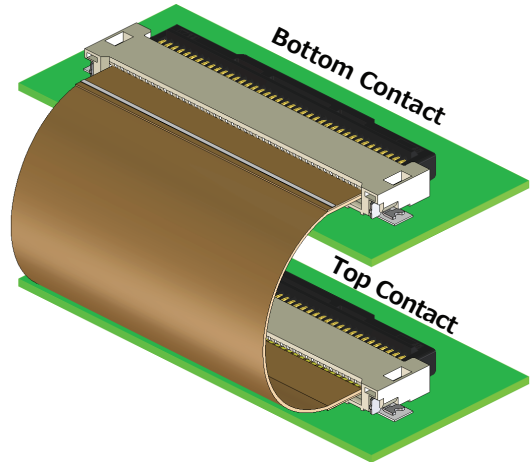
■ Cross-sectional View of Top Contact



■ Vertical Connection Design



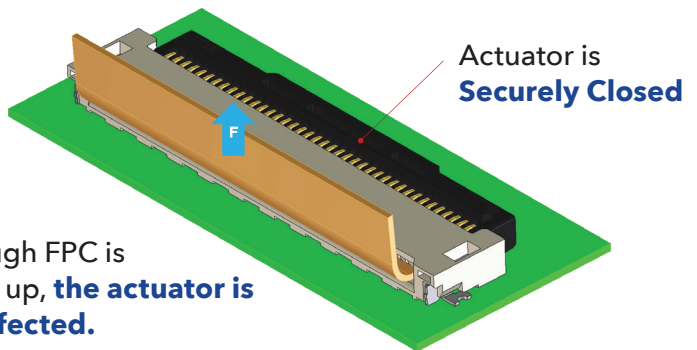
Vertical Connection Design



Superior Retention Force

TF07V: Back Flip Design

BACK FLIP DESIGN
RESISTANT TO UPWARD &
DOWNWARD ROUTING



Although FPC is pulled up, **the actuator is not affected.**

Specifications

Material and Finish

| COMPONENT | MATERIAL | FINISH, REMARKS |
|---------------|-------------------|--|
| Housing | LCP ^{*1} | UL94V-0, Beige |
| Actuator | LCP ^{*1} | UL94V-0, Black |
| Contact | Phosphor Bronze | Gold Plated Over Nickel Underplating Tin |
| Retention Tab | Phosphor Bronze | Plated Over Nickel Underplating |

Performance Characteristics

| | |
|-----------------------|-----------------------------|
| Rated Current | 0.5A |
| Rated Voltage | 50V AC/DC |
| Operating Temperature | -40 to T 85°C ^{*2} |
| Contact Resistance | 50mΩ Max. ^{*3} |
| Withstanding Voltage | 150V AC for 1 min. 100MΩ |
| Insulation Resistance | Min.¥ 500V DC] 20 times |
| Mating Durability | |

^{*1} This product satisfies halogen free requirements defined as 900ppm maximum chlorine, 900ppm maximum bromine, and 1,500ppm maximum total of chlorine and bromine.

^{*2} Includes the temperature rise due to current flow.

^{*3} Includes FPC/FFC conductor resistance.



: RoHS compliant, Halogen-free^{*1} product
: Variations: 30, 40, 50, 60pos.

For additional information please go to
<https://www.hirose.com/en/product/series/TF07V>
Specifications herein are subject to change without notice.
Contact Hirose for latest specifications, drawings, or availabilities.

STAY CONNECTED

