

# 0.25 mm Pitch Back-lock FPC Connector

## FF10 Series



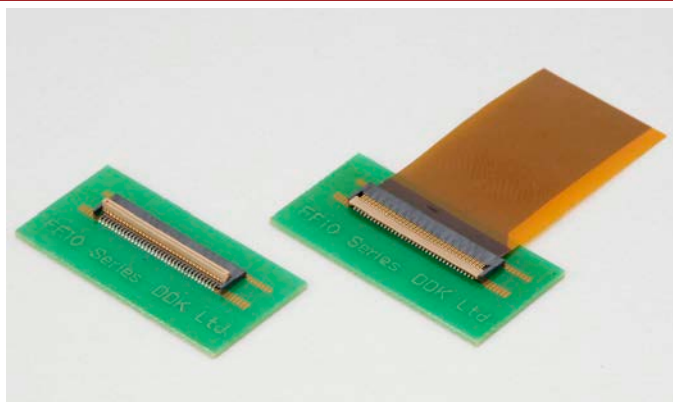
### OUTLINE

FF10 series is 0.25mm pitch, 4.25mm depth and 0.95mm connector height.

It has both upper and lower contact positions.

Applicable FPC thickness is 0.15mm.

It is suitable for large number of contacts (more than 50 contacts).



### FEATURES

- Minimize the winding of the connector on the re-flow process, it can be arrange large number of contacts.
- Both upper and lower contacts design accepts any FPC insertion directions.
- Original rotate oval cam lock mechanism; "Back-lock" system ensure the reliable connection.
- Back-lock structure ensures retention from inadvertent upward pulling of the FPC.
- Connectors delivered with the lock lever opened. Time saving for FPC inserting operation.
- Emboss tape and reel package for automatic mounting machine.
- High temperature resistant resin for lead free reflow process.
- Nickel barrier prevents solder wicking.

**Note :** Please do not close the lock lever without inserting the FPC.

### APPLICATIONS

Mobile phone, Notebook PC, PDA, other Portable devices

### SPECIFICATIONS

|                              |                               |
|------------------------------|-------------------------------|
| Rated Voltage                | 50V AC (r.m.s.)               |
| Rated Current                | 0.2A / Contact                |
| Dielectric Withstand Voltage | 200V AC (r.m.s.) / 1 minute   |
| Insulation Resistance        | 50 M $\Omega$ min. at 250V DC |
| Contact Resistance           | 50m $\Omega$ max.             |

### MATERIAL/FINISH



| Item       | Material / Finish           |
|------------|-----------------------------|
| Contact    | Copper Alloy / Au over Ni   |
| Housing    | LCP Resin (UL94V-0) / Black |
| Lock Lever | PPS Resin (UL94V-0) / Brown |

# 0.25mm Pitch FPC Connector

FF10-       A-R12B-3J

①      ②      ③      ④      ⑤      ⑥      ⑦      ⑧

|                       |                              |
|-----------------------|------------------------------|
| ① Series              | FF10                         |
| ② Number of Contact   | Refer to Table-1             |
| ③ Contact Position    | A : Upper and lower contacts |
| ④ Contact Style       | R : Right Angle              |
| ⑤ Contact Tail Length | 1 : 0.5mm & 0.8mm            |
| ⑥ Contact Plating     | 2 : Au over Ni               |
| ⑦ Lock Lever Style    | B : Long lock                |
| ⑧ Material            | 3J : Halogen-free,PFAS Free  |

## Dimensions

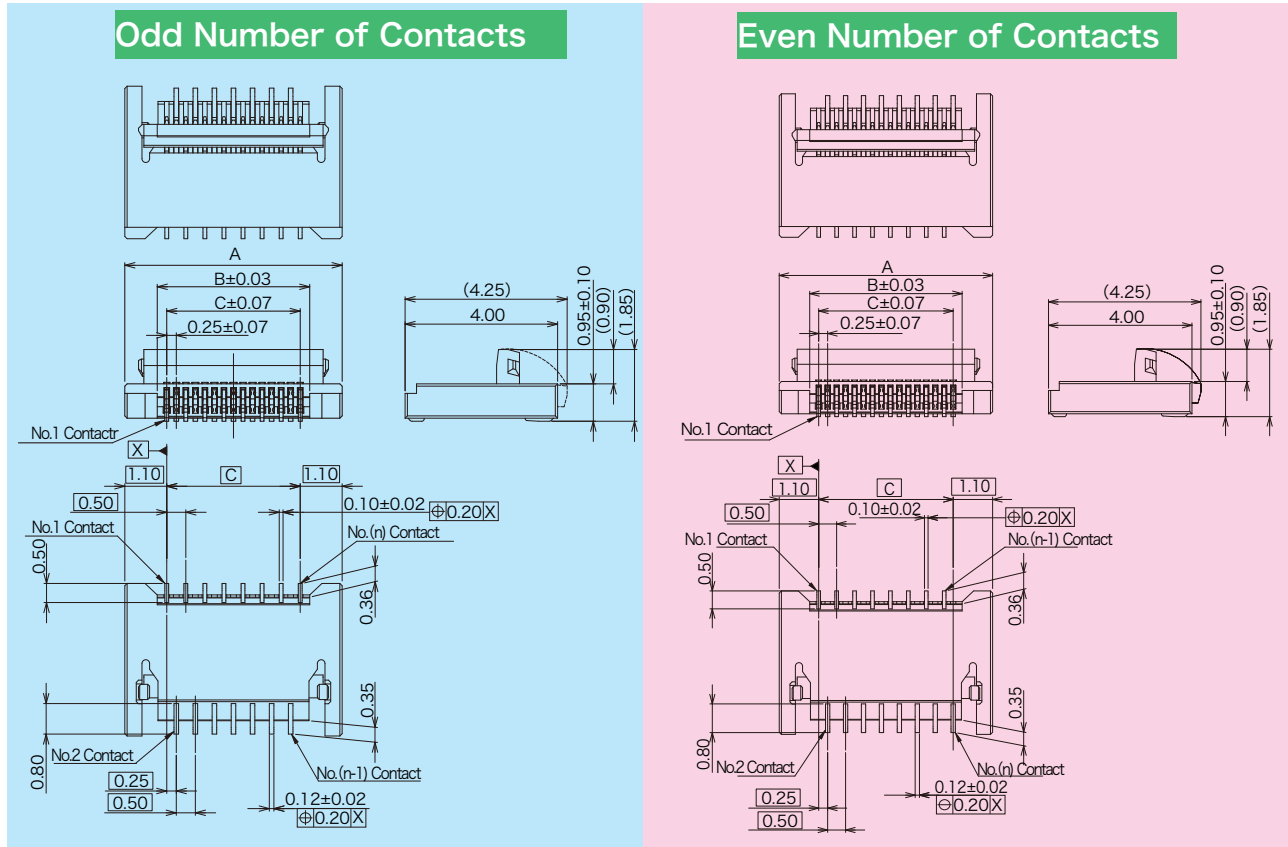
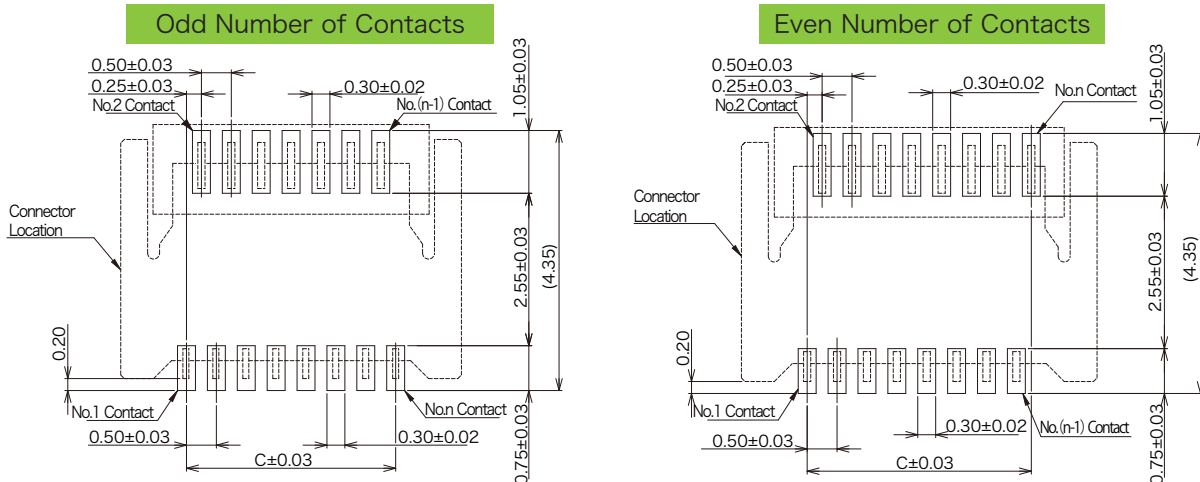


Table-1

| Part Number       | Number of Contacts | A     | B     | C     |
|-------------------|--------------------|-------|-------|-------|
| FF10- 51A-R12B-3J | 51                 | 14.70 | 13.00 | 12.50 |
| FF10- 70A-R12B-3J | 70                 | 19.45 | 17.75 | 17.25 |
| FF10- 80A-R12B-3J | 80                 | 21.95 | 20.25 | 19.75 |

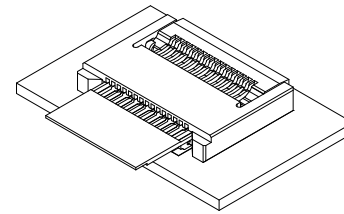
## Recommended PCB Mounting Dimensions

Contacts are arranged zigzag from No.1 contact.



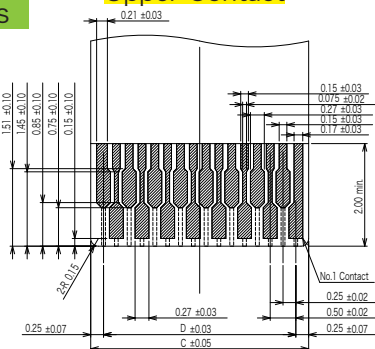
© Specifications and/or dimensions in this catalog are subject to change without notice.  
Please verify the latest specifications with our drawings.

## Standard Type FPC

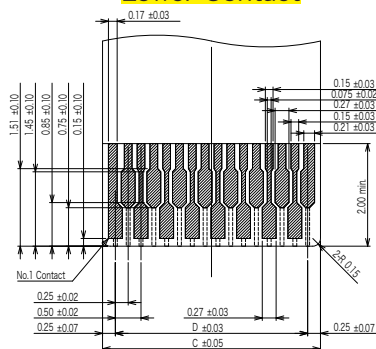


### Standard Type FPC mating

## Upper Contact

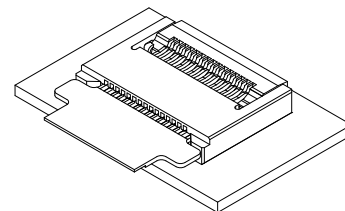


## Lower Contact



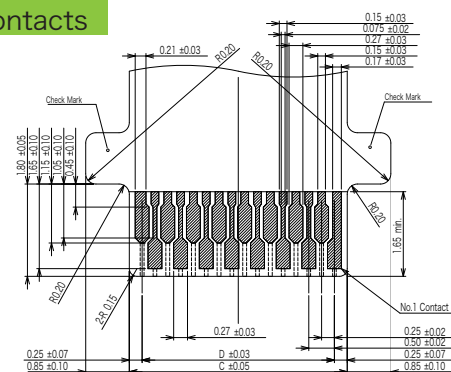
Technical drawing of a contact assembly. The drawing shows a cross-section of a contact with various dimensions and tolerances. Key features include:

- Dimensions and Tolerances:**
  - Top dimensions:  $0.15 \pm 0.03$ ,  $0.075 \pm 0.02$ ,  $0.27 \pm 0.03$ ,  $0.13 \pm 0.03$ ,  $0.17 \pm 0.03$ .
  - Left side dimensions:  $130 \pm 0.05$ ,  $165 \pm 0.02$ ,  $173 \pm 0.02$ ,  $175 \pm 0.02$ ,  $174 \pm 0.02$ .
  - Right side dimensions:  $165 \text{ mm}$ ,  $0.50 \text{ mm}$ ,  $0.15 \pm 0.03$ .
  - Bottom dimensions:  $0.25 \pm 0.07$ ,  $0.85 \pm 0.10$ ,  $0.27 \pm 0.03$ ,  $0.25 \pm 0.02$ ,  $0.50 \pm 0.02$ ,  $0.25 \pm 0.07$ ,  $0.85 \pm 0.10$ .
  - Internal dimensions:  $2.7 \pm 0.15$ ,  $D \pm 0.03$ ,  $C \pm 0.05$ .
- Geometric Features:**
  - Curved surfaces labeled  $R0.20$ .
  - Check Marks indicating specific points of interest.
  - A hatched area representing a specific material or component.
  - A label "No. 1 Contact" pointing to a specific part.
  - A label "Supporting" pointing to a structural element.

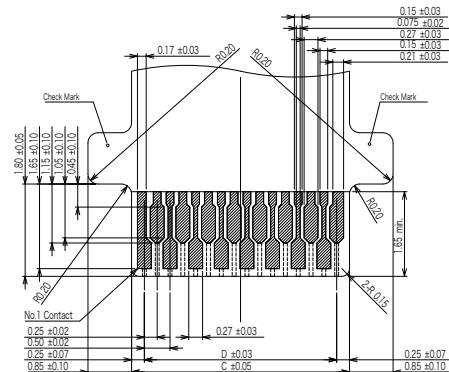


With Check Mark Type FPC mating

## Upper Contact



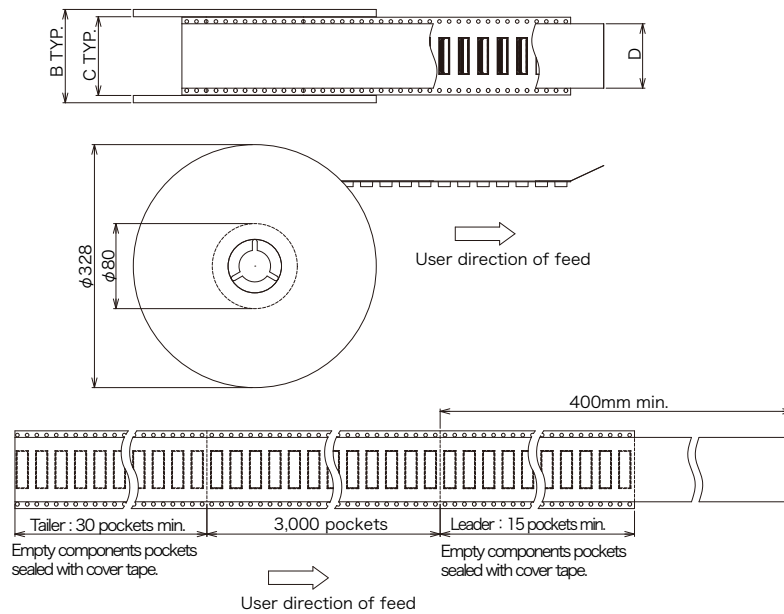
## Lower Contact



Please varify the latest specifications with our drawings.

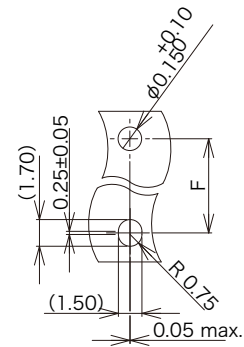
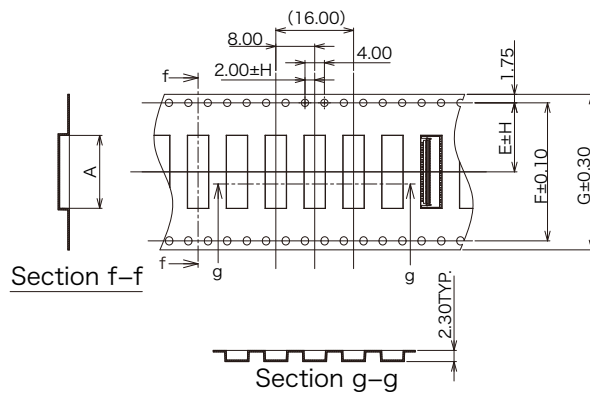
## Package Specifications

### Reel Dimensions



### Emboss Tape Dimensions

#### ◆ Type 2



Detail elongation and skew of sprocket hole

| Part Number      | Number of Contact | A     | B     | C     | D     | E     | F     | G     | H    | Emboss Type |
|------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|------|-------------|
| FF10-51A-R12B-3J | 51                | 15.00 | 38.40 | 32.40 | 26.50 | 14.20 | 28.40 | 32.00 | 0.10 | Type2       |
| FF10-70A-R12B-3J | 70                | 19.75 | 50.40 | 44.40 | 38.50 | 20.20 | 40.40 | 44.00 | 0.15 |             |
| FF10-80A-R12B-3J | 80                | 22.25 |       |       |       |       |       |       |      |             |

### Quantity : 3,000pcs./reel