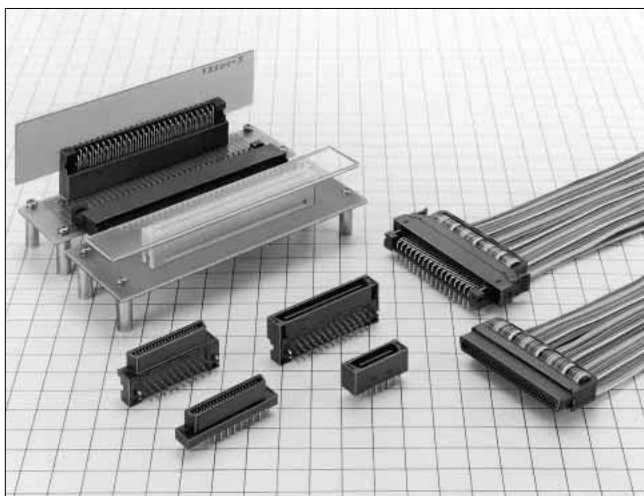


1.27mm Pitch Multi-function Two Piece Connector

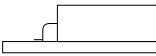
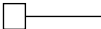
FX2 Series



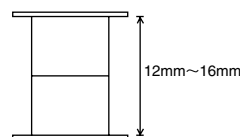
■ Features

1. Various connection with various product line

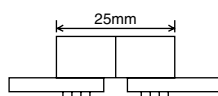
Stacking connection		Vertical type		Cable connection
Through hole type	SMT type	Through hole type	SMT type	
 Through hole type SMT type		 Through hole type SMT type		 Cable only

Through hole type 	⇐	Horizontal type 			
SMT type 		Vertical type <table><tr><th>Through hole type</th><th>SMT type</th></tr><tr><td></td><td></td></tr></table>	Through hole type	SMT type	
Through hole type	SMT type				
					
Cable only 	Cable connection 				

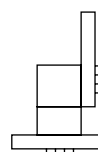
Stacking connection (Stack height: 12~16mm)



Horizontal Connection



Vertical Connection



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.



(2) With unique and preferable click feeling, the cable and connector can be inserted or withdrawn.



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

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

3. Board to board type

① Flux swell prevention

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 unit 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.

Applications

Computers, peripheral equipments, various machines etc.

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	1000M ohms min	250V DC
2. Withstanding Voltage	No flashover or insulation breakdown.	300V AC/1 minute
3. Contact Resistance	45m ohms 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: 55m ohms max. Insulation resistance: 100M ohms min.	96 hours at temperature of 40°C and humidity of 90% to 95%
6. Temperature Cycle	Contact resistance: 55m ohms max. Insulation resistance: 100M ohms 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: 55 m ohms 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.

Note 3: Information contained in this catalog represents general requirements for this Series. Contact us for the drawings and specifications for a specific part number shown.

Material

Parts	Material	Finish	Remark
Insulator	Dip type	Polyamid	UL94V-0
	Socket	PBT/Polyamid	
	SMT type	PPS	
Contact	Receptacle	Phosphor bronze	Selective gold plated
	Socket	Phosphor bronze	
	Header	Phosphor bronze or brass	

Stacking Variation



Header \ Receptacle		Dip type		SMT type
		FX2C-*S-1.27DSA(L)	FX2C2-*S-1.27DSA(L)	FX2-*S-1.27SV(L)
Dip type	FX2C-*P-1.27DSA(L)	12	14.0	12.2
	FX2CA-*P-1.27DSA(L)			
	FX2CA1-*P-1.27DSA(L)			
	FX2CA2-*P-1.27DSA(L)			
SMT type	FX2-*P-1.27SV(L)	12.1	14.1	12.3

Unit:mm

■ Ordering Information

● 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 Number of contacts: 20, 32, 40, 52, 60, 68, 80, 100, 120
② Blank: Right angle type	⑤ Connector type: S: Receptacle
C : Straight non-cleaning type	⑥ Contact pitch: 1.27mm
CA : Straight cleaning type	⑦ Contact type
③ Product height variation (DSA only)	DS : Right angle type
Blank : Standard product	DSA : Straight type
2 : +2mm	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 Number of contacts: 20, 32, 40, 52, 60, 68, 80, 100, 120
② None : Right angle type	⑤ Connector type: P: header
C : Straight non-cleaning type	⑥ Contact pitch: 1.27mm
CA : Straight cleaning type	⑦ Contact type:
③ Product height variation (DSA only)	DS : Right angle type
Blank : Standard product	DSA : Straight type
1 : +1mm	⑧ L: Board prefixed pin
2 : +2mm	

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	⑤ A: Contact material: phosphor bronze
BA : No lock cable type	⑥ Contact pitch: 1.27mm
③ Number of contacts: 20, 32, 40, 52, 60, 68, 80, 100	⑦ R: Insulation displacement

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

●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
③ Number of contacts: 20, 32, 40, 52, 60, 68, 80, 100	⑦ Contact type: DS : Right angle type DSA : Straight type
④ Connector type: P: header	⑧ L: Board prefixed pin

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 Number 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 Number of contacts: 20, 40, 52, 60, 80	⑥ Contact type SH: Right angle SMT type

◆FX2 Functional Flow Chart

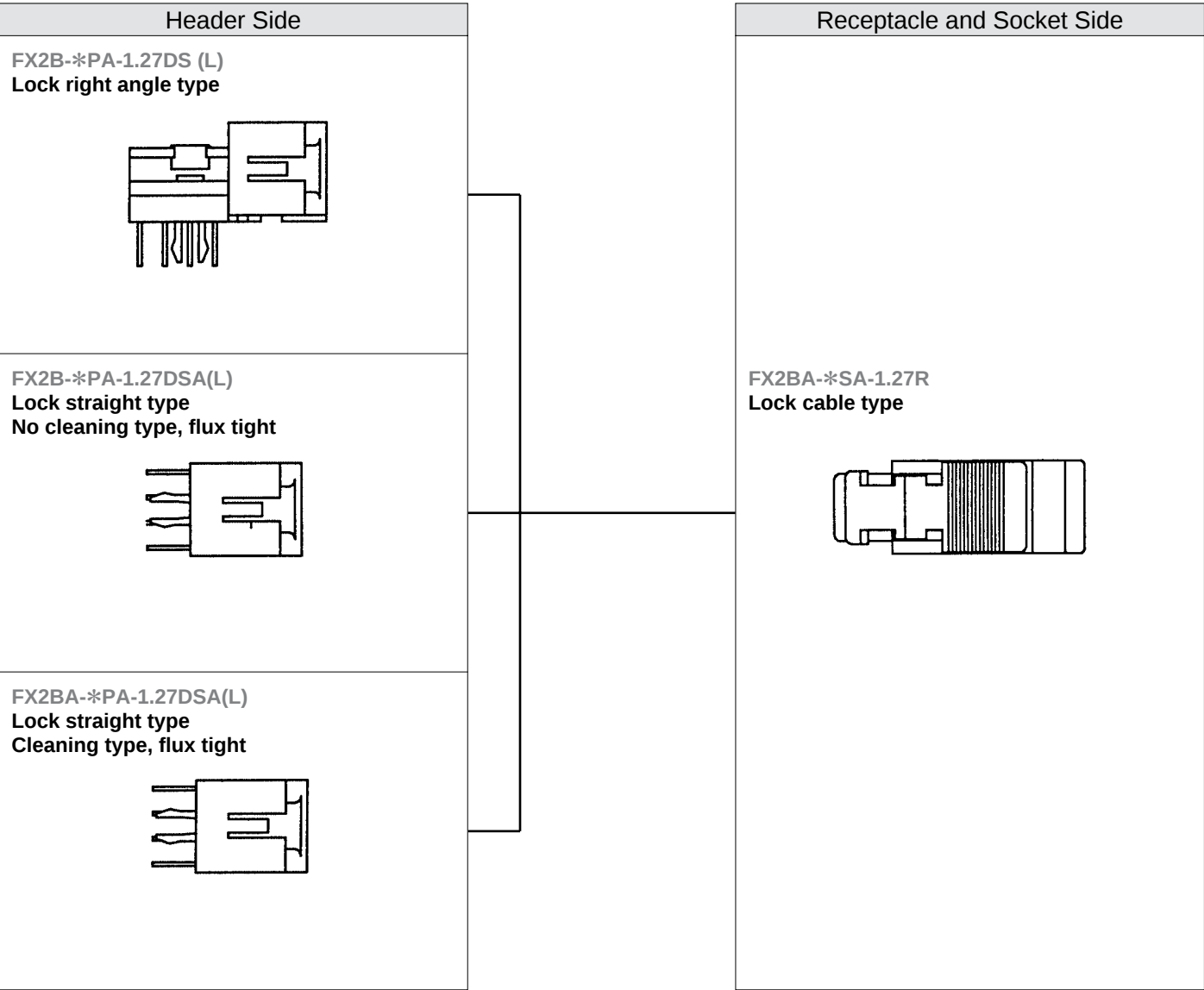
Board to Board Cable Type

Header Side	Receptacle and Socket Side
FX2-*P-1.27DS (L) Right angle type 	FX2-*S-1.27DS (L) Right angle type 
FX2(A)-*P-0.635SH Right angle type SMT type 	FX2C-*S-1.27DS (L) Straight type No cleaning type, flux tight 
FX2C-*P-1.27DSA (L) Straight type No cleaning type, flux tight 	FX2C-*S-1.27DS (L) Straight type Cleaning type, flux tight 
FX2CA-*P-1.27DSA (L) Straight type Cleaning type, flux tight 	FX2CA-*S-1.27DSV (L) Straight type SMT type 
FX2-*P-1.27DSA (L) Straight type SMT type 	FX2BA-*SA-1.27R No lock cable type 

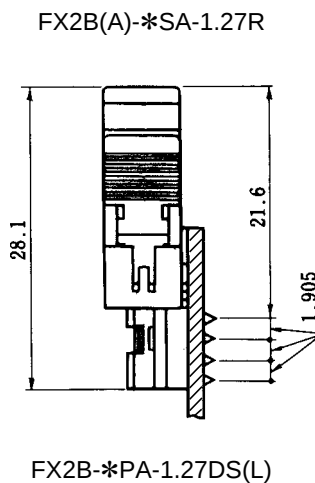
FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

◆FX2 Functional Flow Chart

Board to Board Cable Type



Through hole Type Application Pattern



◆ SMT Type Application Pattern

FX2-*P-1.27SV(L)



FX2-*S-1.27SV(L)

FX2-*S-1.27SV(L)



FX2-*P-1.27SV(L)



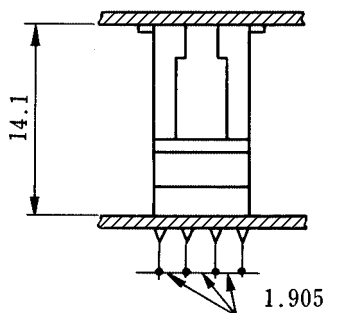
FX2C(A)-*S-1.27-DSA(L)

FX2-*S-1.27SV(L)



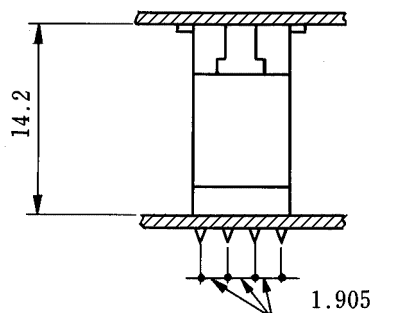
FX2C(A)1-*P-1.27DSA(L)

FX2-*P-1.27SV(L)



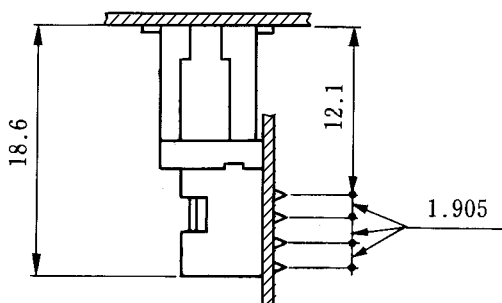
FX2C(A)2-*S-1.27DSA(L)

FX2-*S-1.27SV(L)



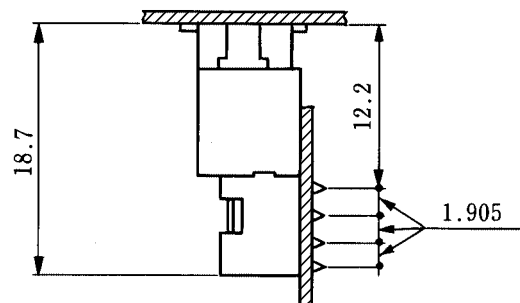
FX2C(A)2-*P-1.27DSA(L)

FX2-*P-1.27SV(L)



FX2-*S-1.27DS(L)

FX2-*S-1.27SV(L)



FX2-*P-1.27DS(L)

◆ SMT Type Application Pattern

FX2(A)-*P-0.635SH

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



FX2(A)-*P-0.635SH



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

FX2-*S-1.27SV(L)

FX2(A)-*P-0.635SH

FX2(A)-*P-0.635SH



FX2-*S-1.27DS(L)



FX2BA-*SA-1.27R

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

■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

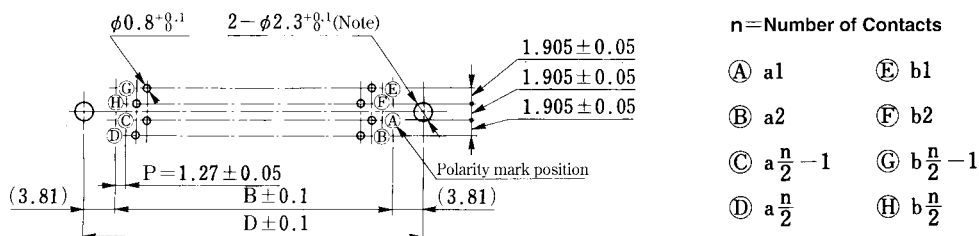
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
FX2C- 20S-1.27DSA(71)	572-2401-7-71	20	22.75	11.43	17.63	_____	YES
FX2C- 20S-1.27DSAL(71)	572-2451-5-71					19.05	
FX2C- 32S-1.27DSA(71)	572-2402-0-71	32	30.37	19.05	25.25	_____	
FX2C- 32S-1.27DSAL(71)	572-2452-8-71					26.67	
FX2C- 40S-1.27DSA(71)	572-2403-2-71	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 Number	CL No.	Number of Contacts	A	B	C	D	RoHS
FX2CA- 20S-1.27DSA(71)	572-2501-1-71	20	22.75	11.43	17.63	_____	YES
FX2CA- 20S-1.27DSAL(71)	572-2551-0-71					19.05	
FX2CA- 32S-1.27DSA(71)	572-2502-4-71	32	30.37	19.05	25.25	_____	
FX2CA- 32S-1.27DSAL(71)	572-2552-2-71					26.67	
FX2CA- 40S-1.27DSA(71)	572-2503-7-71	40	35.45	24.13	30.33	_____	
FX2CA- 40S-1.27DSAL(71)	572-2553-5-71					31.75	
FX2CA- 52S-1.27DSA(71)	572-2504-0-71	52	43.07	31.75	37.95	_____	
FX2CA- 52S-1.27DSAL(71)	572-2554-8-71					39.37	
FX2CA- 60S-1.27DSA(71)	572-2505-2-71	60	48.15	36.83	43.03	_____	
FX2CA- 60S-1.27DSAL(71)	572-2555-0-71					44.45	
FX2CA- 68S-1.27DSA(71)	572-2506-5-71	68	53.23	41.91	48.11	_____	
FX2CA- 68S-1.27DSAL(71)	572-2556-3-71					49.53	
FX2CA- 80S-1.27DSA(71)	572-2507-8-71	80	60.85	49.53	55.73	_____	
FX2CA- 80S-1.27DSAL(71)	572-2557-6-71					57.15	
FX2CA-100S-1.27DSA(71)	572-2508-0-71	100	73.55	62.23	68.43	_____	
FX2CA-100S-1.27DSAL(71)	572-2558-9-71					69.85	
FX2CA-120S-1.27DSA(71)	572-2509-3-71	120	86.25	74.93	81.13	_____	
FX2CA-120S-1.27DSAL(71)	572-2559-1-71					82.55	

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

■Receptacle No Cleaning Type

●Straight Type



◆PCB mounting pattern



n = Number of Contacts

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

Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
FX2C2- 20S-1.27DSA(71)	572-2421-4-71	20	22.75	11.43	17.63	_____	YES
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



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

Unit:mm

Part Number	CL No.	Number 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	

●Right Angle Type

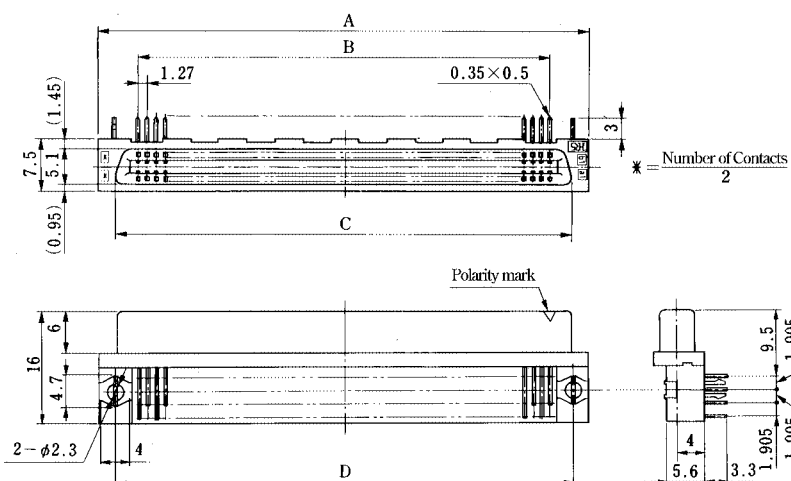


Figure 1 is a dimensional drawing of the mating side of a connector. The drawing shows a cross-section of the connector with various dimensions and labels. Key dimensions include: $2 \cdot \phi 2.3^{+0.1}_0$ (top left), $\phi 0.8^{+0.1}_0$ (top right), 1.27 ± 0.05 (middle left), $B \pm 0.1$ (bottom left), $D \pm 0.1$ (bottom left), 1.905 ± 0.05 (right side, top), 1.905 ± 0.05 (right side, bottom), and (3.31) (bottom left and right). Labels include "Mating side" with a downward arrow, "Polarity mark position" with a dashed line, and contact points labeled A, B, C, D, E, F, G, H. A table on the right defines the contact points: $n = \text{Number of Contacts}$, A a1, B a2, C a $\frac{n}{2}-1$, D a $\frac{n}{2}$, E b1, F b2, G b $\frac{n}{2}-1$, H b $\frac{n}{2}$.

[illegible]

Header

Right Angle Type



PCB mounting pattern



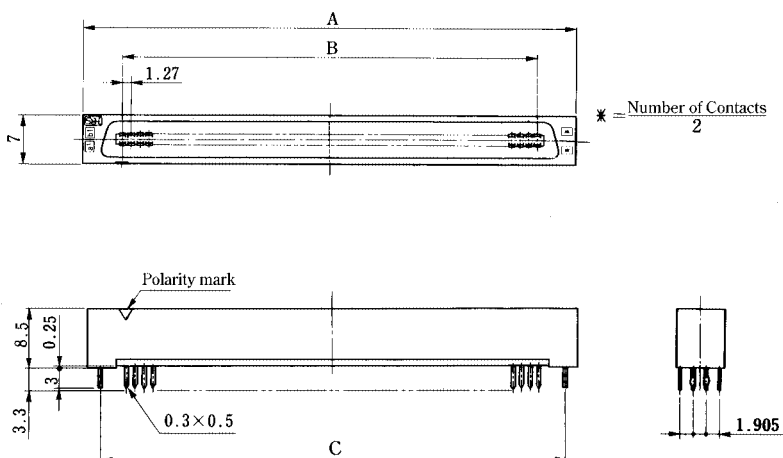
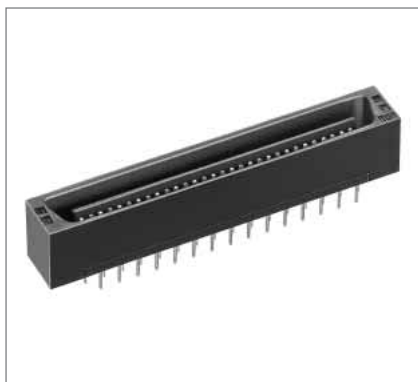
Unit:mm

Part Number	CL No.	Number 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					

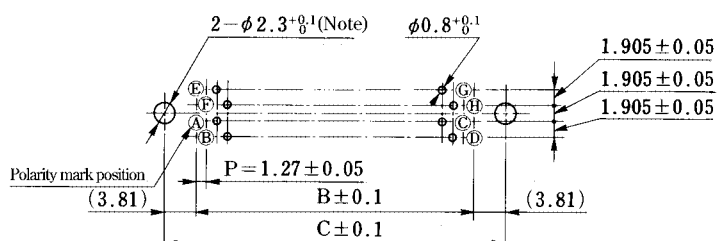
FX2 Series 1.27mm Pitch Multi-Function Two Piece Connector

Header No Cleaning Type

Straight Type



PCB mounting pattern



n = Number of Contacts

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

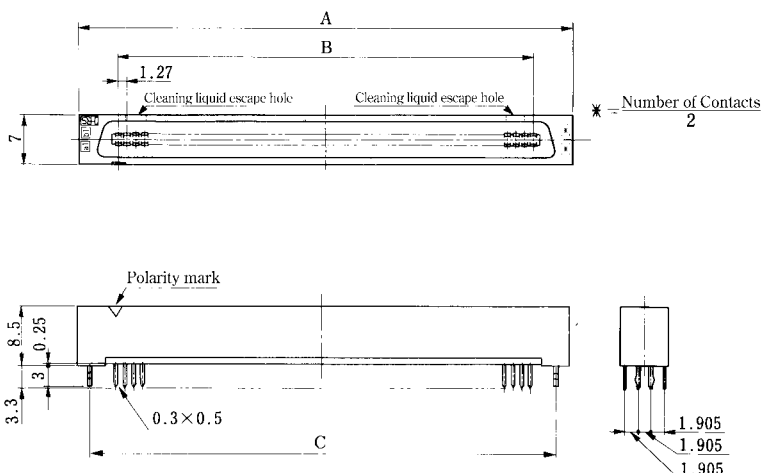
Note: Not required, if no prefixed pin is attached.

Unit:mm

Part Number	CL No.	Number 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



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

n = Number of Contacts

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

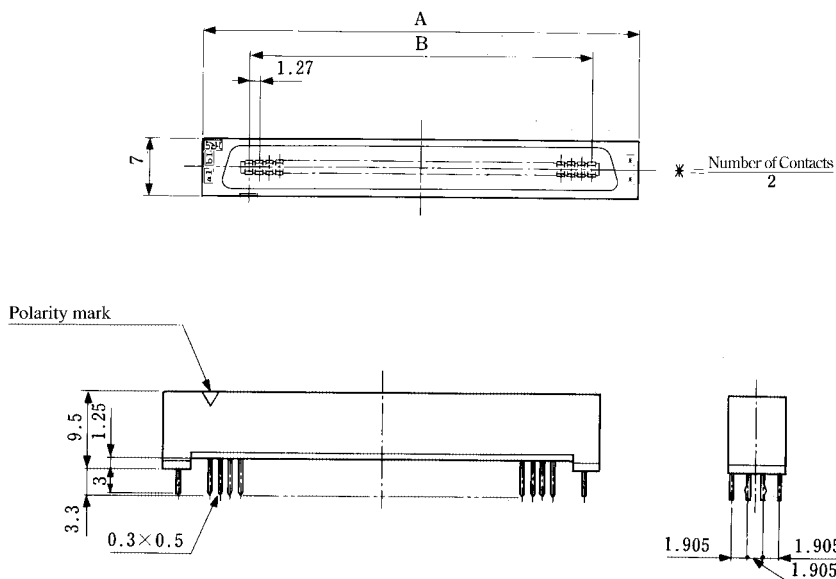
Unit:mm

Part Number	CL No.	Number 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	

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

Header No Cleaning Type

●Straight Type



PCB mounting pattern



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

Unit: mm

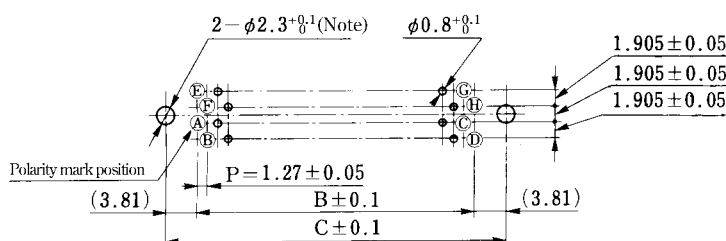
Part Number	CL No.	Number of Contacts	A	B	C	RoHS
FX2C1- 20P-1.27DSA(71)	572-2211-1-71	20	22.75	11.43	—	YES
FX2C1- 20P-1.27DSAL(71)	572-2261-0-71				19.05	
FX2C1- 32P-1.27DSA(71)	572-2212-4-71	32	30.37	19.05	—	
FX2C1- 32P-1.27DSAL(71)	572-2262-2-71				26.67	
FX2C1- 40P-1.27DSA(71)	572-2213-7-71	40	35.45	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



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.

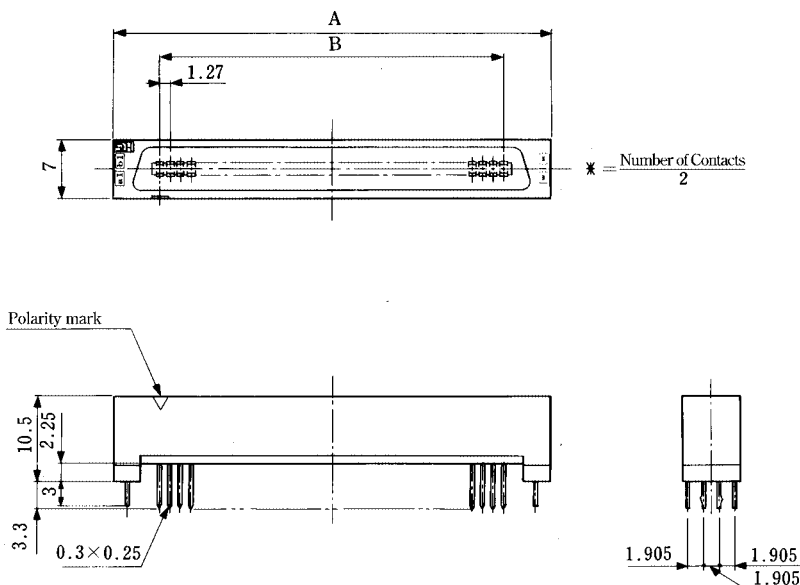
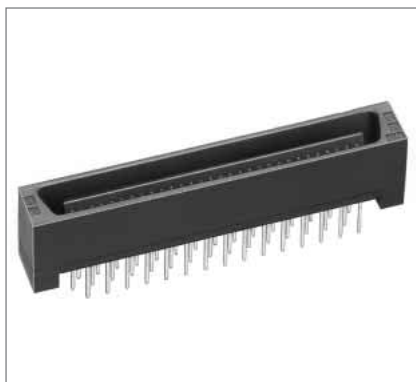
Unit: mm

Part Number	CL No.	Number 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	

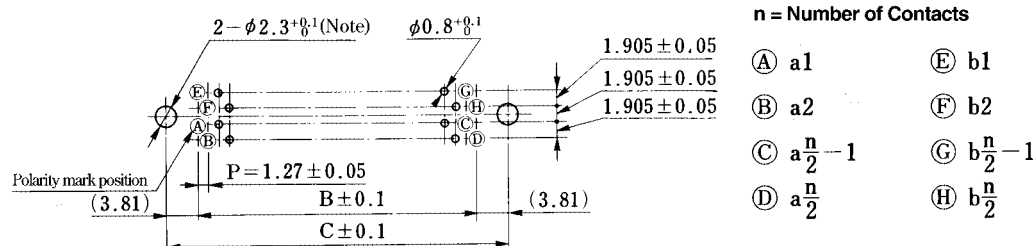
FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

Header No Cleaning Type

●Straight Type



PCB mounting pattern



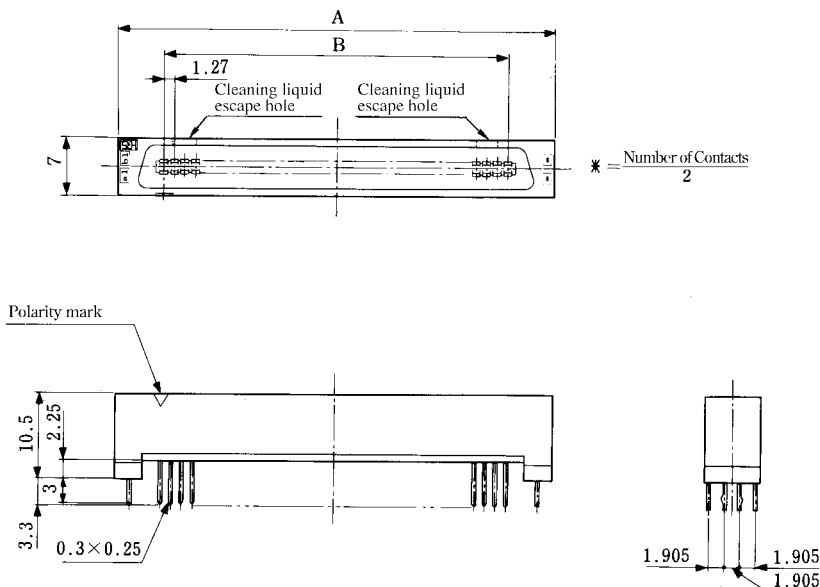
Note: Not required, if no prefixed pin is attached.

Unit: mm

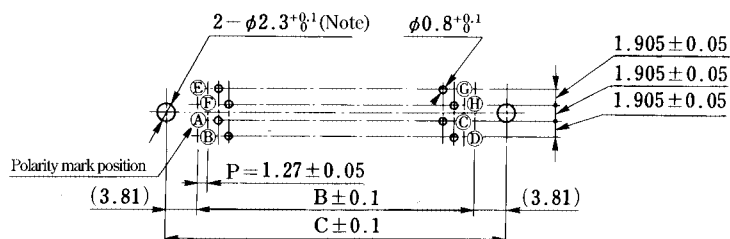
Part Number	CL No.	Number of Contacts	A	B	C	RoHS
FX2C2- 20P-1.27DSA(71)	572-2221-5-71	20	22.75	11.43	—	YES
FX2C2- 20P-1.27DSAL(71)	572-2271-3-71				19.05	
FX2C2- 32P-1.27DSA(71)	572-2222-8-71	32	30.37	19.05	—	
FX2C2- 32P-1.27DSAL(71)	572-2272-6-71				26.67	
FX2C2- 40P-1.27DSA(71)	572-2223-0-71	40	35.45	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



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.

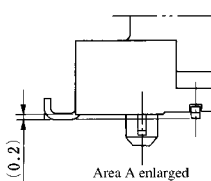
Unit: mm

Part Number	CL No.	Number 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	

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

■Receptacle SMT Type

●Straight Type



Note 1 : The 120 contacts type differs in the style.

Note 2 : The connector positioning bosses are constructed to press fit into the board with light force. When mounting on the board, press the connector lightly from the top and check that the positioning bosses are securely inserted in the board holes and that the connector leads are engaged in the board. The recommended boss hole for use with automatic mounting is illustrated in fig. 1.

◆PCB mounting pattern



n = Number of Contacts

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

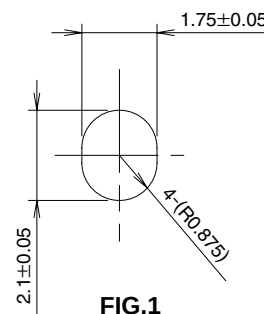
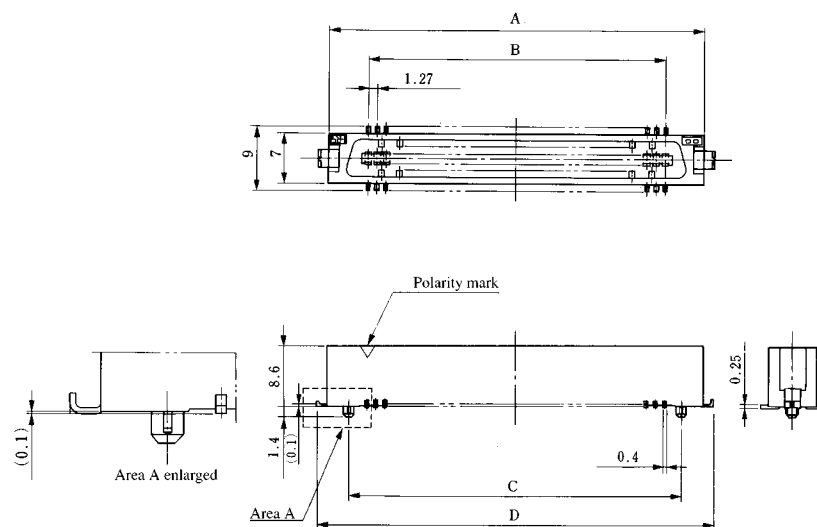


FIG.1

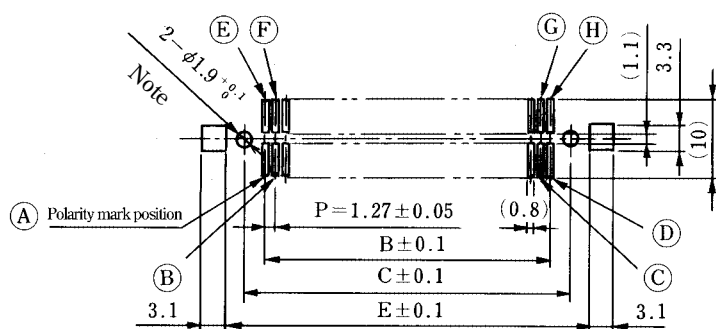
Unit: mm

Part Number	CL No.	Number 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	

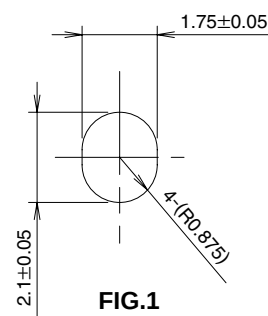
●Straight Type



PCB mounting pattern



(A) a_1 (E) b_1
 (B) a_2 (F) b_2
 (C) $a \frac{n}{2} - 1$ (G) $b \frac{n}{2} - 1$
 (D) $a \frac{n}{2}$ (H) $b \frac{n}{2}$



Unit: mm

Part Number	CL No.	Number 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	

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

Header SMT Type

Right Angle Type



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

PCB mounting Pattern



Recommended Screw Clamp



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

Unit: mm

Part Number	CL No.	Number 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

●Lock Cable Type



Combination View

Unit: mm

Part Number	CL No.	Number 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	

●Unlock Cable Type



Combination View

Unit: mm

Part Number	CL No.	Number 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

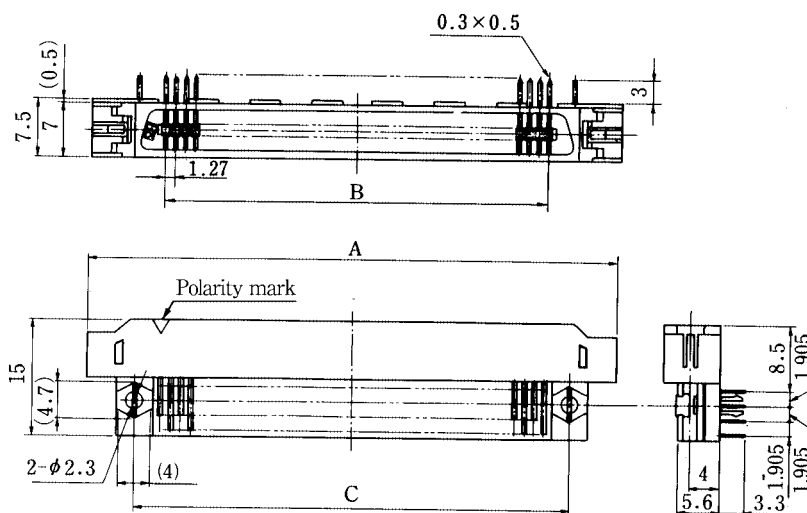
Type	Part Number	CL No.
Guide plate	FX2B(A)-GPA	550-0212-6
Connection press	Hi-Flex connection press	550-0082-2

Note:HRS6 cable cutter FC601 isn't required for FX2B(A) connection.
 (Connected without convex-concave cutting.)

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

Header

Right Angle Type for Lock



PCB mounting pattern



n= number of contacts

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

Unit: mm

Part Number	CL No.	Number 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 for Lock



◆PCB mounting pattern



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

Unit: mm

Part Number	CL No.	Number 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	

FX2 Series 1.27mm Pitch Multi-function Two Piece Connector

Header Cleaning Type

●Straight Type for Lock



PCB mounting pattern



Unit: mm

Part Number	CL No.	Number 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	