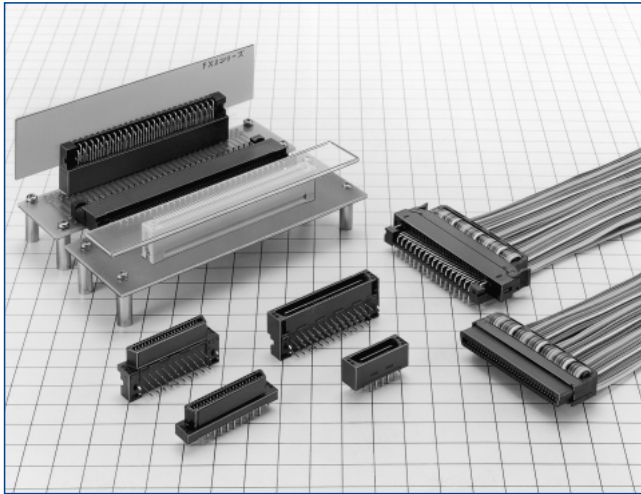
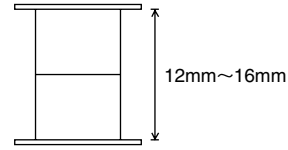


# 1.27mm Pitch Multi-function Two Piece Connectors

## FX2 Series



Stacking connection (Stack height : 12~16mm)



Horizontal Connection

Vertical Connection

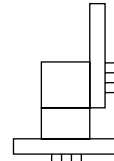
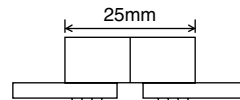
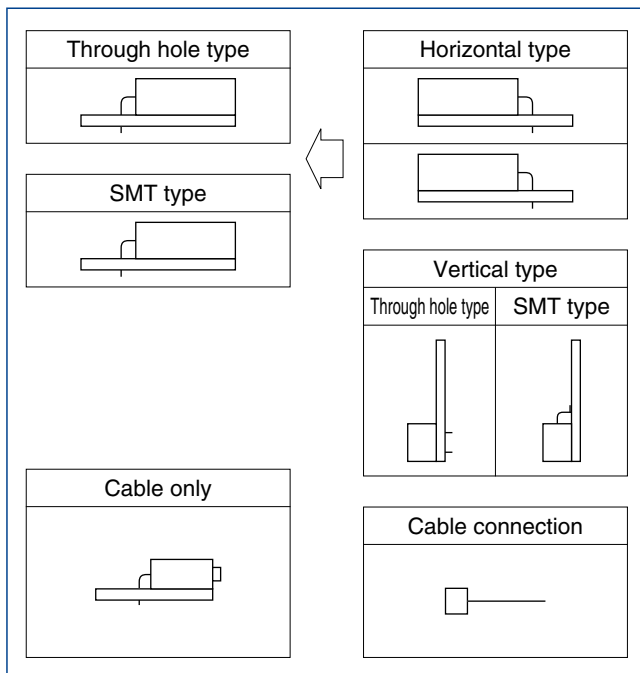
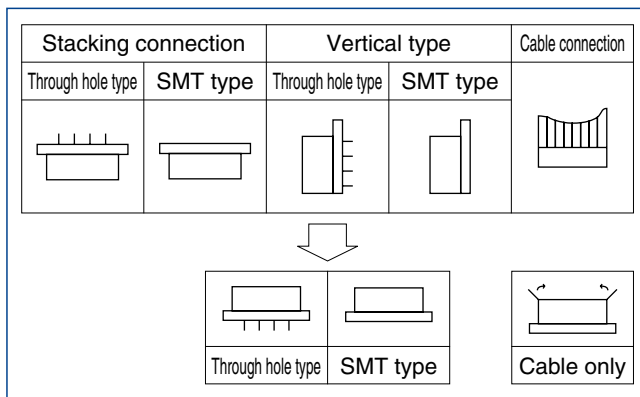


Fig.1

## Features

### 1. Various connection with various product line



### 2. Easy One-Touch Operation

The ribbon cable connection type allows easy one-touch operation with either single hand.

Insertion and Extraction

(1) Pick internal locks with thumb and the index finger.



Fig.2

(2) With unique and preferable click feeling, the cable and connector can be inserted or withdrawn.

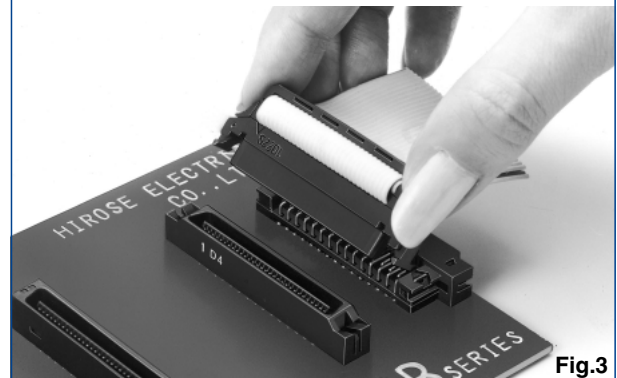


Fig.3

(For insertion, the operation proceeds from procedure (2) to (1).)

### 3. Board to board type

- ① **Prevents flux penetration**  
The straight through hole type takes the complete flux tight action from the board back side at solder dipping. The type is prepared, corresponding to whether or not cleaning is required.
- ② **Stack height 12mm to 16mm**  
The board stack height can be set to every 1 mm step up to 12 to 16mm.
- ③ **Mis-insertion preventive mechanism**  
The mating area is designed in a mechanism so as to prevent mis-insertion, and complete countermeasures have been taken against wrenching.

### 4. Board to cable type

- ① **Positive lock with easy operation**  
Employing the inner lock system, positive lock and eject actions can be performed with easy operation.
- ② **Applicable cable**  
The applicable cable is the <UL2651>28 AWG flat cable (7/0.127mm), and the jacket size is 0.9±0.1mm.

### 5. SMT type

#### Robust design with metal hold-down

The right angle type is equipped with metal hold-down to secure soldering strength, and constructed so as to fix by screws. The straight type can choose whether or not metal hold-down are required.

## Product Specifications

Rating	Current rating 0.5A	Operating Temperature Range -55°C to +85°C (Note 1)	Storage Temperature Range -10°C to +60°C(Note 2)
	Voltage rating 125V AC	Operating Humidity Range 40 to 80%	Storage Humidity Range 40 to 70%(Note 2)

Item	Specification	Condition	
1. Insulation Resistance	1000MΩ min	250V DC	
2. Withstanding Voltage	No flashover or insulation breakdown.	300V AC/1 min	
3. Contact Resistance	45mΩ max.	100mA	
4. Vibration	No electrical discontinuity of 1μs or more	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.	
5. Humidity (Steady state)	Contact resistance: 55mΩ max. Insulation resistance: 100MΩ min.	96 hours at temperature of 40°C and humidity of 90% to 95%	
6. Temperature Cycle	Contact resistance: 55mΩ max. Insulation resistance: 100MΩ min. No damage, cracks, or parts looseness.	(-55°C: 30 minutes→15 to 35°C: 2 to 3 minutes→85°C: 30 minutes→15 to 35°C: 2 to 3 minutes) 5 cycles	
7. Durability (Mating/un-mating)	Contact resistance: 55mΩ max.	500 cycles	
8. Resistance to soldering heat	No deformation of components affecting performance.	SMT Type	Reflow: At the recommended temperature profile Manual soldering: 360°C for 5 seconds
		DIP Type	Solder bath: 260°C for 10 seconds Manual soldering: 360°C for 5 seconds

Note 1 : Includes temperature rise caused by current flow.

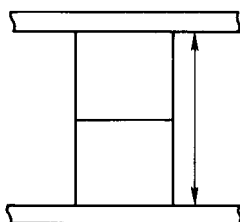
Note 2 : The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non conducting condition of installed connectors in storage, shipment or during transportation.

## Material

Parts		Material	Finish	Remark
Insulator	Through hole type	Polyamid	Black	UL94V-0
	Socket	PBT/Polyamid		
	SMT type	PPS	Light brown	
Contact	Receptacle	Phosphor bronze	Selective gold plated	_____
	Socket			
	Header	Phosphor bronze or brass		

## Stacking Variation

Unit : mm



Header	Receptacle	Through hole type		SMT type
		FX2C-*S-1.27DSA(L)	FX2C2-*S-1.27DSA(L)	FX2-*S-1.27SV(L)
Through hole type	FX2C-*P-1.27DSA(L)	12	14.0	12.2
	FX2CA-*P-1.27DSA(L)			
	FX2CA1-*P-1.27DSA(L)	13	15.0	13.2
	FX2CA2-*P-1.27DSA(L)	14	16.0	14.2
SMT type	FX2-*P-1.27SV(L)	12.1	14.1	12.3

## ■ Product Number Structure

### ● Board to Board Receptacle

**FX2** **CA** **2** - \* **S** - **1.27** **DSA** **L**

①      ②      ③      ④      ⑤      ⑥      ⑦      ⑧

① Series Name : FX2	④ No. of contacts : 20, 32, 40, 52, 60, 68, 80, 100, 120
② Blank : Right angle type C : Straight non-cleaning type CA : Straight cleaning type	⑤ Connector type : S : Receptacle
	⑥ Contact pitch : 1.27mm
③ Product height variation (DSA only) Blank : Standard product 2 : +2mm	⑦ Contact type : DS : Right angle type DSA : Straight type
	⑧ L : Board prefixed pin

### ● Board to Board Header

**FX2** **CA** **1** - \* **P** - **1.27** **DSA** **L**

①      ②      ③      ④      ⑤      ⑥      ⑦      ⑧

① Series Name : FX2	④ No. of contacts : 20, 32, 40, 52, 60, 68, 80, 100, 120
② Blank : Right angle type C : Straight non-cleaning type CA : Straight cleaning type	⑤ Connector type : P : header
	⑥ Contact pitch : 1.27mm
③ Product height variation (DSA only) Blank : Standard product 1 : +1mm 2 : +2mm	⑦ Contact type : DS : Right angle type DSA : Straight type
	⑧ L : Board prefixed pin

Note 1 : C and CA take complete countermeasures against flux.  
 Note 2 : Cleaning type: the liquid escape hole is added at dip cleaning.  
 Note 3 : No-cleaning type: no liquid escape hole is added at dip cleaning.

### ● Board to Cable Socket

**FX2** **BA** - \* **S** **A** - **1.27** **R**

①      ②      ③      ④      ⑤      ⑥      ⑦

① Series Name : FX2	④ S : Socket
② B : Lock cable type BA : No lock cable type	⑤ A : Contact material: phosphor bronze
	⑥ Contact pitch : 1.27mm
③ No. of contacts : 20, 32, 40, 52, 60, 68, 80, 100	⑦ R : Insulation displacement

### ● Board to Cable Header

**FX2** **BA** - \* **P** **A** - **1.27** **DSA** **L**

①      ②      ③      ④      ⑤      ⑥      ⑦      ⑧

① Series Name : FX2	⑤ None : Contact material: phosphor bronze A : Contact material: brass
② B : Lock straight no cleaning type : Lock right angle type BA : Lock straight cleaning type	⑥ Contact pitch : 1.27mm
	⑦ Contact type : DS : Right angle type DSA : Straight type
③ No. of contacts : 20, 32, 40, 52, 60, 68, 80, 100	⑧ L : Board prefixed pin
④ Connector type : P: header	

Note 1 : Cleaning type: The liquid escape hole is added at dip cleaning.  
 Note 2 : No cleaning type: No liquid escape hole is added at dip cleaning.  
 Note 3 : Straight 20 and 32 contact types use phosphor bronze for contact material.

● Straight SMT Type

**FX2** - \* **P** - **1.27** **SV** **L**  
 ① ② ③ ④ ⑤ ⑥

① Series Name : FX2	④ Contact pitch : 1.27mm
② No. of contacts : 20, 32, 40, 52, 60, 68, 80, 100, 120	⑤ Contact type : SV : Straight SMT type
③ Connector type : P : Header S : Receptacle	⑥ L : Board prefixed pin

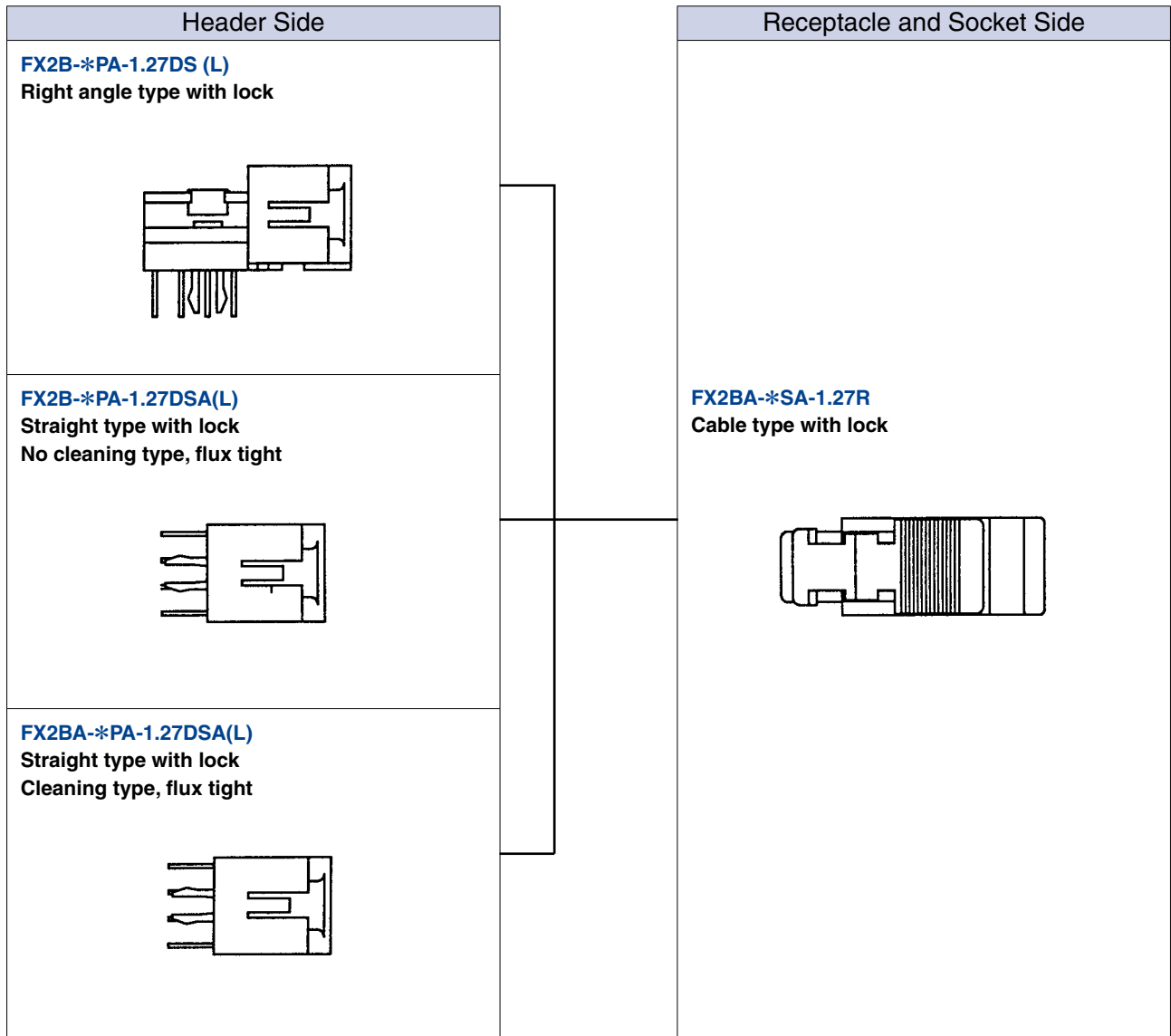
● Header Right Angle SMT Type

**FX2** **A** - \* **P** - **0.635** **SH**  
 ① ② ③ ④ ⑤ ⑥

① Series Name : FX2	④ Connector type : P : Header
② Blank : With boss A : Without boss	⑤ Mounting area pitch : 0.635mm
③ No. of contacts : 20, 40, 52, 60, 80	⑥ Contact type : SH : Right angle SMT type

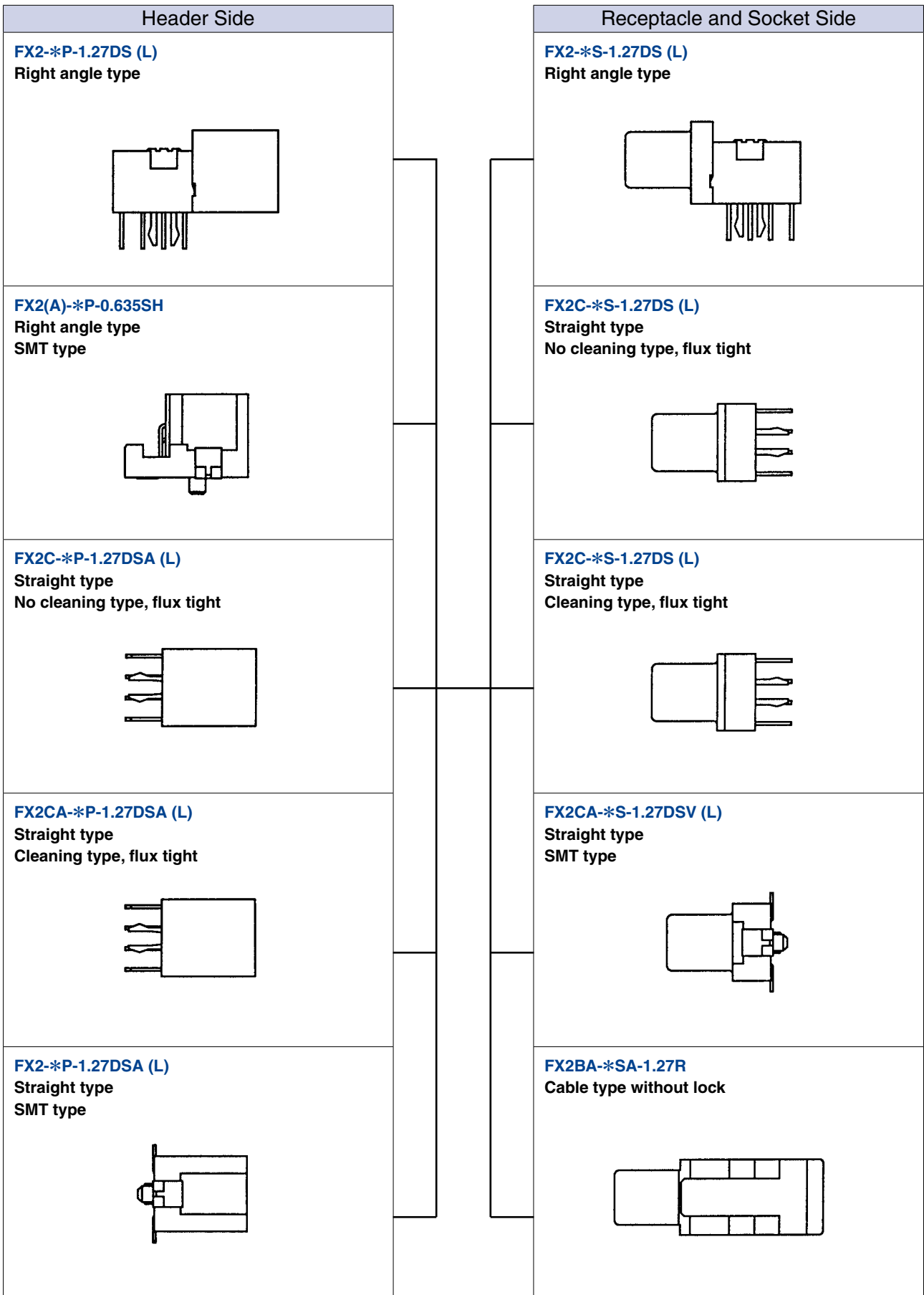
◆ FX2 Functional Flow Chart

Board to Board Cable Type

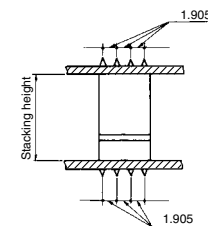


## ◆ FX2 Functional Flow Chart

### Board to Board Cable Type



### ◆ Through hole Type Application Pattern



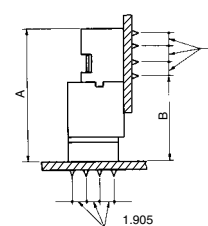
**Header**

Stacking height

Header \ Receptacle	FX2CA-*S	FX2CA2-*S
FX2CA-*P	12	14
FX2CA1-*P	13	15
FX2CA2-*P	14	16

**Receptacle**

**FX2-\*P-1.27DS(L)**

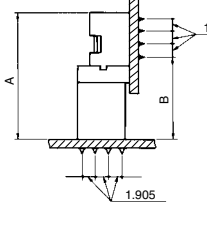


**FX2-\*P-1.27DS(L)**

Receptacle	A	B
FX2C(A) -*S	18.5	12
FX2C(A)2-*S	20.5	14

**Receptacle**

**FX2-\*S-1.27DS(L)**

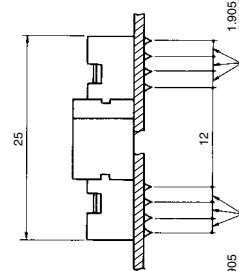


**Header**

Header	A	B
FX2C(A) -*P	18.5	12
FX2C(A)1-*P	19.5	13
FX2C(A)2-*P	20.5	14

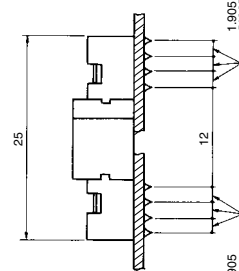
**Header**

**FX2B(A)\*SA-1.27R**



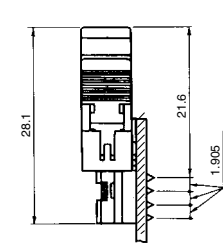
**FX2-\*P-1.27DS(L)**

**FX2B(A)\*SA-1.27R**



**Header**

**FX2B(A)\*P(A)-1.27DSA(L)**

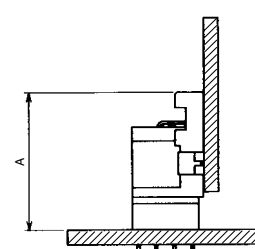


**Header**

**FX2B-\*PA-1.27DS(L)**

### ◆ SMT Type Application Pattern

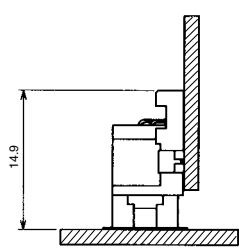
**FX2(A)\*P-0.635SH**



Receptacle	A
FX2C(A)	14.7
FX2C(A)2	16.7

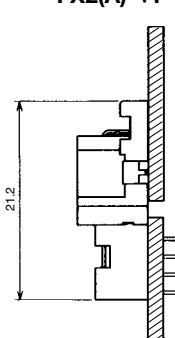
**FX2C(A)2-\*S-1.27DSA(L)**

**FX2(A)\*P-0.635SH**



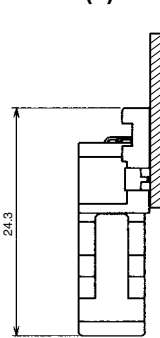
**FX2-\*S-1.27SV(L)**

**FX2(A)\*P-0.635SH**



**FX2-\*S-1.27DS(L)**

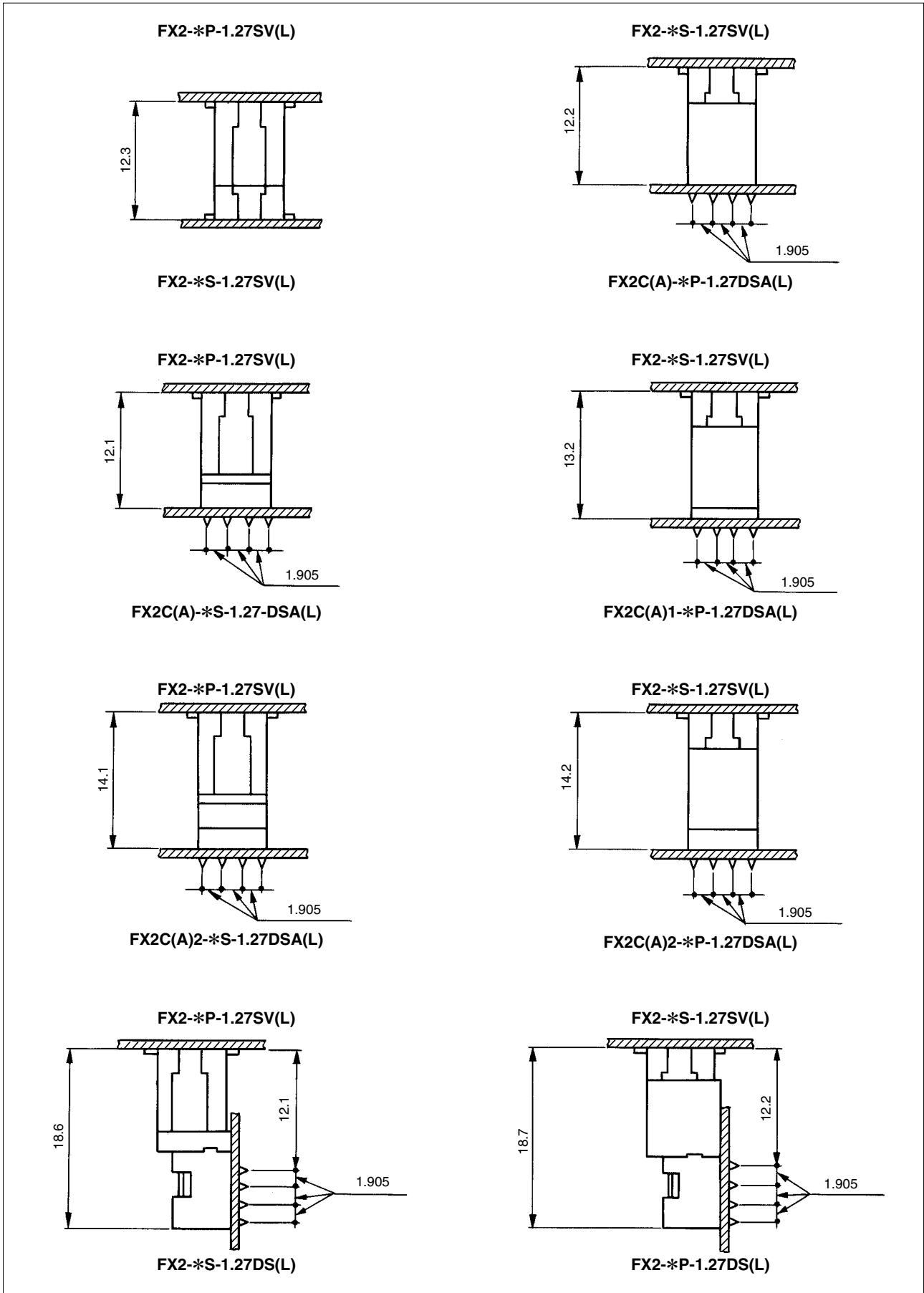
**FX2(A)\*P-0.635SH**



**FX2BA-\*SA-1.27R**

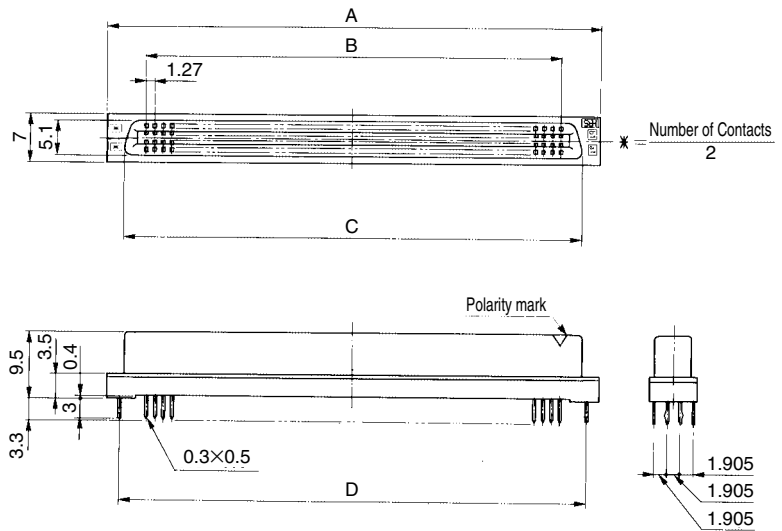
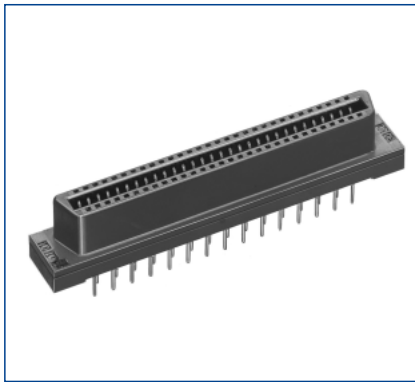
◆ SMT Type Application Pattern

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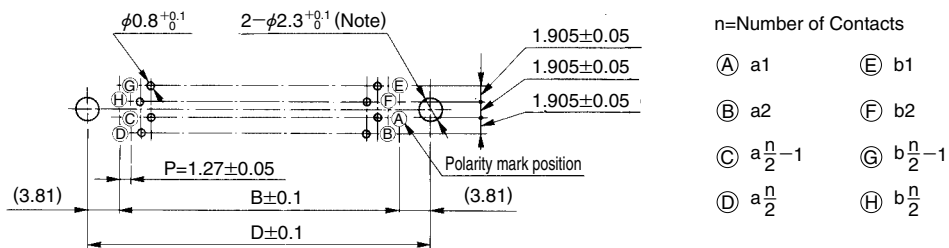


## ■ Receptacle No Cleaning Type

### ● Straight Type



### ◆ PCB mounting pattern



Note : Not required, if no prefixed pin is attached.

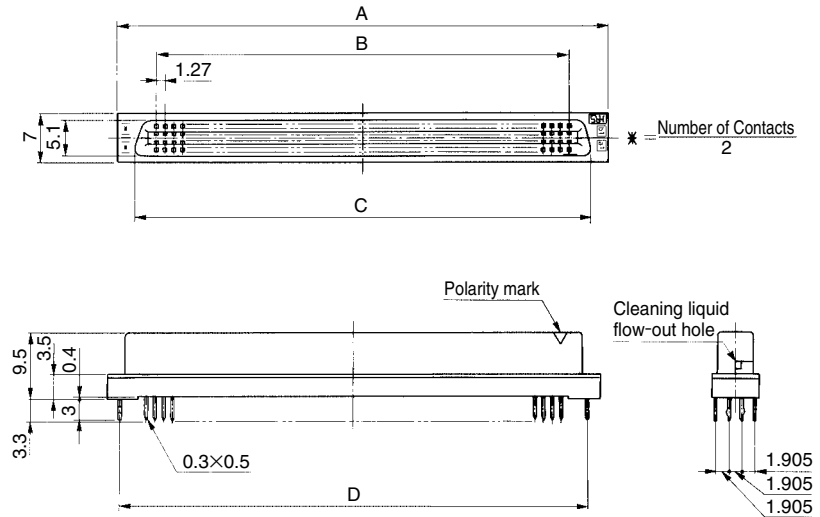
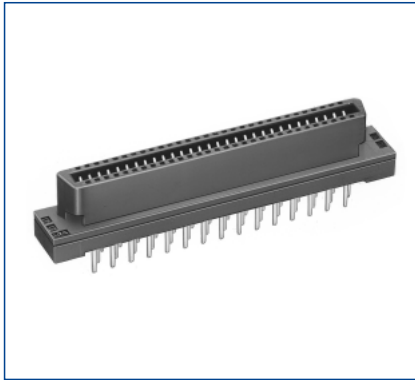
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	C	D	RoHS
FX2C-20S-1.27DSA(71)	572-2401-7 71	20	22.75	11.43	17.63	_____	Yes
FX2C-20S-1.27DSAL(71)	572-2451-5 71					19.05	
FX2C-32S-1.27DSA(71)	572-2402-0 71	32	30.37	19.05	25.25	_____	
FX2C-32S-1.27DSAL(71)	572-2452-8 71					26.67	
FX2C-40S-1.27DSA(71)	572-2403-2 71	40	35.45	24.13	30.33	_____	
FX2C-40S-1.27DSAL(71)	572-2453-0 71					31.75	
FX2C-52S-1.27DSA(71)	572-2404-5 71	52	43.07	31.75	37.95	_____	
FX2C-52S-1.27DSAL(71)	572-2454-3 71					39.37	
FX2C-60S-1.27DSA(71)	572-2405-8 71	60	48.15	36.83	43.03	_____	
FX2C-60S-1.27DSAL(71)	572-2455-6 71					44.45	
FX2C-68S-1.27DSA(71)	572-2406-0 71	68	53.23	41.91	48.11	_____	
FX2C-68S-1.27DSAL(71)	572-2456-9 71					49.53	
FX2C-80S-1.27DSA(71)	572-2407-3 71	80	60.85	49.53	55.73	_____	
FX2C-80S-1.27DSAL(71)	572-2457-1 71					57.15	
FX2C-100S-1.27DSA(71)	572-2408-6 71	100	73.55	62.23	68.43	_____	
FX2C-100S-1.27DSAL(71)	572-2458-4 71					69.85	
FX2C-120S-1.27DSA(71)	572-2409-9 71	120	86.25	74.93	81.13	_____	
FX2C-120S-1.27DSAL(71)	572-2459-7 71					82.55	

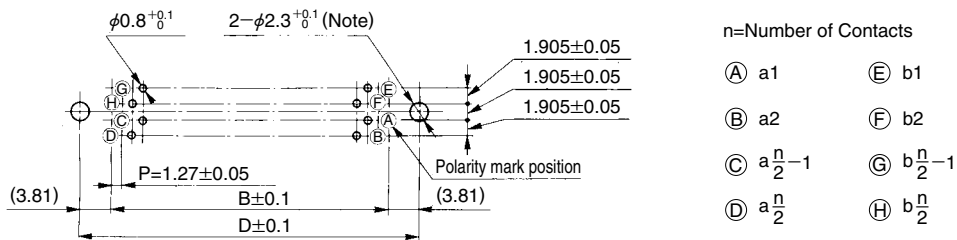


## Receptacle Cleaning Type

### Straight Type



### PCB mounting pattern



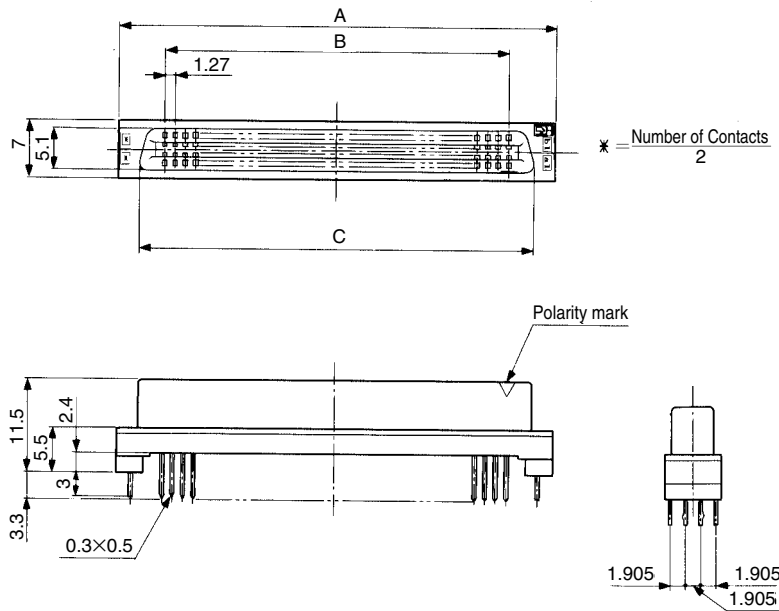
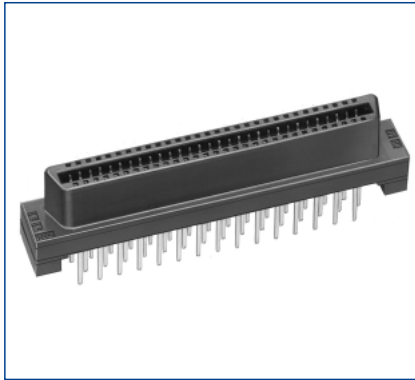
Note : Not required, if no prefixed pin is attached.

Unit : mm

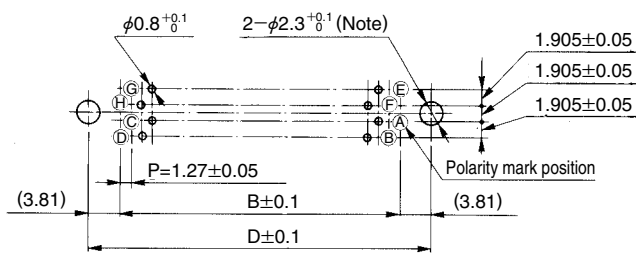
Part No.	HRS No.	No. of Contacts	A	B	C	D	RoHS
FX2C-20S-1.27DSA(71)	572-2501-1 71	20	22.75	11.43	17.63	_____	Yes
FX2C-20S-1.27DSAL(71)	572-2551-0 71					19.05	
FX2C-32S-1.27DSA(71)	572-2502-4 71	32	30.37	19.05	25.25	_____	
FX2C-32S-1.27DSAL(71)	572-2552-2 71					26.67	
FX2C-40S-1.27DSA(71)	572-2503-7 71	40	35.45	24.13	30.33	_____	
FX2C-40S-1.27DSAL(71)	572-2553-5 71					31.75	
FX2C-52S-1.27DSA(71)	572-2504-0 71	52	43.07	31.75	37.95	_____	
FX2C-52S-1.27DSAL(71)	572-2554-8 71					39.37	
FX2C-60S-1.27DSA(71)	572-2505-2 71	60	48.15	36.83	43.03	_____	
FX2C-60S-1.27DSAL(71)	572-2555-0 71					44.45	
FX2C-68S-1.27DSA(71)	572-2506-5 71	68	53.23	41.91	48.11	_____	
FX2C-68S-1.27DSAL(71)	572-2556-3 71					49.53	
FX2C-80S-1.27DSA(71)	572-2507-8 71	80	60.85	49.53	55.73	_____	
FX2C-80S-1.27DSAL(71)	572-2557-6 71					57.15	
FX2C-100S-1.27DSA(71)	572-2508-0 71	100	73.55	62.23	68.43	_____	
FX2C-100S-1.27DSAL(71)	572-2558-9 71					69.85	
FX2C-120S-1.27DSA(71)	572-2509-3 71	120	86.25	74.93	81.13	_____	
FX2C-120S-1.27DSAL(71)	572-2559-1 71					82.55	

## ■ Receptacle No Cleaning Type

### ● Straight Type



### ◆ PCB mounting pattern



n=Number of Contacts

- Ⓐ a1      Ⓔ b1
- Ⓑ a2      Ⓕ b2
- Ⓒ  $a\frac{n}{2}-1$       Ⓖ  $b\frac{n}{2}-1$
- Ⓓ  $a\frac{n}{2}$       Ⓗ  $b\frac{n}{2}$

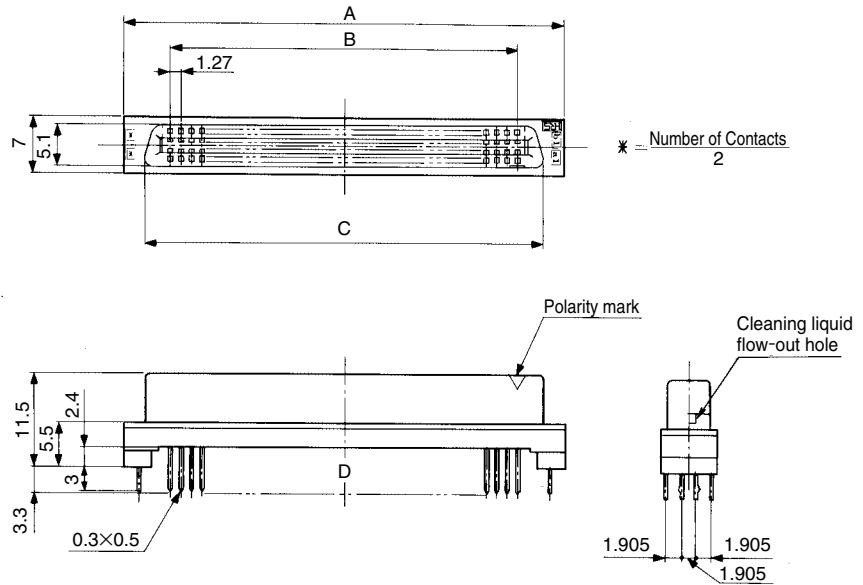
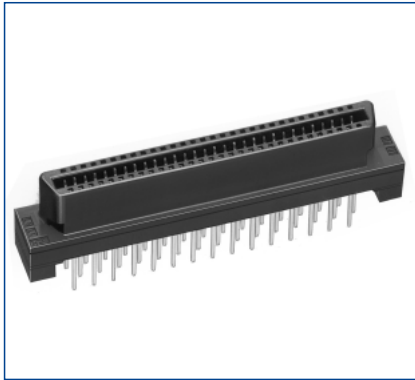
Note : Not required, if no prefixed pin is attached.

Unit : mm

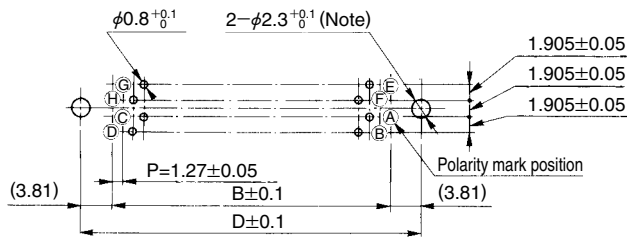
Part No.	HRS No.	No. of Contacts	A	B	C	D	RoHS
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FX2C2-20S-1.27DSAL(71)	572-2471-2 71					19.05	
FX2C2-32S-1.27DSA(71)	572-2422-7 71	32	30.37	19.05	25.25	_____	
FX2C2-32S-1.27DSAL(71)	572-2472-5 71					26.67	
FX2C2-40S-1.27DSA(71)	572-2423-0 71	40	35.45	24.13	30.33	_____	
FX2C2-40S-1.27DSAL(71)	572-2473-8 71					31.75	
FX2C2-52S-1.27DSA(71)	572-2424-2 71	52	43.07	31.75	37.95	_____	
FX2C2-52S-1.27DSAL(71)	572-2474-0 71					39.37	
FX2C2-60S-1.27DSA(71)	572-2425-5 71	60	48.15	36.83	43.03	_____	
FX2C2-60S-1.27DSAL(71)	572-2475-3 71					44.45	
FX2C2-68S-1.27DSA(71)	572-2426-8 71	68	53.23	41.91	48.11	_____	
FX2C2-68S-1.27DSAL(71)	572-2476-6 71					49.53	
FX2C2-80S-1.27DSA(71)	572-2427-0 71	80	60.85	49.53	55.73	_____	
FX2C2-80S-1.27DSAL(71)	572-2477-9 71					57.15	
FX2C2-100S-1.27DSA(71)	572-2428-3 71	100	73.55	62.23	68.43	_____	
FX2C2-100S-1.27DSAL(71)	572-2478-1 71					69.85	
FX2C2-120S-1.27DSA(71)	572-2429-6 71	120	86.25	74.93	81.13	_____	
FX2C2-120S-1.27DSAL(71)	572-2479-4 71					82.55	

## Receptacle Cleaning Type

### Straight Type



### PCB mounting pattern



n=Number of Contacts

- Ⓐ a1      Ⓔ b1
- Ⓑ a2      Ⓕ b2
- Ⓒ  $a\frac{n}{2}-1$       Ⓖ  $b\frac{n}{2}-1$
- Ⓓ  $a\frac{n}{2}$       Ⓗ  $b\frac{n}{2}$

Note : Not required, if no prefixed pin is attached.

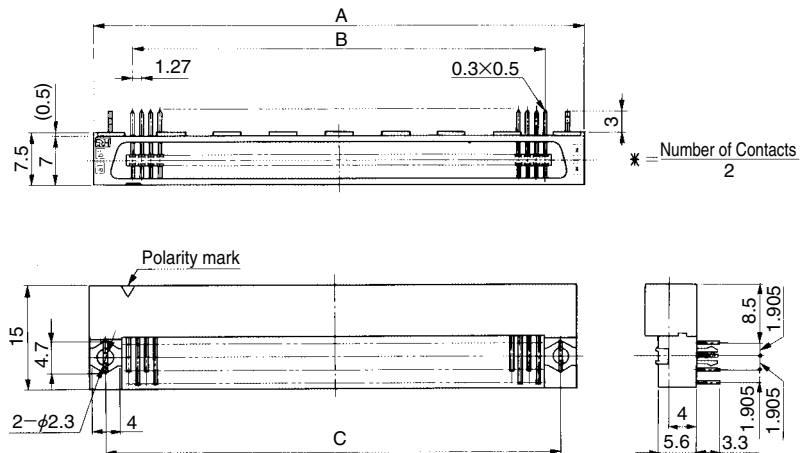
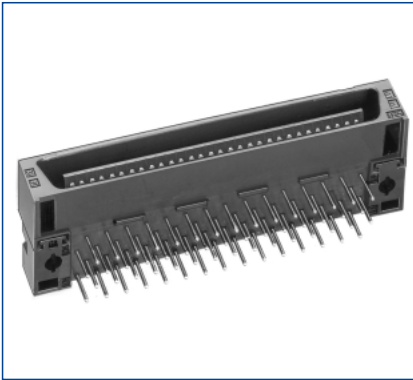
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	C	D	RoHS
FX2CA2-20S-1.27DSA(71)	572-2521-9 71	20	22.75	11.43	17.63	_____	Yes
FX2CA2-20S-1.27DSAL(71)	572-2571-7 71					19.05	
FX2CA2-32S-1.27DSA(71)	572-2522-1 71	32	30.37	19.05	25.25	_____	
FX2CA2-32S-1.27DSAL(71)	572-2572-0 71					26.67	
FX2CA2-40S-1.27DSA(71)	572-2523-4 71	40	35.45	24.13	30.33	_____	
FX2CA2-40S-1.27DSAL(71)	572-2573-2 71					31.75	
FX2CA2-52S-1.27DSA(71)	572-2524-7 71	52	43.07	31.75	37.95	_____	
FX2CA2-52S-1.27DSAL(71)	572-2574-5 71					39.37	
FX2CA2-60S-1.27DSA(71)	572-2525-0 71	60	48.15	36.83	43.03	_____	
FX2CA2-60S-1.27DSAL(71)	572-2575-8 71					44.45	
FX2CA2-68S-1.27DSA(71)	572-2526-2 71	68	53.23	41.91	48.11	_____	
FX2CA2-68S-1.27DSAL(71)	572-2576-0 71					49.53	
FX2CA2-80S-1.27DSA(71)	572-2527-5 71	80	60.85	49.53	55.73	_____	
FX2CA2-80S-1.27DSAL(71)	572-2577-3 71					57.15	
FX2CA2-100S-1.27DSA(71)	572-2528-8 71	100	73.55	62.23	68.43	_____	
FX2CA2-100S-1.27DSAL(71)	572-2578-6 71					69.85	
FX2CA2-120S-1.27DSA(71)	572-2529-0 71	120	86.25	74.93	81.13	_____	
FX2CA2-120S-1.27DSAL(71)	572-2579-9 71					82.55	

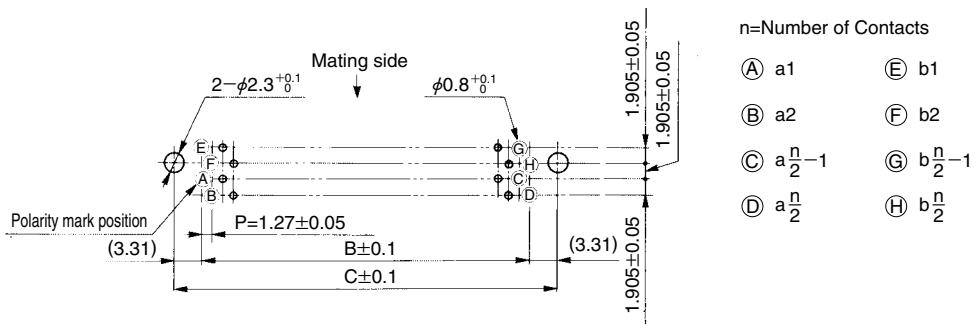


## Header

### Right Angle Type



### PCB mounting pattern

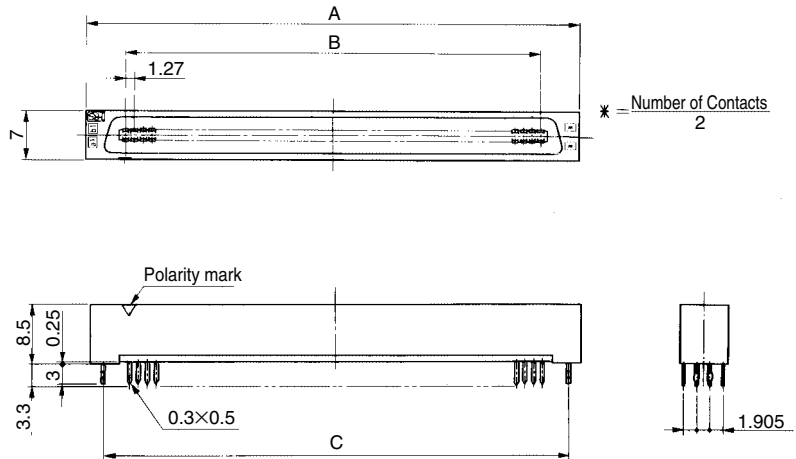
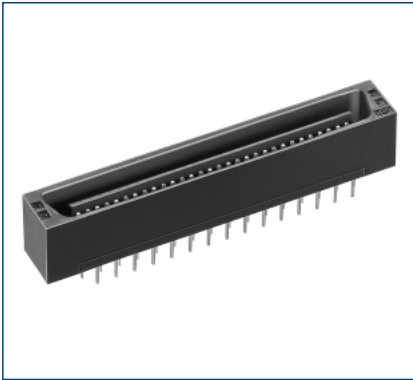


Unit : mm

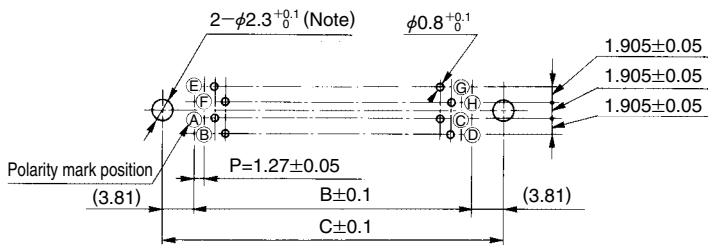
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2-20P-1.27DS(71)	572-2601-6 71	20	22.75	11.43	18.05	Yes
FX2-20P-1.27DSL(71)	572-2651-4 71					
FX2-32P-1.27DS(71)	572-2602-9 71	32	30.37	19.05	25.67	
FX2-32P-1.27DSL(71)	572-2652-7 71					
FX2-40P-1.27DS(71)	572-2603-1 71	40	35.45	24.13	30.75	
FX2-40P-1.27DSL(71)	572-2653-0 71					
FX2-52P-1.27DS(71)	572-2604-4 71	52	43.07	31.75	38.37	
FX2-52P-1.27DSL(71)	572-2654-2 71					
FX2-60P-1.27DS(71)	572-2605-7 71	60	48.15	36.83	43.45	
FX2-60P-1.27DSL(71)	572-2655-5 71					
FX2-68P-1.27DS(71)	572-2606-0 71	68	53.23	41.91	48.53	
FX2-68P-1.27DSL(71)	572-2656-8 71					
FX2-80P-1.27DS(71)	572-2607-2 71	80	60.85	49.53	56.15	
FX2-80P-1.27DSL(71)	572-2657-0 71					
FX2-100P-1.27DS(71)	572-2608-5 71	100	73.55	62.23	68.85	
FX2-100P-1.27DSL(71)	572-2658-3 71					
FX2-120P-1.27DS(71)	572-2609-8 71	120	86.25	74.93	81.55	
FX2-120P-1.27DSL(71)	572-2659-6 71					

## Header No Cleaning Type

### ● Straight Type



### ◆ PCB mounting pattern



n=Number of Contacts

- Ⓐ a1      Ⓔ b1
- Ⓑ a2      Ⓕ b2
- Ⓒ  $a\frac{n}{2}-1$       Ⓖ  $b\frac{n}{2}-1$
- Ⓓ  $a\frac{n}{2}$       Ⓗ  $b\frac{n}{2}$

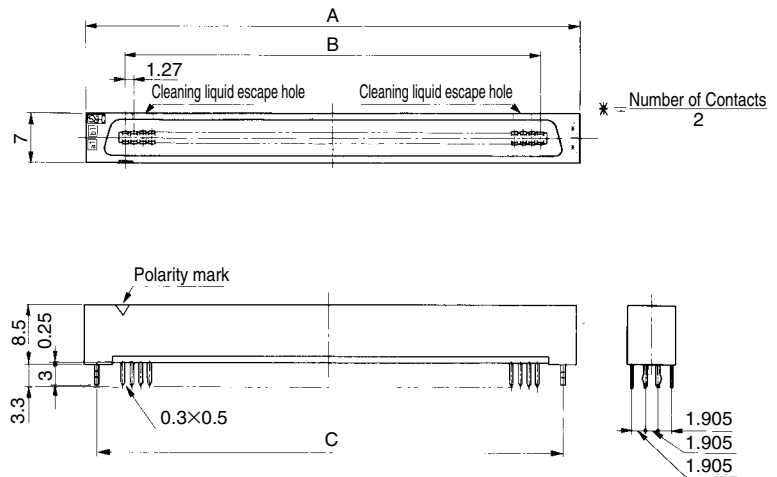
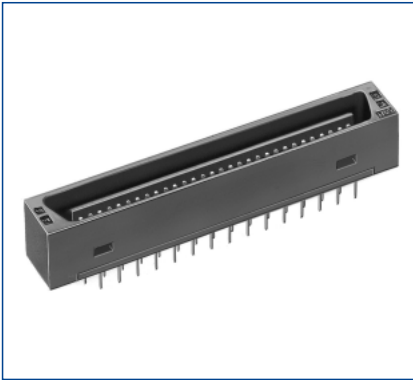
Note : Not required, if no prefixed pin is attached.

Unit : mm

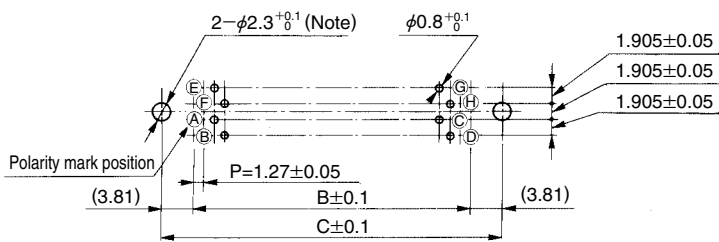
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2C-20P-1.27DSA(71)	572-2201-8 71	20	22.75	11.43	_____	Yes
FX2C-20P-1.27DSAL(71)	572-2251-6 71				19.05	
FX2C-32P-1.27DSA(71)	572-2202-0 71	32	30.37	19.05	_____	
FX2C-32P-1.27DSAL(71)	572-2252-9 71				26.67	
FX2C-40P-1.27DSA(71)	572-2203-3 71	40	35.45	24.13	_____	
FX2C-40P-1.27DSAL(71)	572-2253-1 71				31.75	
FX2C-52P-1.27DSA(71)	572-2204-6 71	52	43.07	31.75	_____	
FX2C-52P-1.27DSAL(71)	572-2254-4 71				39.37	
FX2C-60P-1.27DSA(71)	572-2205-9 71	60	48.15	36.83	_____	
FX2C-60P-1.27DSAL(71)	572-2255-7 71				44.45	
FX2C-68P-1.27DSA(71)	572-2206-1 71	68	53.23	41.91	_____	
FX2C-68P-1.27DSAL(71)	572-2256-0 71				49.53	
FX2C-80P-1.27DSA(71)	572-2207-4 71	80	60.85	49.53	_____	
FX2C-80P-1.27DSAL(71)	572-2257-2 71				57.15	
FX2C-100P-1.27DSA(71)	572-2208-7 71	100	73.55	62.23	_____	
FX2C-100P-1.27DSAL(71)	572-2258-5 71				69.85	
FX2C-120P-1.27DSA(71)	572-2209-0 71	120	86.25	74.93	_____	
FX2C-120P-1.27DSAL(71)	572-2259-8 71				82.55	

## Header Cleaning Type

### Straight Type



### PCB mounting pattern



n=Number of Contacts

- Ⓐ a1      Ⓔ b1
- Ⓑ a2      Ⓕ b2
- Ⓒ  $a_{\frac{n}{2}-1}$       Ⓖ  $b_{\frac{n}{2}-1}$
- Ⓓ  $a_{\frac{n}{2}}$       Ⓖ  $b_{\frac{n}{2}}$

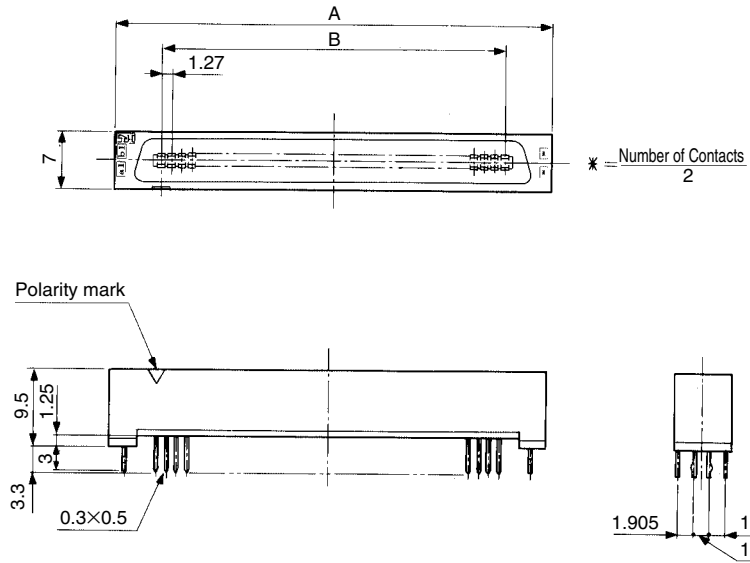
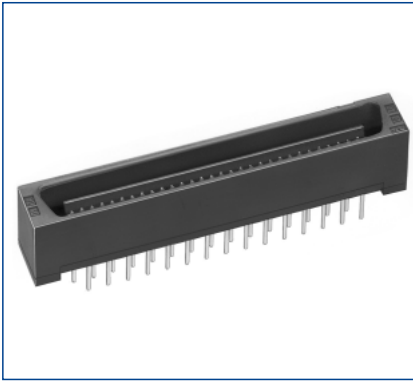
Note : Not required, if no prefixed pin is attached.

Unit : mm

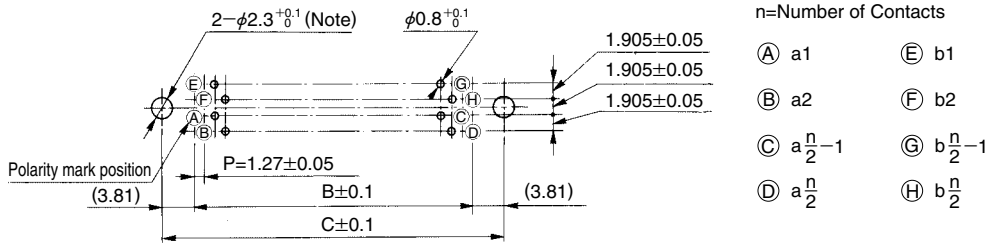
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2CA-20P-1.27DSA(71)	572-2301-2 71	20	22.75	11.43	_____	Yes
FX2CA-20P-1.27DSAL(71)	572-2351-0 71				19.05	
FX2CA-32P-1.27DSA(71)	572-2302-5 71	32	30.37	19.05	_____	
FX2CA-32P-1.27DSAL(71)	572-2352-3 71				26.67	
FX2CA-40P-1.27DSA(71)	572-2303-8 71	40	35.45	24.13	_____	
FX2CA-40P-1.27DSAL(71)	572-2353-6 71				31.75	
FX2CA-52P-1.27DSA(71)	572-2304-0 71	52	43.07	31.75	_____	
FX2CA-52P-1.27DSAL(71)	572-2354-9 71				39.37	
FX2CA-60P-1.27DSA(71)	572-2305-3 71	60	48.15	36.83	_____	
FX2CA-60P-1.27DSAL(71)	572-2355-1 71				44.45	
FX2CA-68P-1.27DSA(71)	572-2306-6 71	68	53.23	41.91	_____	
FX2CA-68P-1.27DSAL(71)	572-2356-4 71				49.53	
FX2CA-80P-1.27DSA(71)	572-2307-9 71	80	60.85	49.53	_____	
FX2CA-80P-1.27DSAL(71)	572-2357-7 71				57.15	
FX2CA-100P-1.27DSA(71)	572-2308-1 71	100	73.55	62.23	_____	
FX2CA-100P-1.27DSAL(71)	572-2358-0 71				69.85	
FX2CA-120P-1.27DSA(71)	572-2309-4 71	120	86.25	74.93	_____	
FX2CA-120P-1.27DSAL(71)	572-2359-2 71				82.55	

# Header No Cleaning Type

## Straight Type



## PCB mounting pattern



Note : Not required, if no prefixed pin is attached.

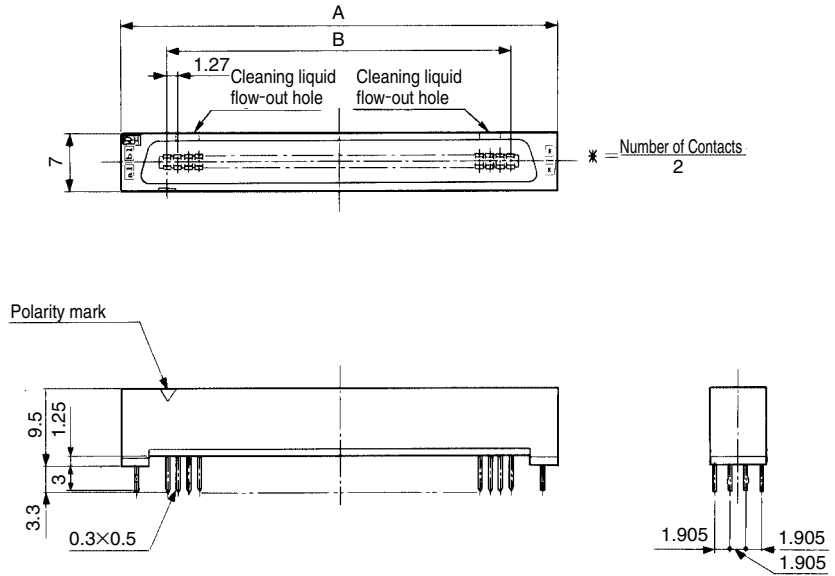
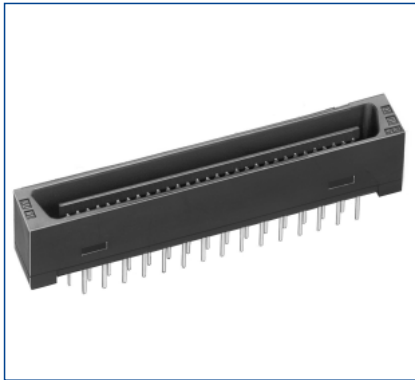
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2C1-20P-1.27DSA(71)	572-2211-1 71	20	22.75	11.43	_____	Yes
FX2C1-20P-1.27DSAL(71)	572-2261-0 71				19.05	
FX2C1-32P-1.27DSA(71)	572-2212-4 71	32	30.37	19.05	_____	
FX2C1-32P-1.27DSAL(71)	572-2262-2 71				26.67	
FX2C1-40P-1.27DSA(71)	572-2213-7 71	40	35.45	24.13	_____	
FX2C1-40P-1.27DSAL(71)	572-2263-5 71				31.75	
FX2C1-52P-1.27DSA(71)	572-2214-0 71	52	43.07	31.75	_____	
FX2C1-52P-1.27DSAL(71)	572-2264-8 71				39.37	
FX2C1-60P-1.27DSA(71)	572-2215-2 71	60	48.15	36.83	_____	
FX2C1-60P-1.27DSAL(71)	572-2265-0 71				44.45	
FX2C1-68P-1.27DSA(71)	572-2216-5 71	68	53.23	41.91	_____	
FX2C1-68P-1.27DSAL(71)	572-2266-3 71				49.53	
FX2C1-80P-1.27DSA(71)	572-2217-8 71	80	60.85	49.53	_____	
FX2C1-80P-1.27DSAL(71)	572-2267-6 71				57.15	
FX2C1-100P-1.27DSA(71)	572-2218-0 71	100	73.55	62.23	_____	
FX2C1-100P-1.27DSAL(71)	572-2268-9 71				69.85	
FX2C1-120P-1.27DSA(71)	572-2219-3 71	120	86.25	74.93	_____	
FX2C1-120P-1.27DSAL(71)	572-2269-1 71				82.55	

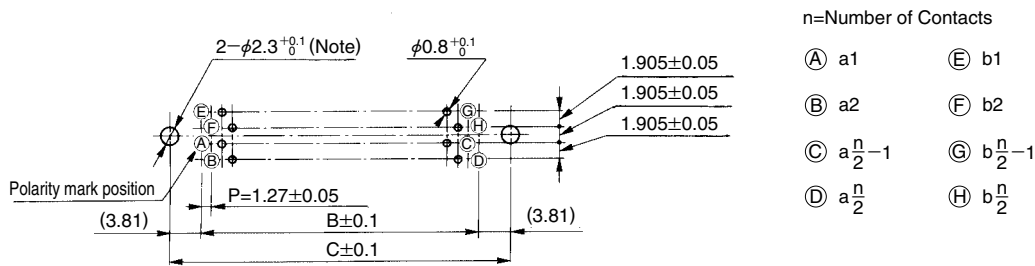


## Header Cleaning Type

### Straight Type



### PCB mounting pattern



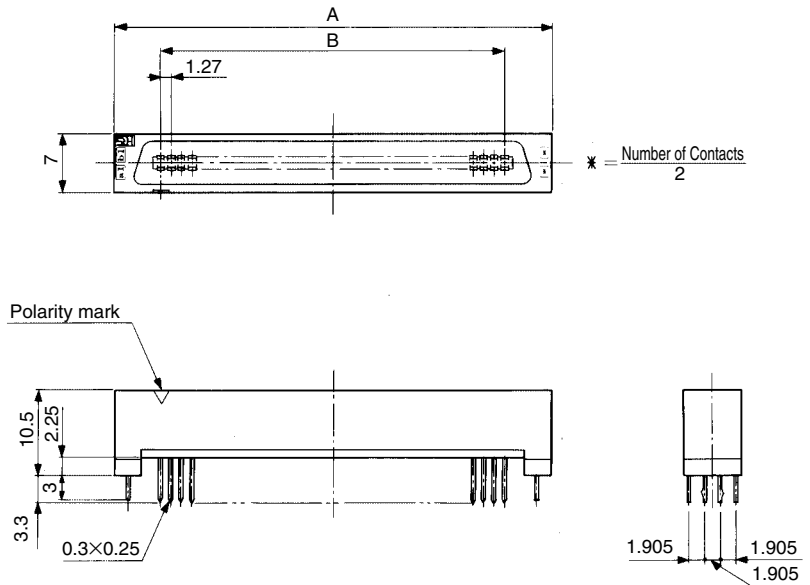
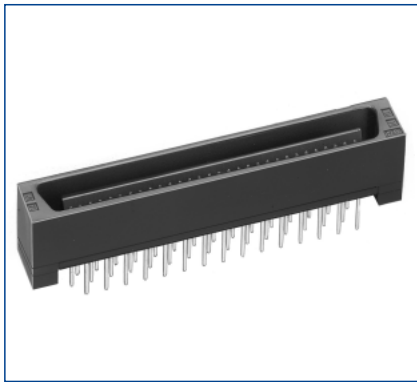
Note : Not required, if no prefixed pin is attached.

Unit : mm

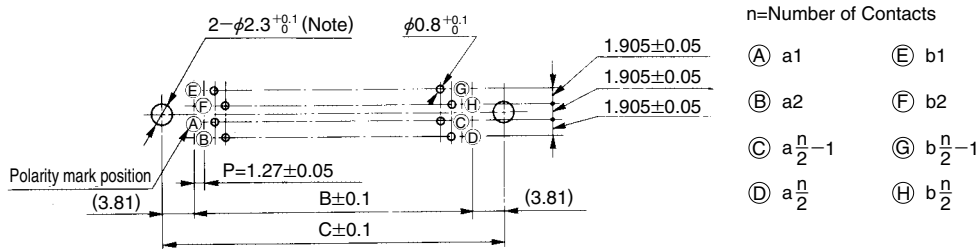
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2CA1-20P-1.27DSA(71)	572-2311-6 71	20	22.75	11.43	_____	Yes
FX2CA1-20P-1.27DSAL(71)	572-2361-4 71				19.05	
FX2CA1-32P-1.27DSA(71)	572-2312-9 71	32	30.37	19.05	_____	
FX2CA1-32P-1.27DSAL(71)	572-2362-7 71				26.67	
FX2CA1-40P-1.27DSA(71)	572-2313-1 71	40	35.45	24.13	_____	
FX2CA1-40P-1.27DSAL(71)	572-2363-0 71				31.75	
FX2CA1-52P-1.27DSA(71)	572-2314-4 71	52	43.07	31.75	_____	
FX2CA1-52P-1.27DSAL(71)	572-2364-2 71				39.37	
FX2CA1-60P-1.27DSA(71)	572-2315-7 71	60	48.15	36.83	_____	
FX2CA1-60P-1.27DSAL(71)	572-2365-5 71				44.45	
FX2CA1-68P-1.27DSA(71)	572-2316-0 71	68	53.23	41.91	_____	
FX2CA1-68P-1.27DSAL(71)	572-2366-8 71				49.53	
FX2CA1-80P-1.27DSA(71)	572-2317-2 71	80	60.85	49.53	_____	
FX2CA1-80P-1.27DSAL(71)	572-2367-0 71				57.15	
FX2CA1-100P-1.27DSA(71)	572-2318-5 71	100	73.55	62.23	_____	
FX2CA1-100P-1.27DSAL(71)	572-2368-3 71				69.85	
FX2CA1-120P-1.27DSA(71)	572-2319-8 71	120	86.25	74.93	_____	
FX2CA1-120P-1.27DSAL(71)	572-2369-6 71				82.55	

## Header No Cleaning Type

### ● Straight Type



### ◆ PCB mounting pattern



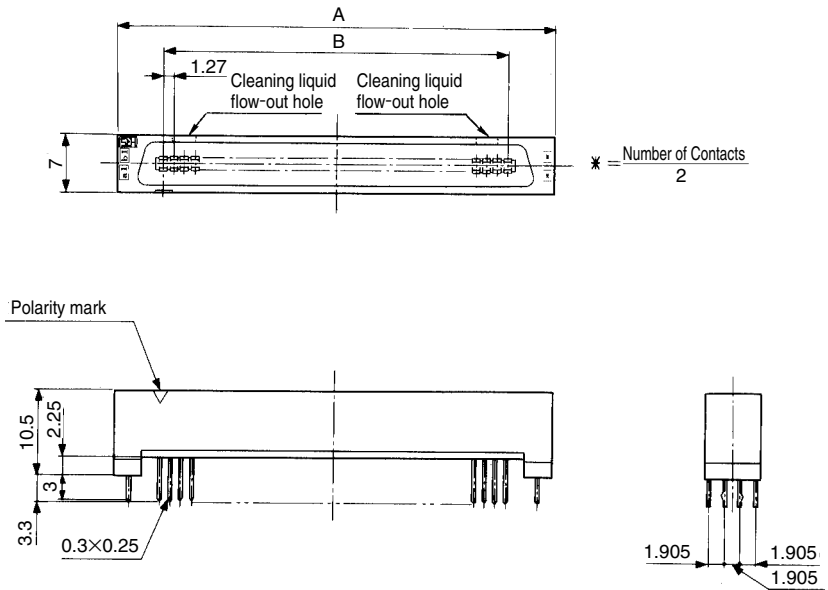
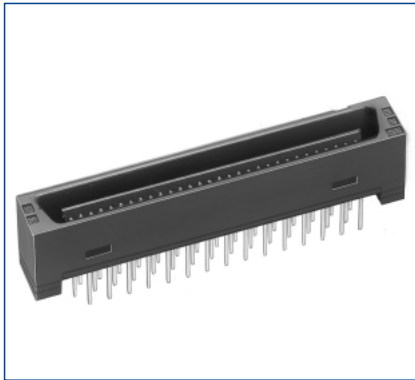
Note : Not required, if no prefixed pin is attached.

Unit : mm

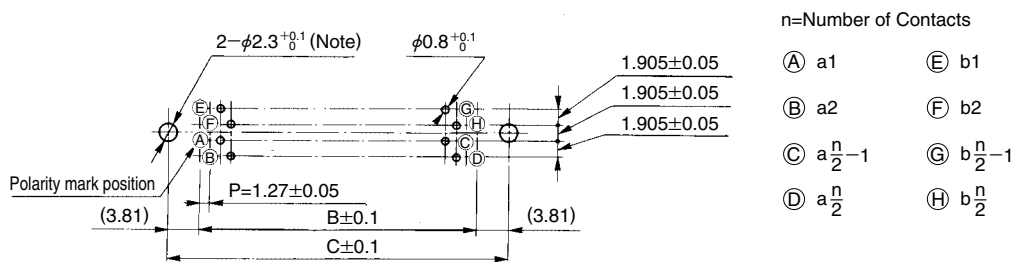
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2C2-20P-1.27DSA(71)	572-2221-5 71	20	22.75	11.43	_____	Yes
FX2C2-20P-1.27DSAL(71)	572-2271-3 71				19.05	
FX2C2-32P-1.27DSA(71)	572-2222-8 71	32	30.37	19.05	_____	
FX2C2-32P-1.27DSAL(71)	572-2272-6 71				26.67	
FX2C2-40P-1.27DSA(71)	572-2223-0 71	40	35.45	24.13	_____	
FX2C2-40P-1.27DSAL(71)	572-2273-9 71				31.75	
FX2C2-52P-1.27DSA(71)	572-2224-3 71	52	43.07	31.75	_____	
FX2C2-52P-1.27DSAL(71)	572-2274-1 71				39.37	
FX2C2-60P-1.27DSA(71)	572-2225-6 71	60	48.15	36.83	_____	
FX2C2-60P-1.27DSAL(71)	572-2275-4 71				44.45	
FX2C2-68P-1.27DSA(71)	572-2226-9 71	68	53.23	41.91	_____	
FX2C2-68P-1.27DSAL(71)	572-2276-7 71				49.53	
FX2C2-80P-1.27DSA(71)	572-2227-1 71	80	60.85	49.53	_____	
FX2C2-80P-1.27DSAL(71)	572-2277-0 71				57.15	
FX2C2-100P-1.27DSA(71)	572-2228-4 71	100	73.55	62.23	_____	
FX2C2-100P-1.27DSAL(71)	572-2278-2 71				69.85	
FX2C2-120P-1.27DSA(71)	572-2229-7 71	120	86.25	74.93	_____	
FX2C2-120P-1.27DSAL(71)	572-2279-5 71				82.55	

## Header Cleaning Type

### Straight Type



### PCB mounting pattern



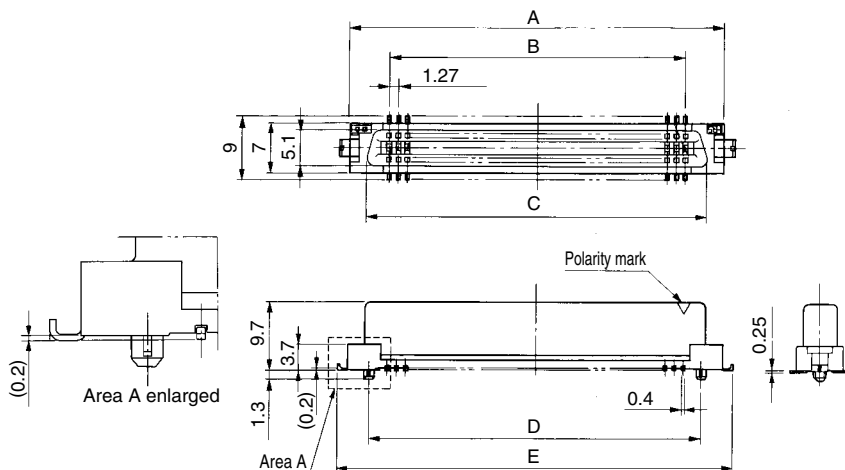
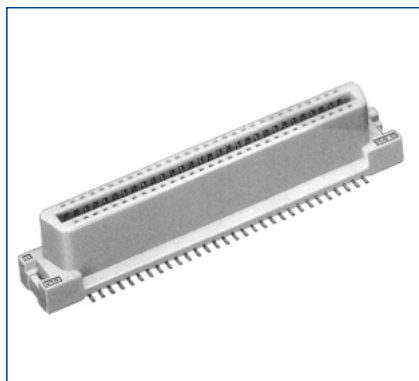
Note : Not required, if no prefixed pin is attached.

Unit : mm

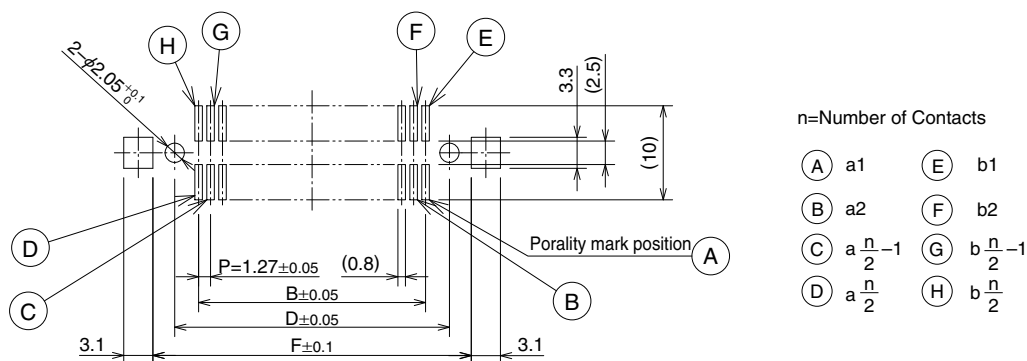
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2CA2-20P-1.27DSA(71)	572-2321-0 71	20	22.75	11.43	_____	Yes
FX2CA2-20P-1.27DSAL(71)	572-2371-8 71				19.05	
FX2CA2-32P-1.27DSA(71)	572-2322-2 71	32	30.37	19.05	_____	
FX2CA2-32P-1.27DSAL(71)	572-2372-0 71				26.67	
FX2CA2-40P-1.27DSA(71)	572-2323-5 71	40	35.45	24.13	_____	
FX2CA2-40P-1.27DSAL(71)	572-2373-3 71				31.75	
FX2CA2-52P-1.27DSA(71)	572-2324-8 71	52	43.07	31.75	_____	
FX2CA2-52P-1.27DSAL(71)	572-2374-6 71				39.37	
FX2CA2-60P-1.27DSA(71)	572-2325-0 71	60	48.15	36.83	_____	
FX2CA2-60P-1.27DSAL(71)	572-2375-9 71				44.45	
FX2CA2-68P-1.27DSA(71)	572-2326-3 71	68	53.23	41.91	_____	
FX2CA2-68P-1.27DSAL(71)	572-2376-1 71				49.53	
FX2CA2-80P-1.27DSA(71)	572-2327-6 71	80	60.85	49.53	_____	
FX2CA2-80P-1.27DSAL(71)	572-2377-4 71				57.15	
FX2CA2-100P-1.27DSA(71)	572-2328-9 71	100	73.55	62.23	_____	
FX2CA2-100P-1.27DSAL(71)	572-2378-7 71				69.85	
FX2CA2-120P-1.27DSA(71)	572-2329-1 71	120	86.25	74.93	_____	
FX2CA2-120P-1.27DSAL(71)	572-2379-0 71				82.55	

## Receptacle SMT Type

### Straight Type



### PCB mounting pattern

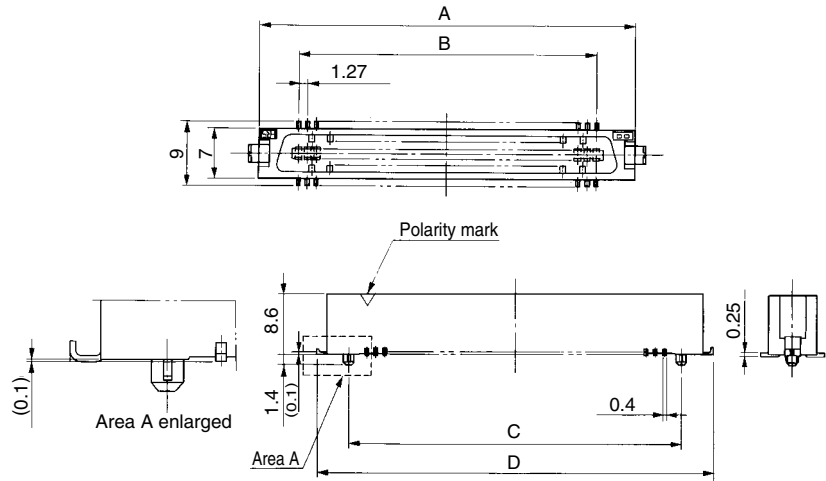
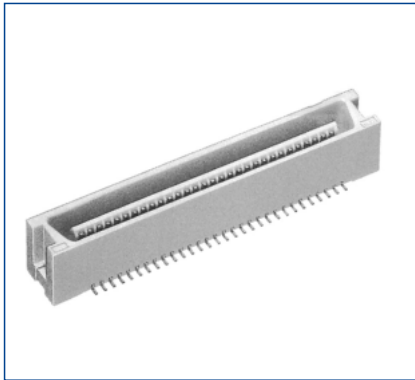


Unit : mm

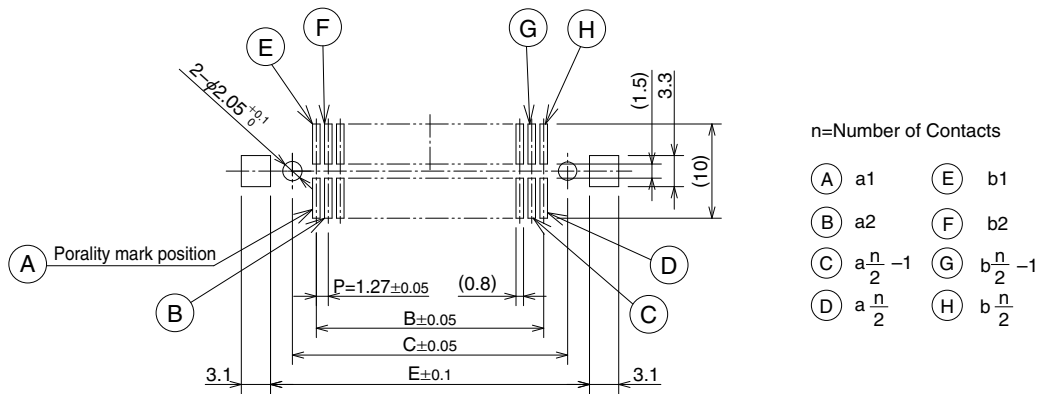
Part No.	HRS No.	No. of Contacts	A	B	C	D	E	F	RoHS
FX2-20S-1.27SV(71)	572-2101-3 71	20	22.75	11.43	17.63	16.51	—	—	Yes
FX2-20S-1.27SVL(71)	572-2151-1 71						25.75	21.15	
FX2-32S-1.27SV(71)	572-2102-6 71	32	30.37	19.05	25.25	24.13	—	—	
FX2-32S-1.27SVL(71)	572-2152-4 71						33.37	28.77	
FX2-40S-1.27SV(71)	572-2103-9 71	40	35.45	24.13	30.33	29.21	—	—	
FX2-40S-1.27SVL(71)	572-2153-7 71						38.45	33.85	
FX2-52S-1.27SV(71)	572-2104-1 71	52	43.07	31.75	37.95	36.83	—	—	
FX2-52S-1.27SVL(71)	572-2154-0 71						46.07	41.47	
FX2-60S-1.27SV(71)	572-2105-4 71	60	48.15	36.83	43.03	41.91	—	—	
FX2-60S-1.27SVL(71)	572-2155-2 71						51.15	46.55	
FX2-68S-1.27SV(71)	572-2106-7 71	68	53.23	41.91	48.11	46.99	—	—	
FX2-68S-1.27SVL(71)	572-2156-5 71						56.23	51.63	
FX2-80S-1.27SV(71)	572-2107-0 71	80	60.85	49.53	55.73	54.61	—	—	
FX2-80S-1.27SVL(71)	572-2157-8 71						63.85	59.25	
FX2-100S-1.27SV(71)	572-2108-2 71	100	73.55	62.23	68.43	67.31	—	—	
FX2-100S-1.27SVL(71)	572-2158-0 71						76.55	71.95	
FX2-120S-1.27SV(71)	572-2109-5 71	120	86.25	74.93	81.13	80.01	—	—	
FX2-120S-1.27SVL(71)	572-2159-3 71						89.25	84.65	

## Header SMT Type

### Straight Type



### PCB mounting pattern

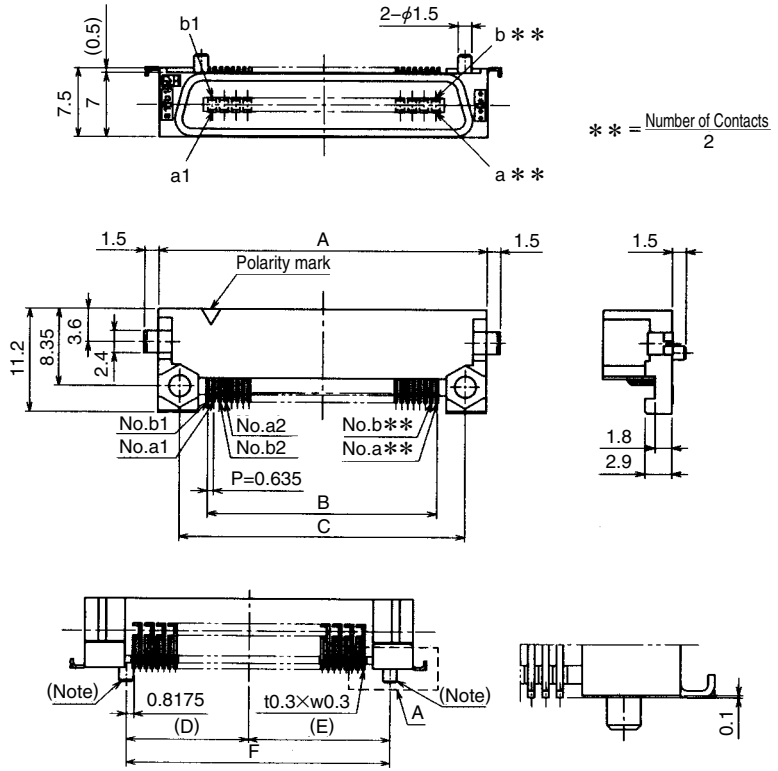


Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	C	D	E	RoHS
FX2-20P-1.27SV(71)	572-2001-9 71	20	22.75	11.43	16.51	—	—	Yes
FX2-20P-1.27SVL(71)	572-2051-7 71					25.75	21.15	
FX2-32P-1.27SV(71)	572-2002-1 71	32	30.37	19.05	24.13	—	—	
FX2-32P-1.27SVL(71)	572-2052-0 71					33.37	28.77	
FX2-40P-1.27SV(71)	572-2003-4 71	40	35.45	24.13	29.21	—	—	
FX2-40P-1.27SVL(71)	572-2053-2 71					38.45	33.85	
FX2-52P-1.27SV(71)	572-2004-7 71	52	43.07	31.75	36.83	—	—	
FX2-52P-1.27SVL(71)	572-2054-5 71					46.07	41.47	
FX2-60P-1.27SV(71)	572-2005-0 71	60	48.15	36.83	41.91	—	—	
FX2-60P-1.27SVL(71)	572-2055-8 71					51.15	46.55	
FX2-68P-1.27SV(71)	572-2006-2 71	68	53.23	41.91	46.99	—	—	
FX2-68P-1.27SVL(71)	572-2056-0 71					56.23	51.63	
FX2-80P-1.27SV(71)	572-2007-5 71	80	60.85	49.53	54.61	—	—	
FX2-80P-1.27SVL(71)	572-2057-3 71					63.85	59.25	
FX2-100P-1.27SV(71)	572-2008-8 71	100	73.55	62.23	67.31	—	—	
FX2-100P-1.27SVL(71)	572-2058-6 71					76.55	71.95	
FX2-120P-1.27SV(71)	572-2009-0 71	120	86.25	74.93	80.01	—	—	
FX2-120P-1.27SVL(71)	572-2059-9 71					89.25	84.65	

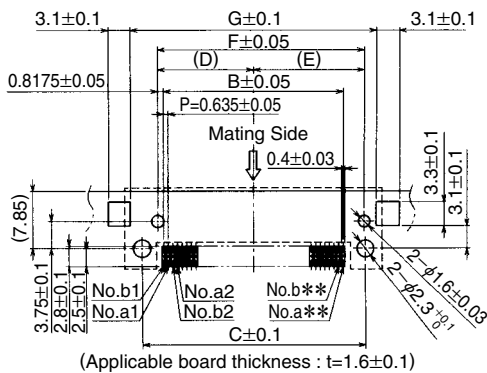
## Header SMT Type

### Right Angle Type

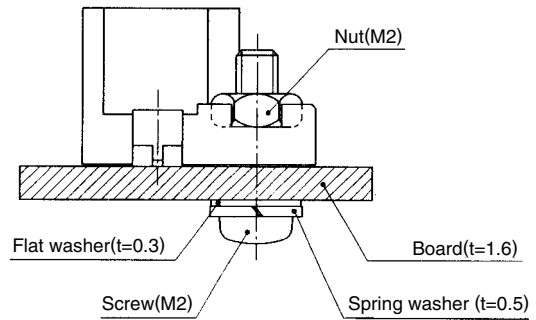


Note: The FX2A type does not have bosses as shown in the illustration.

## PCB mounting Pattern



## Recommended Screw Tightening Conditions



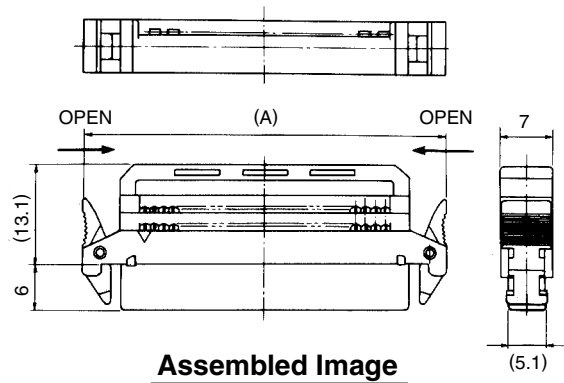
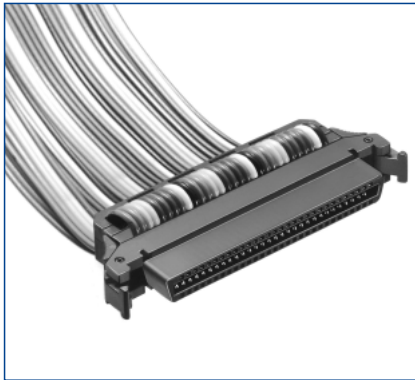
Use M2 screw for fixture.  
Recommended torque is 0.15(N·m).

Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	C	D	E	F	G	RoHS
FX2-20P-0.635SH(71)	572-2761-2 71	20	22.75	12.065	18.05	6.85	8.85	15.7	21.15	Yes
FX2A-20P-0.635SH(71)	572-2771-6 71					—	—	—		
FX2-40P-0.635SH(71)	572-2763-8 71	40	35.45	24.765	30.75	13.2	15.2	28.4	33.85	
FX2A-40P-0.635SH(71)	572-2773-1 71					—	—	—		
FX2-52P-0.635SH(71)	572-2764-0 71	52	43.07	32.385	38.37	17.01	19.01	36.02	41.47	
FX2A-52P-0.635SH(71)	572-2774-4 71					—	—	—		
FX2-60P-0.635SH(71)	572-2765-3 71	60	48.15	37.465	43.45	19.55	21.55	41.1	46.55	
FX2A-60P-0.635SH(71)	572-2775-7 71					—	—	—		
FX2-80P-0.635SH(71)	572-2767-9 71	80	60.85	50.165	56.15	25.9	27.9	53.8	59.25	
FX2A-80P-0.635SH(71)	572-2777-2 71					—	—	—		

## ■ Socket Type

### ● Cable Type with Lock

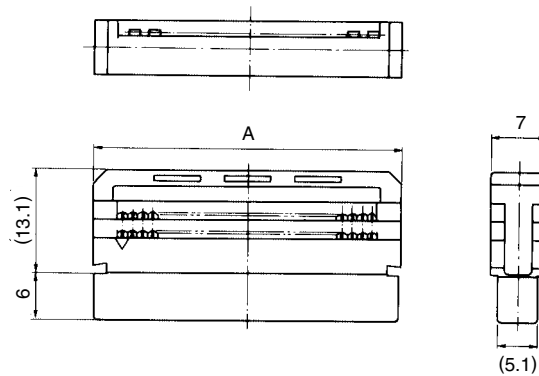


Assembled Image

Unit : mm

Part No.	HRS No.	No. of Contacts	A	RoHS
FX2B-20SA-1.27R	572-0621-2	20	27.83	Yes
FX2B-32SA-1.27R	572-0622-5	32	35.45	
FX2B-40SA-1.27R	572-0623-8	40	40.53	
FX2B-52SA-1.27R	572-0624-0	52	48.15	
FX2B-60SA-1.27R	572-0625-3	60	53.23	
FX2B-68SA-1.27R	572-0629-4	68	58.31	
FX2B-80SA-1.27R	572-0630-3	80	65.93	
FX2B-100SA-1.27R	572-0628-1	100	78.63	

### ● Cable Type without Lock



Assembled Image

Unit : mm

Part No.	HRS No.	No. of Contacts	A	RoHS
FX2BA-20SA-1.27R	572-0671-0	20	18.05	Yes
FX2BA-32SA-1.27R	572-0672-3	32	25.67	
FX2BA-40SA-1.27R	572-0673-6	40	30.75	
FX2BA-52SA-1.27R	572-0674-9	52	38.37	
FX2BA-60SA-1.27R	572-0675-1	60	43.45	
FX2BA-68SA-1.27R	572-0676-4	68	48.53	
FX2BA-80SA-1.27R	572-0677-7	80	56.15	
FX2BA-100SA-1.27R	572-0678-0	100	68.85	

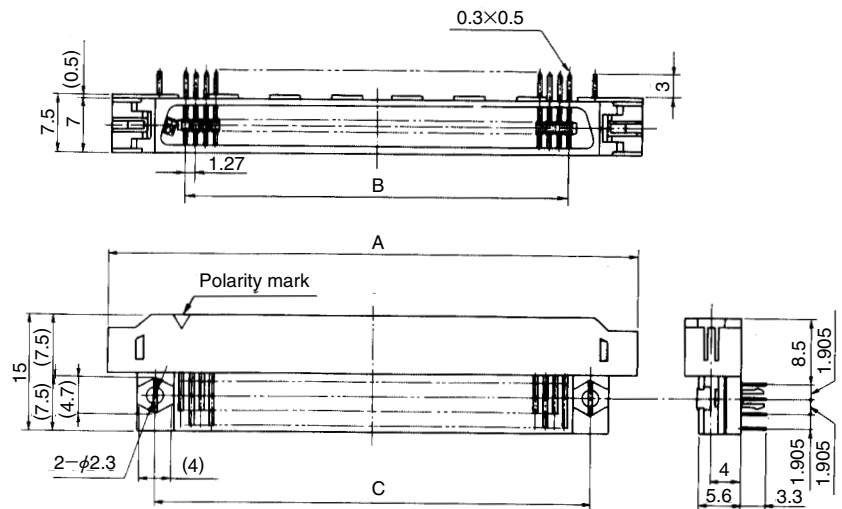
## ◆ Connection Tool

Type	Part No.	HRS No.
Guide plate	FX2B(A)-GPA	550-0212-6
Connection press	Hi-Flex connection press	550-0082-2

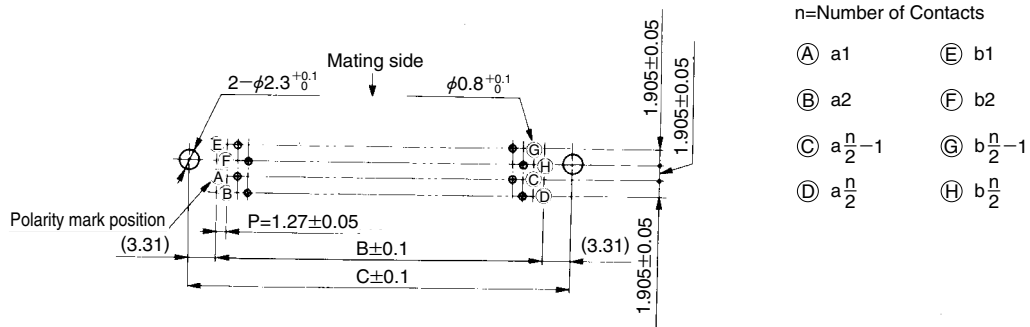
Note : HIF6 cable cutter FC601 isn't required for FX2B(A) cable assembly. (Connected without convex-concave cutting.)

## Header

### Right Angle Type with Lock



### PCB mounting pattern



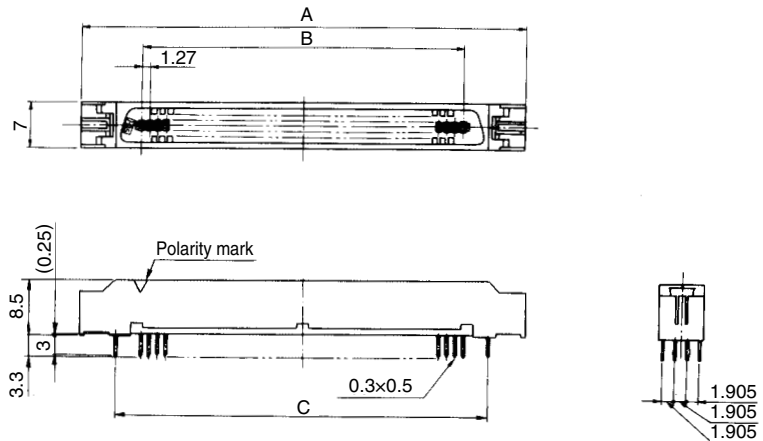
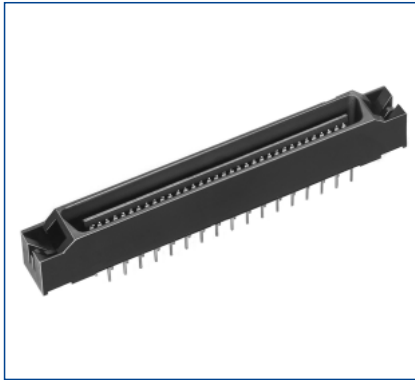
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2B-20PA-1.27DS(71)	572-0721-7 71	20	30.33	11.43	18.05	Yes
FX2B-20PA-1.27DSL(71)	572-0771-5 71					
FX2B-32PA-1.27DS(71)	572-0722-0 71	32	37.95	19.05	25.67	
FX2B-32PA-1.27DSL(71)	572-0772-8 71					
FX2B-40PA-1.27DS(71)	572-0723-2 71	40	43.03	24.13	30.75	
FX2B-40PA-1.27DSL(71)	572-0773-0 71					
FX2B-52PA-1.27DS(71)	572-0724-5 71	52	50.65	31.75	38.37	
FX2B-52PA-1.27DSL(71)	572-0774-3 71					
FX2B-60PA-1.27DS(71)	572-0725-8 71	60	55.73	36.83	43.45	
FX2B-60PA-1.27DSL(71)	572-0775-6 71					
FX2B-68PA-1.27DS(71)	572-0726-0 71	68	60.81	41.91	48.53	
FX2B-68PA-1.27DSL(71)	572-0776-9 71					
FX2B-80PA-1.27DS(71)	572-0727-3 71	80	68.43	49.53	56.15	
FX2B-80PA-1.27DSL(71)	572-0777-1 71					
FX2B-100PA-1.27DS(71)	572-0728-6 71	100	81.13	62.23	68.85	
FX2B-100PA-1.27DSL(71)	572-0778-4 71					

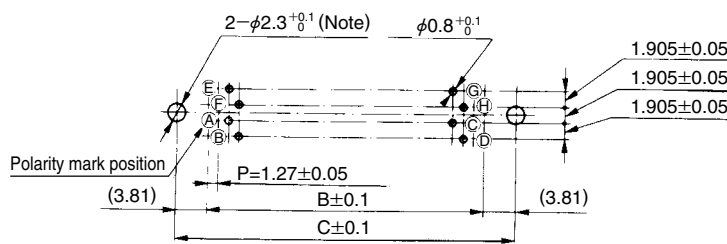


## Header No Cleaning Type

### Straight Type with Lock



### PCB mounting pattern



n=Number of Contacts

- Ⓐ a1      Ⓔ b1
- Ⓑ a2      Ⓣ b2
- Ⓒ  $a \frac{n}{2} - 1$       Ⓢ  $b \frac{n}{2} - 1$
- Ⓓ  $a \frac{n}{2}$       Ⓣ  $b \frac{n}{2}$

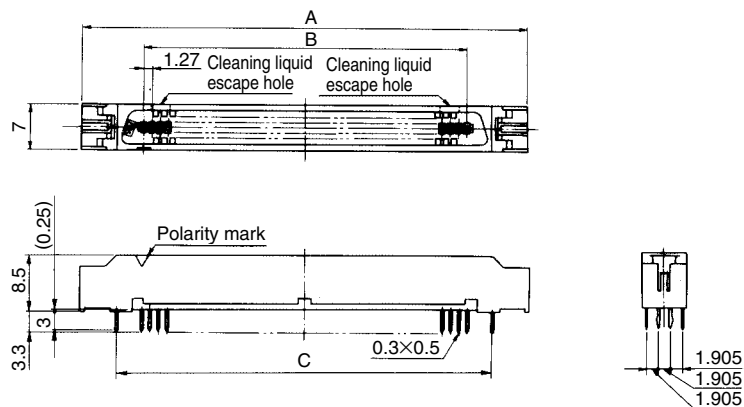
Note : Not required, unless the prefixed pin is attached.

Unit : mm

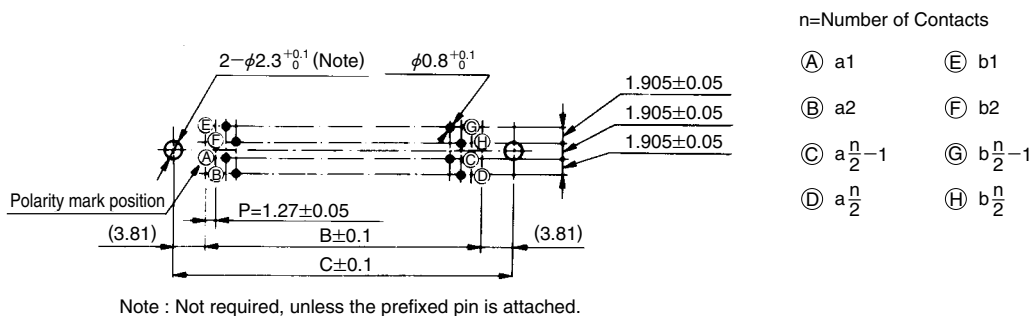
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2B-20P-1.27DSA(71)	572-0801-4 71	20	30.33	11.43	_____	Yes
FX2B-20P-1.27DSAL(71)	572-0851-2 71				19.05	
FX2B-32P-1.27DSA(71)	572-0802-7 71	32	37.95	19.05	_____	
FX2B-32P-1.27DSAL(71)	572-0852-5 71				26.67	
FX2B-40PA-1.27DSA(71)	572-0823-7 71	40	43.03	24.13	_____	
FX2B-40PA-1.27DSAL(71)	572-0873-5 71				31.75	
FX2B-52PA-1.27DSA(71)	572-0824-0 71	52	50.65	31.75	_____	
FX2B-52PA-1.27DSAL(71)	572-0874-8 71				39.37	
FX2B-60PA-1.27DSA(71)	572-0825-2 71	60	55.73	36.83	_____	
FX2B-60PA-1.27DSAL(71)	572-0875-0 71				44.45	
FX2B-68PA-1.27DSA(71)	572-0826-5 71	68	60.81	41.91	_____	
FX2B-68PA-1.27DSAL(71)	572-0876-3 71				49.53	
FX2B-80PA-1.27DSA(71)	572-0827-8 71	80	68.43	49.53	_____	
FX2B-80PA-1.27DSAL(71)	572-0877-6 71				57.15	
FX2B-100PA-1.27DSA(71)	572-0828-0 71	100	81.13	62.23	_____	
FX2B-100PA-1.27DSAL(71)	572-0878-9 71				69.85	

## Header Cleaning Type

### ● Straight Type with Lock



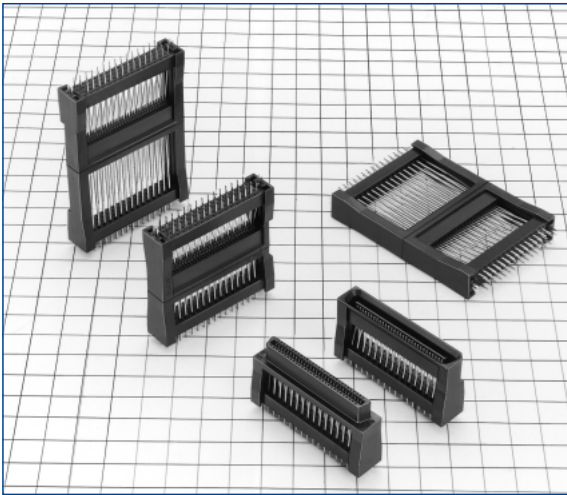
## PCB mounting pattern



Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2BA-20P-1.27DSA(71)	572-0901-9 71	20	30.33	11.43	_____	Yes
FX2BA-20P-1.27DSAL(71)	572-0951-7 71				19.05	
FX2BA-32P-1.27DSA(71)	572-0902-1 71	32	37.95	19.05	_____	
FX2BA-32P-1.27DSAL(71)	572-0952-0 71				26.67	
FX2BA-40PA-1.27DSA(71)	572-0923-1 71	40	43.03	24.13	_____	
FX2BA-40PA-1.27DSAL(71)	572-0973-0 71				31.75	
FX2BA-52PA-1.27DSA(71)	572-0924-4 71	52	50.65	31.75	_____	
FX2BA-52PA-1.27DSAL(71)	572-0974-2 71				39.37	
FX2BA-60PA-1.27DSA(71)	572-0925-7 71	60	55.73	36.83	_____	
FX2BA-60PA-1.27DSAL(71)	572-0975-5 71				44.45	
FX2BA-68PA-1.27DSA(71)	572-0926-0 71	68	60.81	41.91	_____	
FX2BA-68PA-1.27DSAL(71)	572-0976-8 71				49.53	
FX2BA-80PA-1.27DSA(71)	572-0927-2 71	80	68.43	49.53	_____	
FX2BA-80PA-1.27DSAL(71)	572-0977-0 71				57.15	
FX2BA-100PA-1.27DSA(71)	572-0928-5 71	100	81.13	62.23	_____	
FX2BA-100PA-1.27DSAL(71)	572-0978-3 71				69.85	

# FX2M6 Series



## Product Number Structure

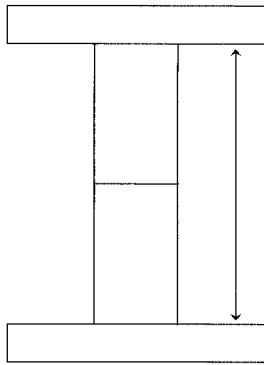
### Board to Board Receptacle

**FX2M6** **A - 60** **P - 1.27** **DSA** **L**

①      ②      ③      ④      ⑤      ⑥      ⑦

① Series Name : FX2M6
② Type No. : A
③ Number of contacts : 60
④ Contact Style P : Header S : Receptacle
⑤ Contact pitch : 1.27mm
⑥ DSA : Straight type
⑦ L : Board prefixed pin

## Stacking Variation



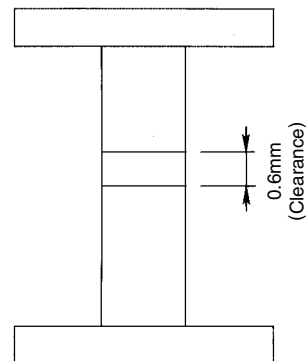
Unit : mm

Receptacle \ Header	FX2C-60S -1.27DSA	FX2C2-60S -1.27DSA	FX2M6B-60S -1.27DSAL	FX2M6A-60S -1.27DSAL
FX2C-60P -1.27DSA	12	14	28.2	44.2
FX2C1-60P -1.27DSA	13	15	29.2 *2	45.2 *2
FX2C2-60P -1.27DSA	14	16	30.2 *2	46.2 *2
FX2M6B-60P -1.27DSAL	28.4 *1	30.4 *1	44	60
FX2M6A-60P -1.27DSAL	34.4 *1	36.4 *1	50	66

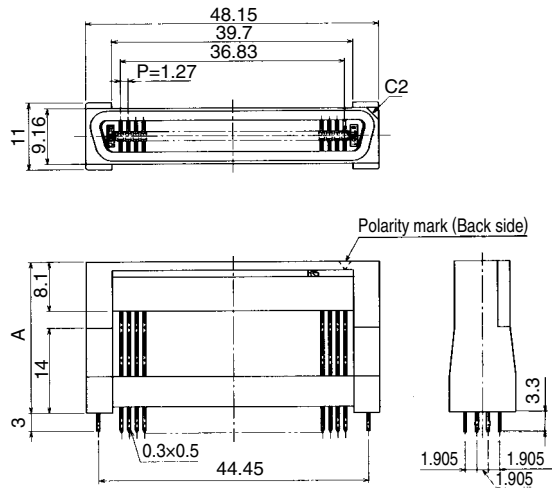
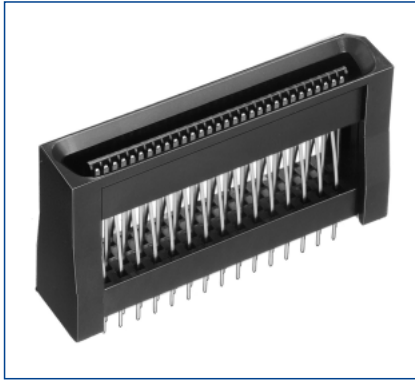
Note 1 : The permissible gap when male and female connectors are mated together shall be within 1.0 mm. However, the gap shall be within 0.4 mm for the assemblies indicated with "\*1."

Note 2 : For the assemblies indicated with "\*2," there may be a gap of 0.6 mm created between the mating surfaces as shown in the figure below but it is acceptable for use.

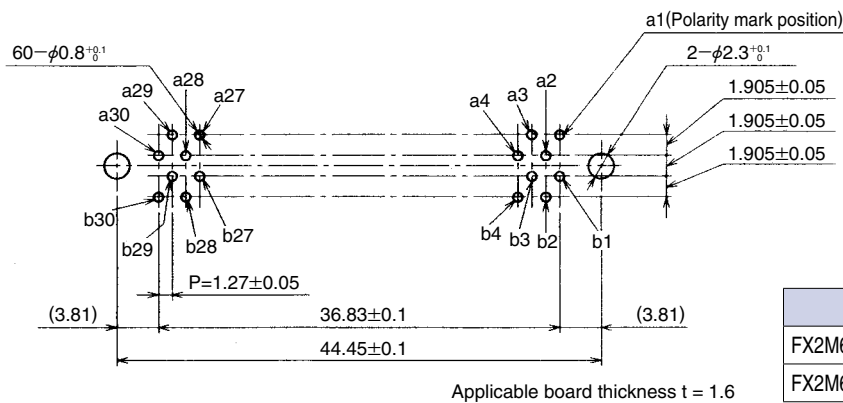
Note 3 : Please be sure to secure the PCB with screws after mounted.



### Header



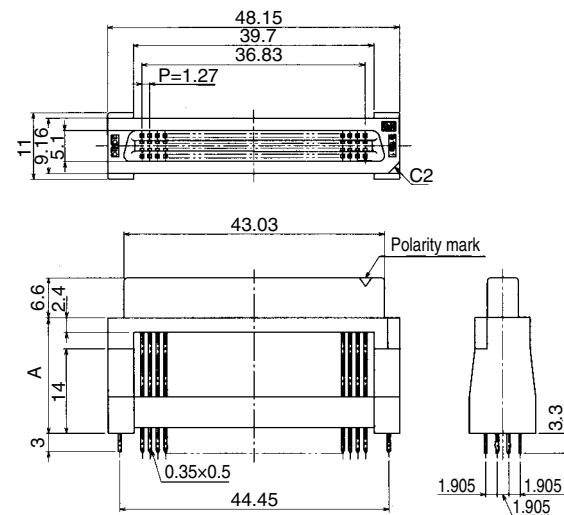
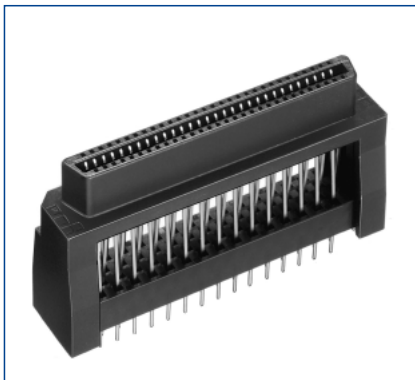
### PCB mounting pattern



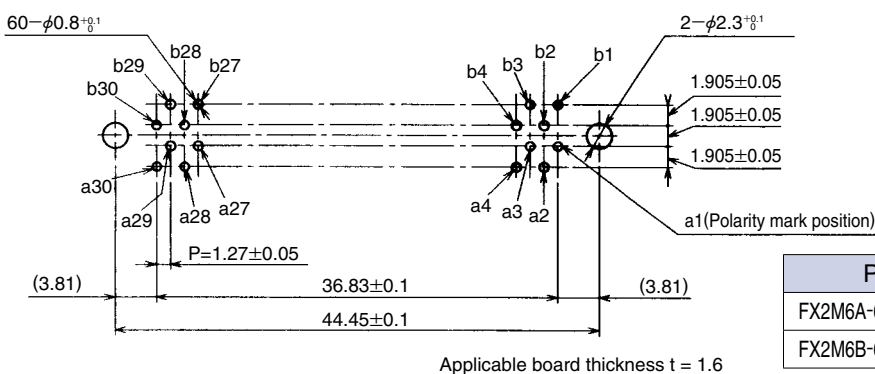
Unit : mm

Part No.	HRS No.	A	RoHS
FX2M6A-60P-1.27DSAL(71)	572-1036-8 71	30.9	Yes
FX2M6B-60P-1.27DSAL(71)	572-1041-8 71	24.9	

### Receptacle



### PCB mounting pattern

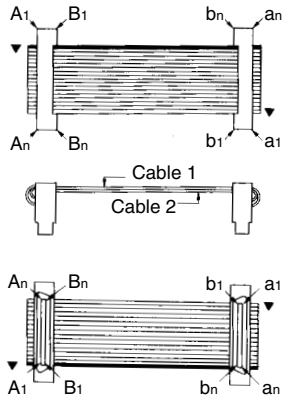


Unit : mm

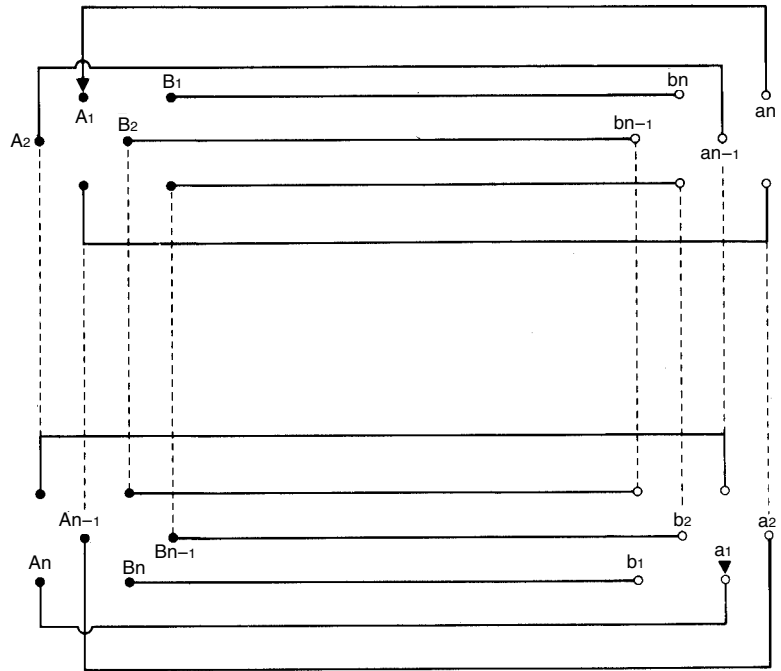
Part No.	HRS No.	A	RoHS
FX2M6A-60S-1.27DSAL(71)	572-1037-0 71	35.1	Yes
FX2M6B-60S-1.27DSAL(71)	572-1042-0 71	19.1	

◆ Recommended Circuit Design  $n = \frac{\text{Number of Contacts}}{2}$

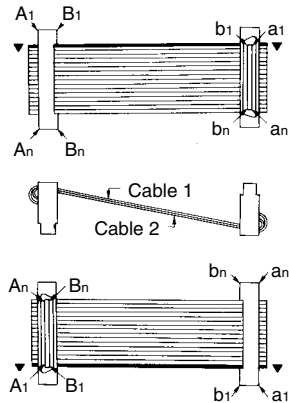
**Type A, B**



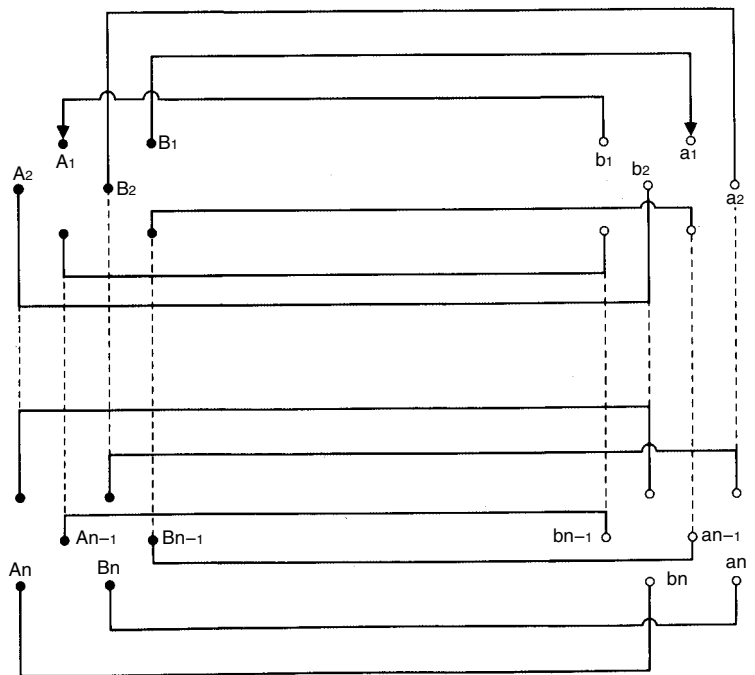
Cable 1 connection	Cable 2 connection
A1 — an	B1 — bn
A2 — an-1	B2 — bn-1
⋮	⋮
An — a1	Bn — b1



**Type A, A**



Cable 1 connection	Cable 2 connection
A1 — b1	B1 — a1
A2 — b2	B2 — a2
⋮	⋮
An — bn	Bn — an



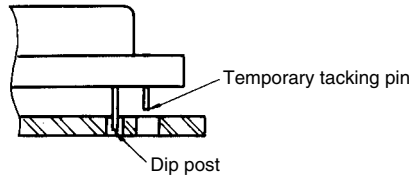
## ◆ How to use the connector

### 1. Selection of connectors

- ① FX2 Series connectors are designed to prevent flux creep-up in the soldering operation of straight type products, and the user needs to select from either non-cleaning types (FX2C-\* and FX2B-\*) or cleaning types (FX2CA-\* and FX2BA-\*). Please make sure to clean the right-angle types (FX2-\* and FX2B-\*). When cleaning them, be sure to use clean liquids.
- ② When using a socket cable type, the user needs to select a locked type if a load is applied on vibration/impact, or the cable. Additionally, please be sure to use cabler clamps when a load is applied on the cable.

### 2. The process of temporary tacking on the PCB

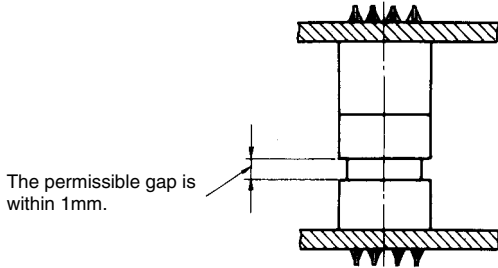
Please use the types equipped with temporary tacking pins when a temporary tacking process is required for mounting on the PCB. (Qualified thickness of the PCB :  $t=1.6\pm 0.1$ )



(Precaution) : In order to prevent damage to the dip post when it is mounted on the PCB, conduct the inserting operation while keeping the PCB and the connectors parallel to one another while the temporary tacking pin is pushed in after the dip post has been guided into the through hole of the PCB.

### 3. Mating Side Tolerance Clearance

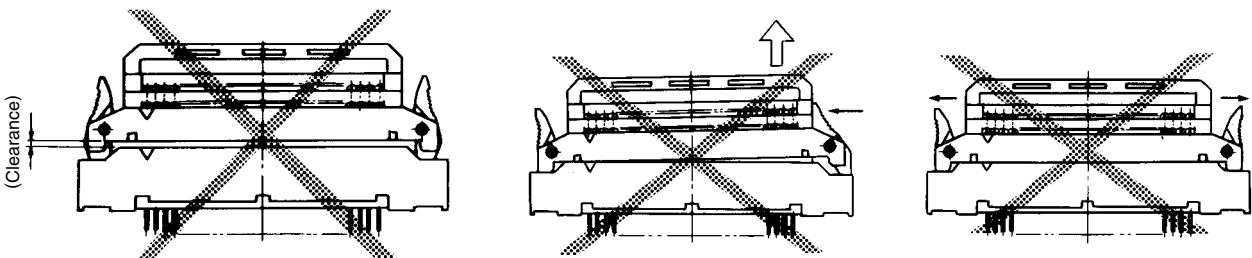
(Example) In the case of FX2C- $\overline{DP}$ -1.27DSA and FX2C- $\overline{DS}$ -1.27DSA\*P-1.27DSA and FX2C-\*S-1.27DSA



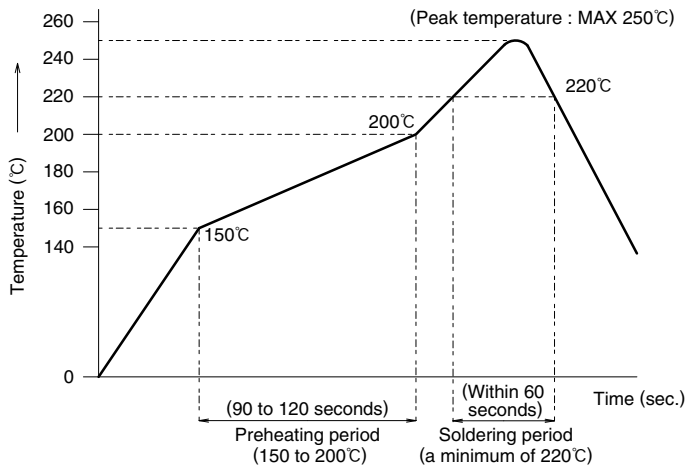
The permissible gap when a male and a female connectors are mated together shall be within 1 mm. (excluding locked cable types)

### 4. Indtructions for using locked cable types

- ① When mating connectors, please insert them to the end so that there is no gap in-between.
- ② When pulling out a connector, please be sure to pull it out after turning in the lock levers on both sides. If you pull out the connector while turning in only the lever on one side, the connector could be damaged.
- ③ Please make sure that the lock lever will not be open to the outside.



## 5. Temperature profile for mounting SMT type connectors (reference)



### <Applicable conditions>

Reflow method : Reflow together with far infrared ray and hot air (SENSBEY NR-II)

Environment in the reflow furnace : Ambient air

Solder : Cream type (Sn-3Ag-0.5Cu)  
(Flux contained amount: 11 Wt%)  
(M705-221CM5-42-10.5 manufactured by Senju Metal Industry Co., Ltd.)

PCB : Size 110 x 40 x 1.6 mm  
Material: Glass epoxy

Metal mask thickness : 0.2 mm (straight type)  
0.15 mm (right-angled type)

Note 1 : This temperature profile shows recommended values. Temperature should be measured on the top of the connector.

Note 2 : The number of reflow processes should be twice or less.

Note 3 : Impacts due to the type and manufacture of solder cream, PCB size, and other mounting materials, etc, may differ depending on the conditions. Please be sure to confirm the mounting conditions before use.

\* When using a 0.15 mm metal mask for the straight type connectors, please contact our technology center for recommended apertures.

## 6. Dimensions between the PCBs for SMT type connectors

The gap between the PCBs for male and female connectors shown in the applications does not include the solder cream thickness. Therefore, please take into account the thickness of the solder cream so that it is added to the gap between the PCBs after mounting the connectors.

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