

# 0.20 mm Pitch Low Profile FPC Back-lock Connector

RoHS2

**FF36 Series** 【Upper and Lower Contact】

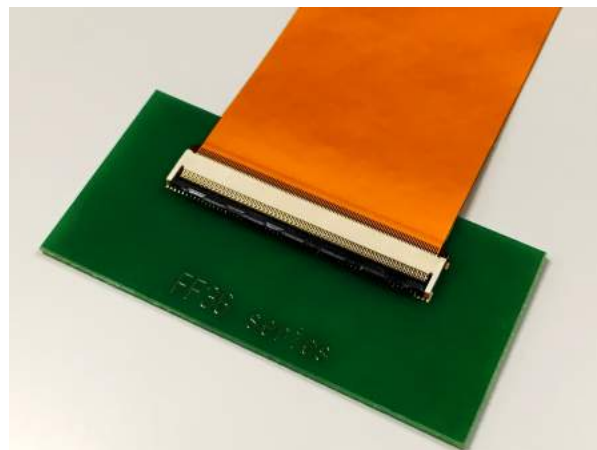
**DDK Ltd.**

## OUTLINE

FF36 series is 0.2mm pitch, depth 4.30mm and 0.95mm connector height.

It is suitable for large number of contacts(up to 120 contacts).

Low profile FPC connector.



## FEATURES

- "Back-lock" system:Original rotate oval cam lock ensures the reliable connection.
- The contact position is upper and lower contact.
- The lock will not open, even the FPC is pulled upward.
- Connectors are delivered with the lock lever opened. Time saving for FPC inserting operation.
- Nickel barrier prevents solder wicking.
- Halogen Free correspondence presence

**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 MΩ min. at 250V DC
Contact Resistance	80m Ω max.

## MATERIAL/FINISH



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

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Please verify the latest specifications with our drawings.

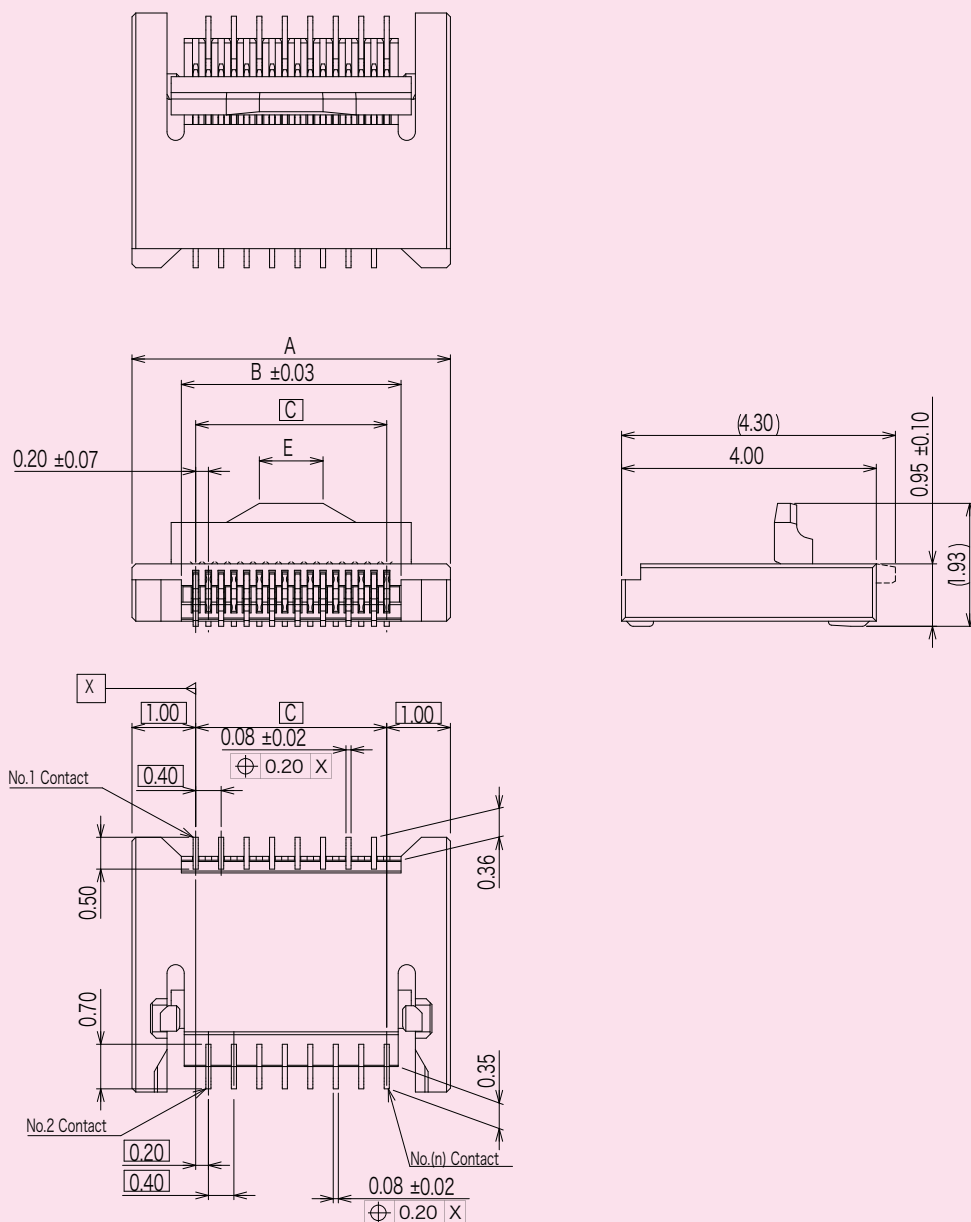
## ▶ 0.20mm Pitch FPC Connector [Upper and Lower contact]

**FF36-**       **A-R21B-3H**

①      ②      ③      ④ ⑤ ⑥ ⑦      ⑧

① Series	FF36
② Number of Contact	Refer to Table-1
③ Contact Position	A : Upper and Lower Contact Applicable FPC Thickness : 0.15±0.02mm
④ Connector Style	R : Right Angle
⑤ Contact Tail Length	2 : Odd Number of Contact 0.50mm Even Number of Contact 0.70mm
⑥ Contact Plating/Finish	1 : Au(Flash) over Ni plating
⑦ Lock Lever Type	B : Long Type
⑧ Material	3H : Halogen-free Correspondence

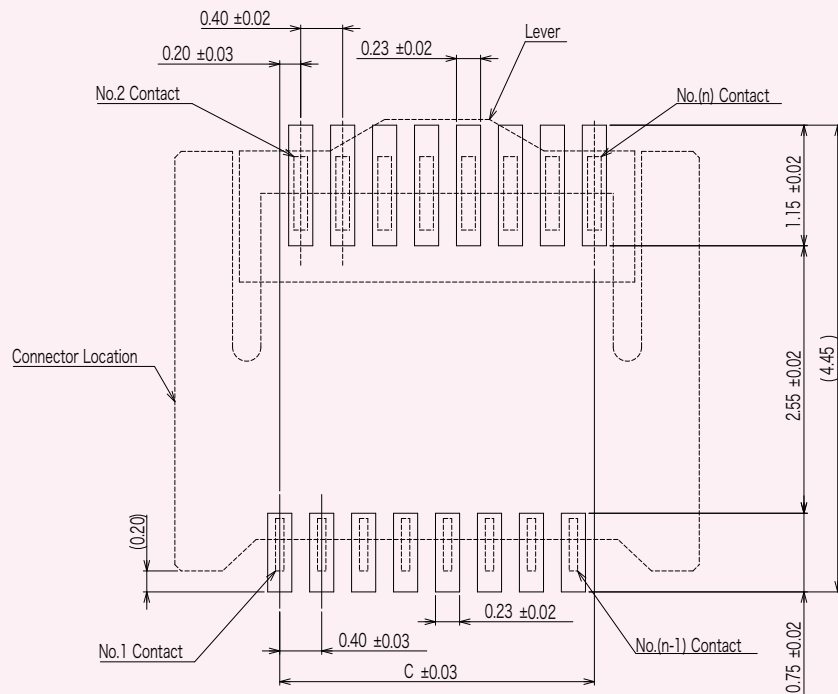
## ◆ Dimensions



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# ▶ 0.20mm Pitch FPC Connector [Upper and Lower contact]

## ◆ Recommended PCB Mounting Dimensions



## ◆ Recommended FPC Dimensions

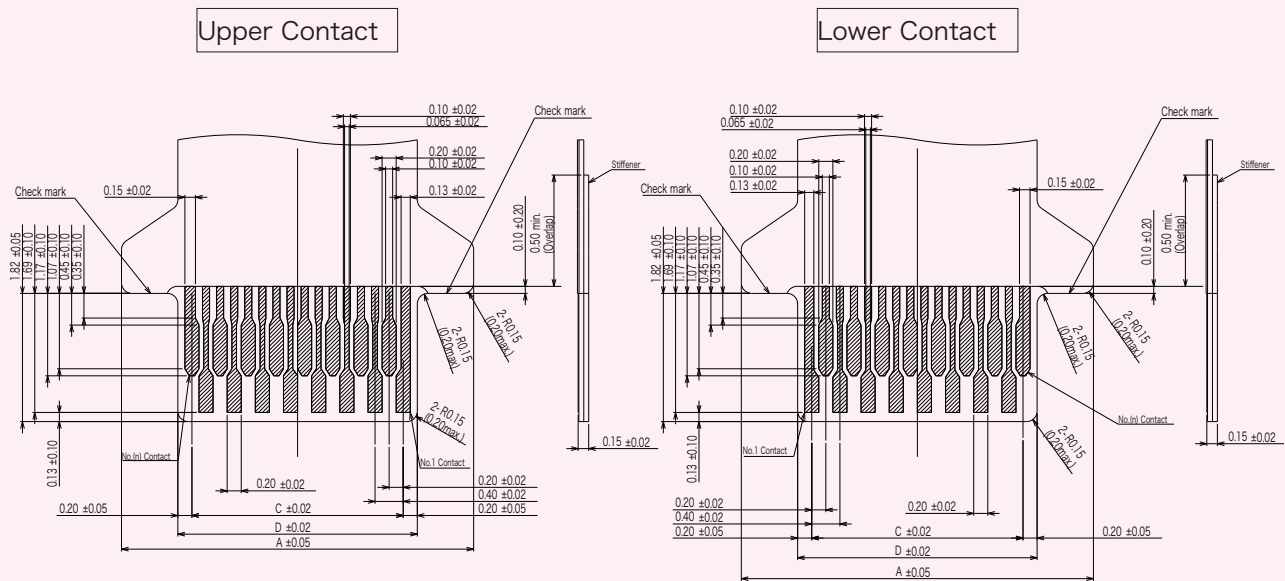
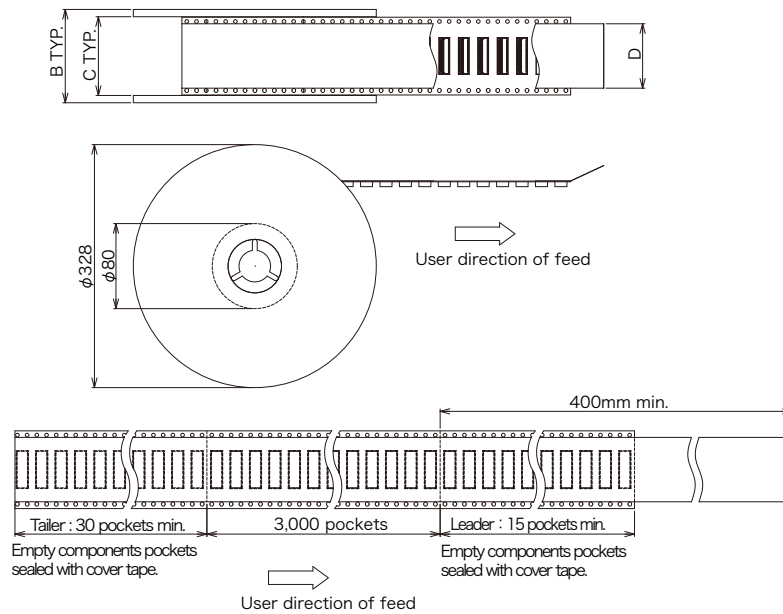


Table-1

Part Number	Number of Contact	A	B	C	D	E
FF36-120A-R21B-3H	120	25.80	24.28	23.80	24.20	20.00

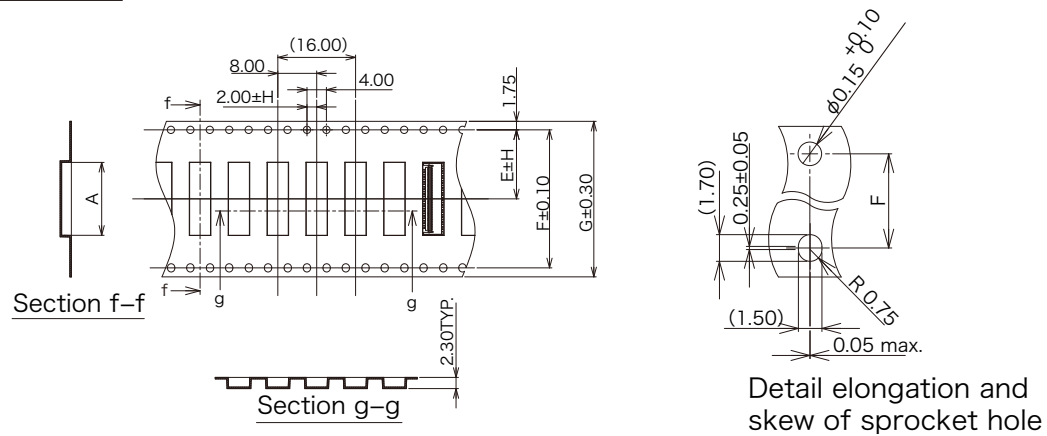
## ► Packing Specifications

### ■ Reel Dimensions



### ■ Emboss Tape Dimensions

#### ◆ Type 2



Part Number	Number of Contact	A	B	C	D	E	F	G	H	Emboss Type
FF36-120A-R21B-3H	120	26.10	50.4	44.4	38.5	20.2	40.4	44.0	0.15	Type2

### ■ Package Quantity : 3,000pcs./Reel

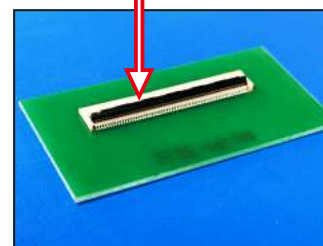
## ▶ Operating Instruction and Caution

### 1. Connector mounting Instruction

· Connectors are delivered with the lock lever opened.  
You do not have to operate the lock lever before inserting FPC.  
( picture ①)

· Please do not reflow with the lock lever closed.

Lock lever is opened when delivery.



picture ①

· Please do not load from the top of the lock lever. (figure ①)  
And please do not load toward the opposite direction of the lock lever. (figure ②)  
Otherwise, the lock lever may be broken or contacts may be deformed.

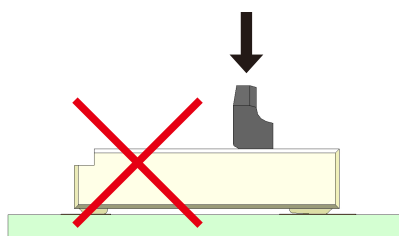


figure ①

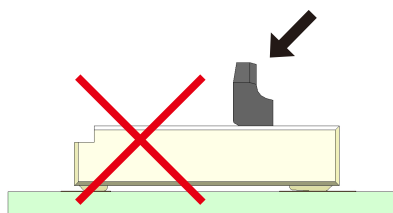
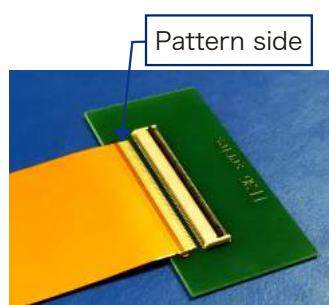


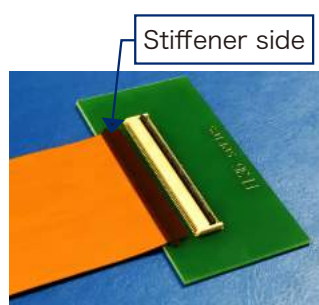
figure ②

### 2. FPC Insertion

· Please insert the FPC straight to the connector. (picture ②, ③)  
Due to the semi-retaining mechanism, some insertion force is necessary when inserting FPC.  
Please make sure whether FPC is inserted fully.



picture ②



picture ③

## ▶ Operating Instruction and Caution

### 3. Correct FPC Insertion Position

- It prevents Incomplete and diagonal insertion by striking the FPC flange against the connector edge.  
(figure ③ , ④ , ⑤ )

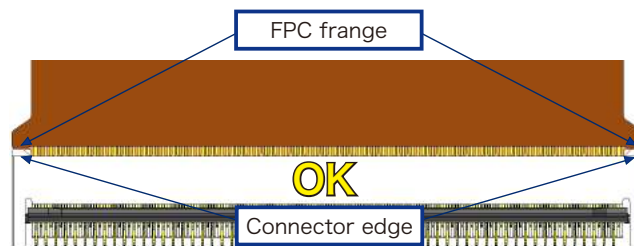


figure ③ : Normal insersion

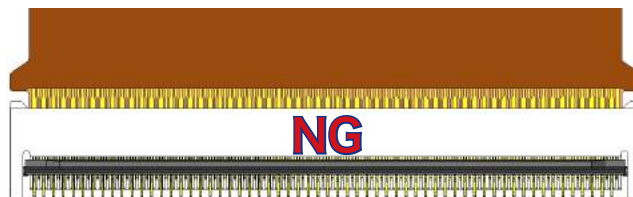


figure ④ : Incomplete insertion

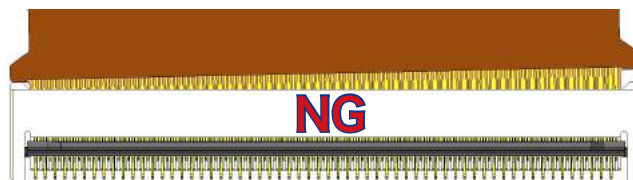


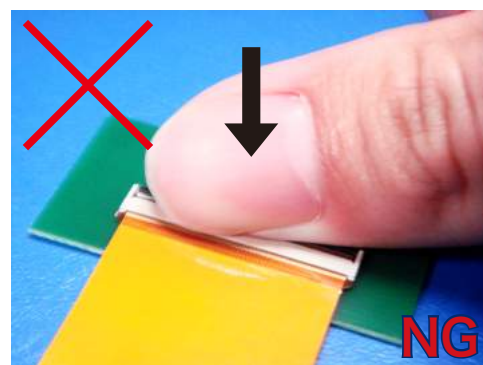
figure ⑤ : Diagonal insertion

### 4. Closing Lock Lever

- Please rotate down the lock lever until firmly closed.(picture ④ )
- Please do not load excessive force on the housing.(picture ⑤ )



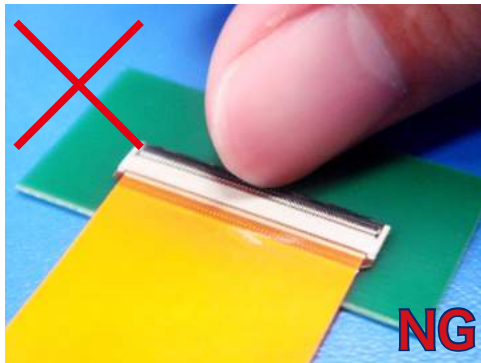
picture ④



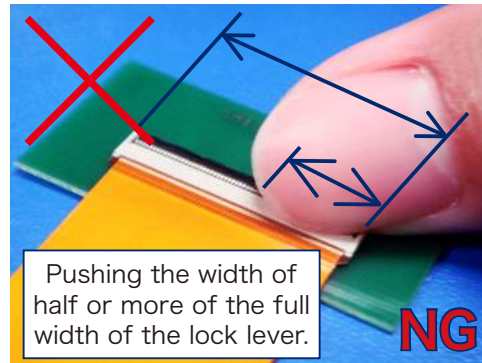
picture ⑤

## ▶ Operating Instruction and Caution

- Please do not close the lock lever by tip of finger nail. (picture ⑥ )
- Please hold the lock lever at least half width of it. (picture ⑦)



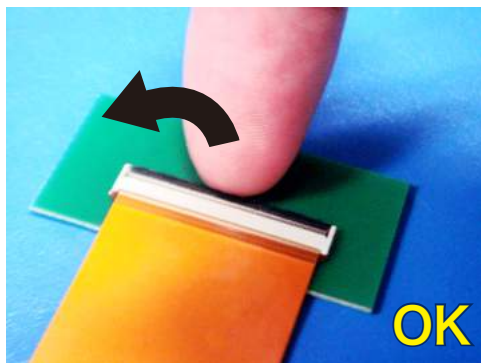
picture ⑥



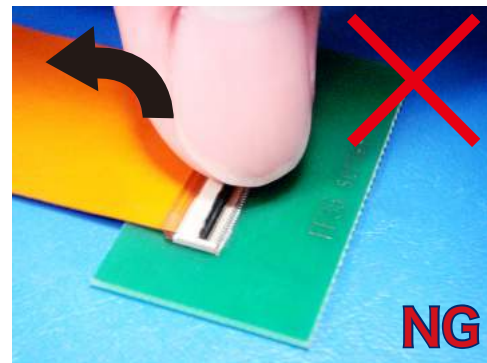
picture ⑦

## 5. Removing FPC

- Please lift the lock lever by flipping up in the direction of arrow.(picture ⑧ )
- Please do not load excessive force on the lock lever.(picture ⑨ )



picture ⑧



picture ⑨

## 6. ESD(Electrostatic Discharge)

This connector does not protect the circuit from ESD.

## 7. Disposal of Connector

Please dispose the connector as industrial waste.