

# 0.5 mm-pitch Rotary-lock Type

XF2H

**New rotary-lock concept achieves high reliability and superior work efficiency.**

- The unique rotary lock construction significantly improves work efficiency during FPC mounting.
- Double-sided contacts maintain a stable contact force. Discrimination between FPC upper and lower contacts is unnecessary.
- Low-profile, protruding only 2 mm on the PCB.



## Specifications

|                       |   |
|-----------------------|---|
| Rated current         | 0.5 A   |
| Rated voltage         | 50 VDC  |
| Contact resistance    | 30 mΩ max. (max. 20 mV, max. 100 mA)                |
| Insulation resistance | 100 MΩ min. (at 250 VDC)                            |
| Withstand voltage     | 250 VAC 1 min. (leakage current: 1 mA max.)         |
| Insertion tolerance   | 20 times  |
| Ambient temperature   | -30 to +85°C (No condensation at low temperatures.) |

## Materials/Finish

|           |  |
|-----------|--|
| Housing   | PA46 resin (UL94V-0)/natural   |
| Slider    | LCP resin (UL94V-0)/black  |
| Contact   | Copper-alloy/nickel spring substrate (2 μm) plated with tin alloy (2 μm) |
| Hold-down | Copper-alloy/copper substrate (2 μm) plated with tin alloy (2 μm)        |

## Dimensions

XF2H-□□15-1

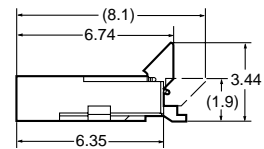
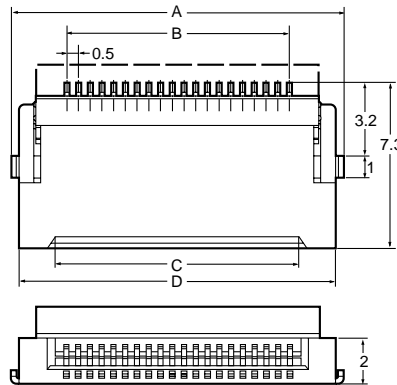
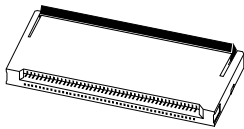
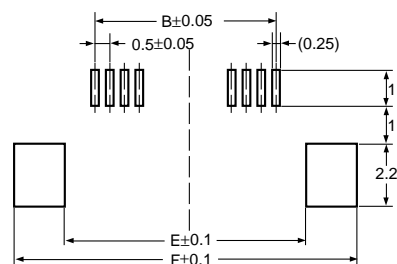


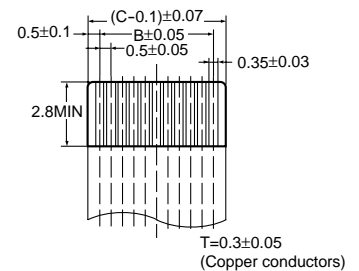
Table of Dimensions

| Poles | Model       | A    | B    | C    | D    | E    | F    |
|-------|-------------|------|------|------|------|------|------|
| 10    | XF2H-1015-1 | 9.1  | 4.5  | 5.6  | 8.5  | 6.5  | 10.1 |
| 20    | XF2H-2015-1 | 14.1 | 9.5  | 10.6 | 13.5 | 11.5 | 15.1 |
| 24    | XF2H-2415-1 | 16.1 | 11.5 | 12.6 | 15.5 | 13.5 | 17.1 |
| 30    | XF2H-3015-1 | 19.1 | 14.5 | 15.6 | 18.5 | 16.5 | 20.1 |
| 35    | XF2H-3515-1 | 21.6 | 17.0 | 18.1 | 21.0 | 19.0 | 22.6 |
| 40    | XF2H-4015-1 | 24.1 | 19.5 | 20.6 | 23.5 | 21.5 | 25.1 |
| 45    | XF2H-4515-1 | 26.6 | 22.0 | 23.1 | 26.0 | 24.0 | 27.6 |
| 50    | XF2H-5015-1 | 29.1 | 24.5 | 25.6 | 28.5 | 26.5 | 30.1 |

Printed Circuit Board Matching Dimensions (Top View)



Applicable FPC Dimensions



## Ordering Information

| Poles | Model       | Quantity per reel* |
|-------|-------------|--------------------|
| 10    | XF2H-1015-1 | 1,500              |
| 20    | XF2H-2015-1 |                    |
| 24    | XF2H-2415-1 |                    |
| 30    | XF2H-3015-1 |                    |
| 35    | XF2H-3515-1 |                    |
| 40    | XF2H-4015-1 |                    |
| 45    | XF2H-4515-1 |                    |
| 50    | XF2H-5015-1 |                    |

\* Order an integer multiple of the quantity per reel.

# 0.5 mm-pitch ZIF-Slide Type

XF2J

## Top-entry ZIF Connector

- Slider achieves secure locking.
- Low-profile, protruding only 4.15 mm on the PCB.
- Adhesion face on top of the connector suits automatic mounting.



### Specifications

|                       |   |
|-----------------------|---|
| Rated current         | 0.5 A   |
| Rated voltage         | 50 VDC  |
| Contact resistance    | 30 mΩ max. (max. 20 mV, max. 100 mA)                |
| Insulation resistance | 100 MΩ min. (at 100 VDC)                            |
| Withstand voltage     | 250 VAC 1 min. (leakage current: 1 mA max.)         |
| Insertion tolerance   | 30 times  |
| Ambient temperature   | -30 to +85°C (No condensation at low temperatures.) |

### Materials/Finish

|           |  |
|-----------|--|
| Housing   | PA46 resin (UL94V-0)/natural   |
| Slider    | PPS resin (UL94V-0)/black  |
| Contact   | Copper-alloy/nickel spring substrate (2 μm) plated with tin alloy (2 μm) |
| Hold-down | Copper-alloy/copper substrate (2 μm) plated with tin alloy (2 μm)        |

### Dimensions

XF2J-□□24-11

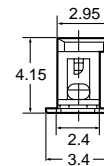
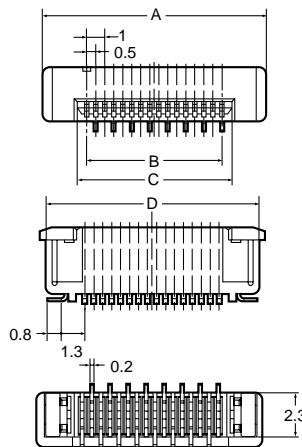
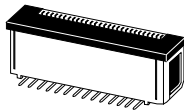
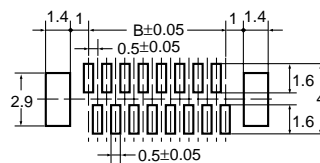


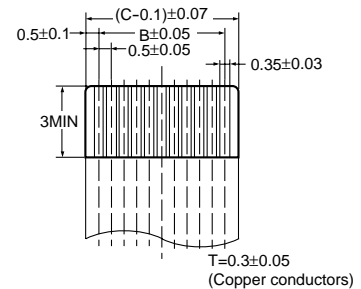
Table of Dimensions

| Poles | Model        | A    | B    | C    | D    |
|-------|--------------|------|------|------|------|
| 6     | XF2J-0624-11 | 7.5  | 2.5  | 3.6  | 6.9  |
| 8     | XF2J-0824-11 | 8.5  | 3.5  | 4.6  | 7.9  |
| 12    | XF2J-1224-11 | 10.5 | 5.5  | 6.6  | 9.9  |
| 14    | XF2J-1424-11 | 11.5 | 6.5  | 7.6  | 10.9 |
| 16    | XF2J-1624-11 | 12.5 | 7.5  | 8.6  | 11.9 |
| 22    | XF2J-2224-11 | 15.5 | 10.5 | 11.6 | 14.9 |
| 28    | XF2J-2824-11 | 18.5 | 13.5 | 14.6 | 17.9 |

Printed Circuit Board Matching Dimensions (Top View)



Applicable FPC Dimensions



### Ordering Information

| Poles | Model        | Quantity per reel* |
|-------|--------------|--------------------|
| 6     | XF2J-0624-11 | 1,000              |
| 8     | XF2J-0824-11 |                    |
| 12    | XF2J-1224-11 |                    |
| 14    | XF2J-1424-11 |                    |
| 16    | XF2J-1624-11 |                    |
| 22    | XF2J-2224-11 |                    |
| 28    | XF2J-2824-11 |                    |

\* Order an integer multiple of the quantity per reel.

# Ultra-low-profile Connector (SMT Terminal) Side-entry Non-ZIF Type

**XF2E**

**Optimum low-profile design.**  
Ultra-low-profile FPC/FFC connector only  
1.5 mm above the PCB.

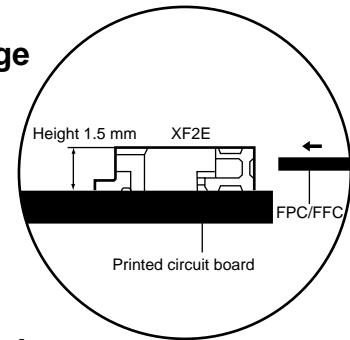
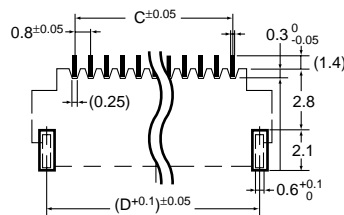
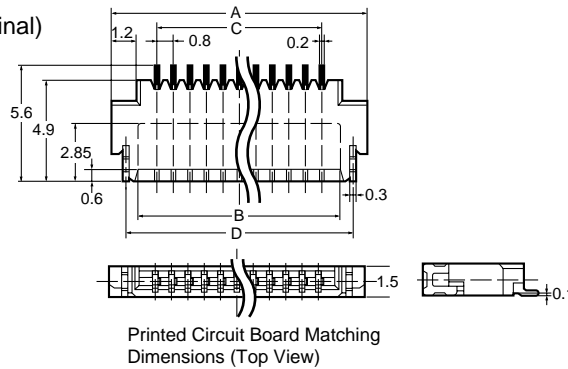
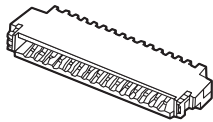
- Ultra-low-profile only 1.5 mm on the PCB allows mounting in spaces with restricted height.
- 0.8 mm-pitch SMT connectors allow high-density mounting.
- Modified-PA-resin housing is compatible with VPS, IR reflow, etc.
- Double-sided contacts maintain a stable contact force.
- Standard tape packing compatible with automatic mounting.

## ■ Specifications

|                       |  |
|-----------------------|--|
| Rated current         | 0.5 A  |
| Rated voltage         | 50 VDC   |
| Contact resistance    | 30 m max.<br>(max. 20 mV, max. 100 mA)                 |
| Insulation resistance | 100 MΩmin. (at 100 VDC)                                |
| Withstand voltage     | 500 VAC 1 min.<br>(leakage current: 1 mA max.)         |
| Total insertion force | Poles x 2.0 N (200 gf) max.                            |
| Total removal force   | Poles x 0.3 N (200 gf) max.                            |
| Insertion tolerance   | 10 times   |
| Ambient temperature   | -30 to +85°C<br>(No condensation at low temperatures.) |

## ■ Dimensions

XF2E-□□15-1(SMT Terminal)



## ■ Mounted Image

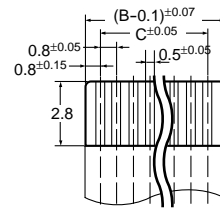
## ■ Materials/Finish

|         |  |
|---------|--|
| Housing | Modified PA resin containing glass (UL94V-0)/opal                        |
| Contact | Copper-alloy/nickel spring substrate (2 μm) plated with tin alloy (2 μm) |

Table of Dimensions

| Poles | A    | B    | C    | D    |
|-------|------|------|------|------|
| 5     | 7.6  | 4.9  | 3.2  | 6.2  |
| 6     | 8.4  | 5.7  | 4.0  | 7.0  |
| 7     | 9.2  | 6.5  | 4.8  | 7.8  |
| 8     | 10.0 | 7.3  | 5.6  | 8.6  |
| 9     | 10.8 | 8.1  | 6.4  | 9.4  |
| 10    | 11.6 | 8.9  | 7.2  | 10.2 |
| 12    | 13.2 | 10.5 | 8.8  | 11.8 |
| 15    | 15.6 | 12.9 | 11.2 | 14.2 |
| 17    | 17.2 | 14.5 | 12.8 | 15.8 |
| 20    | 19.6 | 16.9 | 15.2 | 18.2 |

Applicable FPC Dimensions



## ■ Ordering Information

| Poles | Model       | Quantity per reel* |
|-------|-------------|--------------------|
| 5     | XF2E-0515-1 | 4,000              |
| 6     | XF2E-0615-1 |                    |
| 7     | XF2E-0715-1 |                    |
| 8     | XF2E-0815-1 |                    |
| 9     | XF2E-0915-1 |                    |
| 10    | XF2E-1015-1 |                    |
| 12    | XF2E-1215-1 |                    |
| 15    | XF2E-1515-1 |                    |
| 17    | XF2E-1715-1 |                    |
| 20    | XF2E-2015-1 |                    |

\* Order an integer multiple of the quantity per reel.

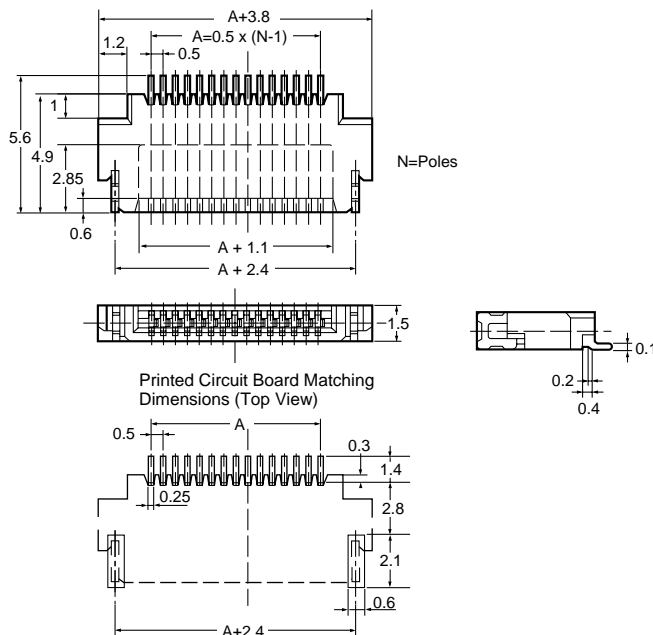
# Non-ZIF Type

XF2K/XF2G

## XF2K 0.5 mm-pitch Non-ZIF Type

- Low-profile, protruding only 1.5 mm on the PCB.
- Double-sided contacts maintain a stable contact force. Discrimination between FPC upper and lower contacts is unnecessary.

### ■ Dimensions



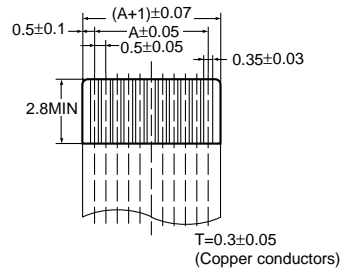
### ■ Poles

6

### ■ Quantity Per Reel

4,000

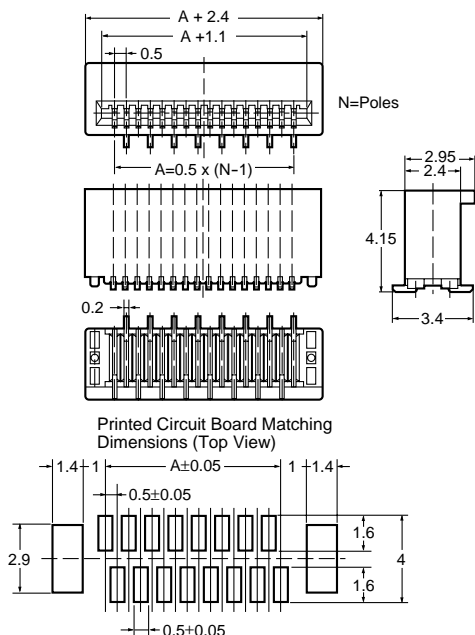
### ■ Applicable FPC Dimensions



## XF2G 0.5 mm-pitch N-ZIF Type

- Low-profile, protruding only 4.15 mm on the PCB.
- Adhesion face on top of the connector suits automatic mounting.

### ■ Dimensions



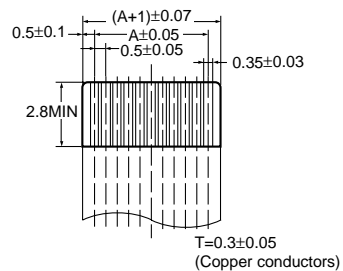
### ■ Poles

16, 20, 30

### ■ Quantity Per Reel

1,000

### ■ Applicable FPC Dimensions



# Precautions

## Recommended Reflow Conditions

Pre-heat  
temperature: 150 ± 10°C  
Time: 60 to 120 seconds

Soldering  
temperature: 200 to 240°C  
Time: Not exceeding 30 seconds  
(Not exceeding 10 seconds at 240°C  
maximum temperature.)

## Storage

Do not store under high humidity levels as this may cause deterioration of the insulation.

## Handling the FPC

Do not forcibly bend or pull an FPC which has been mounted and locked. This may cause discontinuities in the FPC.

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**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. G011-E1-01 In the interest of product improvement, specifications are subject to change without notice.

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