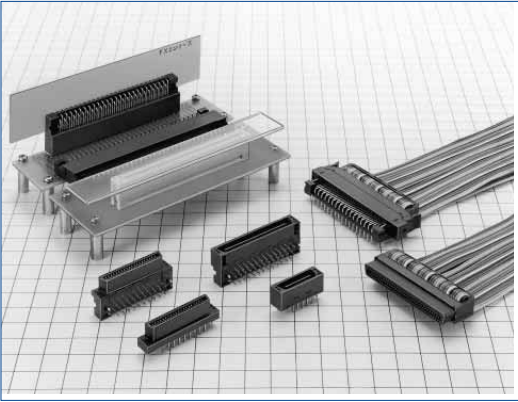


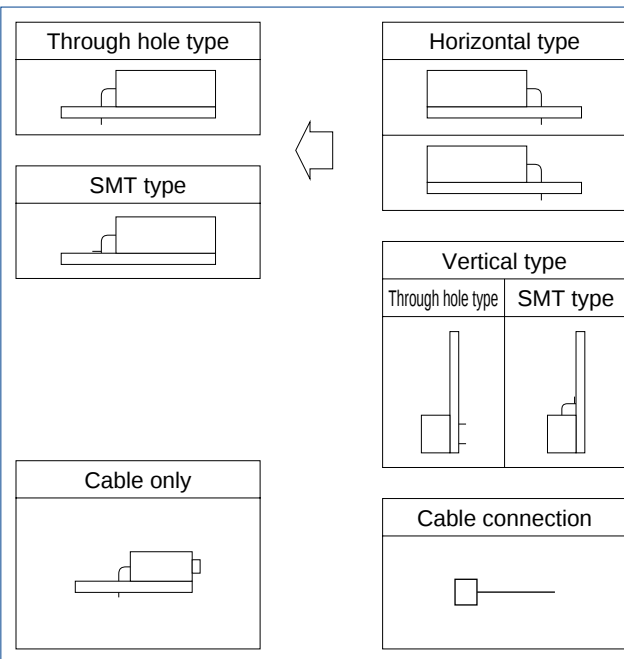
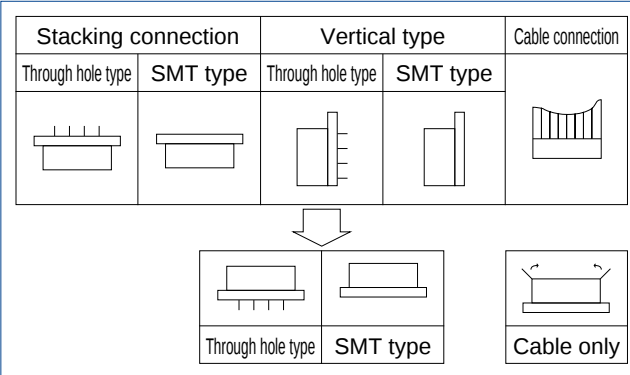
1.27mm Pitch Multi-function Two Piece Connector

FX2 Series



Features

1. Various connection with various product line



Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

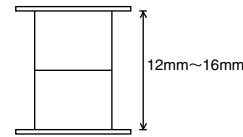
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Казахстан +7(7172)727-132

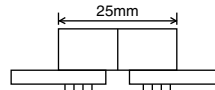
Киргизия +996(312)96-26-47

<https://hirose.nt-rt.ru/> || hes@nt-rt.ru

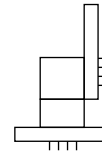
Stacking connection (Stack height : 12~16mm)



Horizontal Connection



Vertical Connection



2. Easy One-Touch Operation

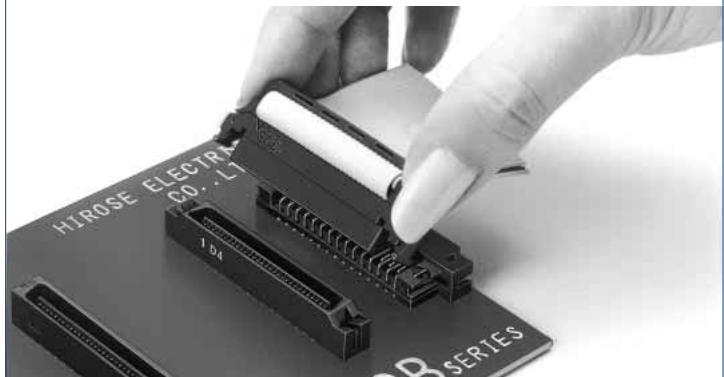
The ribbon cable connection type allows easy one-touch operation with either single hand.

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).)

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 1mm 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.

4. Board to cable type

① Complete lock with easy operation

Employing the inner lock system, complete lock and eject actions can be performed with easy operation.

② Applicable cable

The applicable cable is the <UL2651>AWG#28 flat cable (7/0.127mm), and the jacket size is 0.9±0.1mm.

5. SMT type

Strength security with metaltab

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

■Applications

Computers, peripheral equipments, various machines etc.

■Product Specifications

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

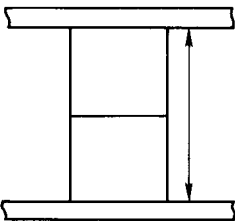
Item	Specification	Condition	
1. Insulation Resistance	1000MΩ min	250V DC	
2. Withstanding Voltage	No flashover or insulation breakdown.	300V AC/1 minute	
3. Contact Resistance	45mΩ max.	100mA	
4. Vibration	No electrical discontinuity of 1μs or more	Frequency : 10 to 55Hz, single amplitude of 0.75mm, 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℃ and humidity of 90% to 95%	
6. Temperature Cycle	Contact resistance : 55mΩ max.	(-55℃ : 30 minutes→15 to 35℃ : 2 to 3 minutes → 85℃ : 30 minutes→15 to 35℃ : 2 to 3 minutes) 5 cycles	
	Insulation resistance : 100MΩ min.		
No damage, cracks, or parts looseness.			
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℃ for 5 seconds
		DIP Type	Solder bath : 260℃ for 10 seconds Manual soldering : 360℃ 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	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



Header \ Receptacle		Dip type		SMT type
		FX2C-*S-1.27DSA(L) FX2CA-*S-1.27DSA(L)	FX2C2-*S-1.27DSA(L) FX2CA2-*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

●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

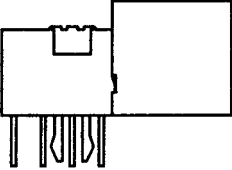
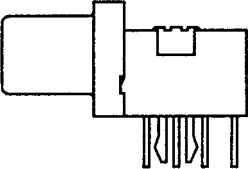
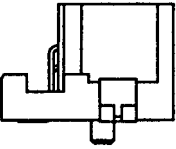
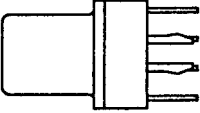
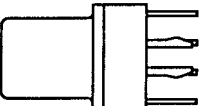
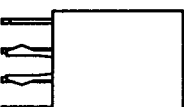
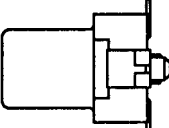
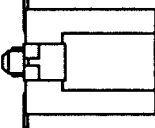
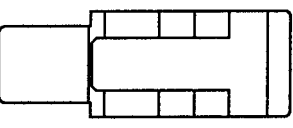
●Header Right Angle SMT Type

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

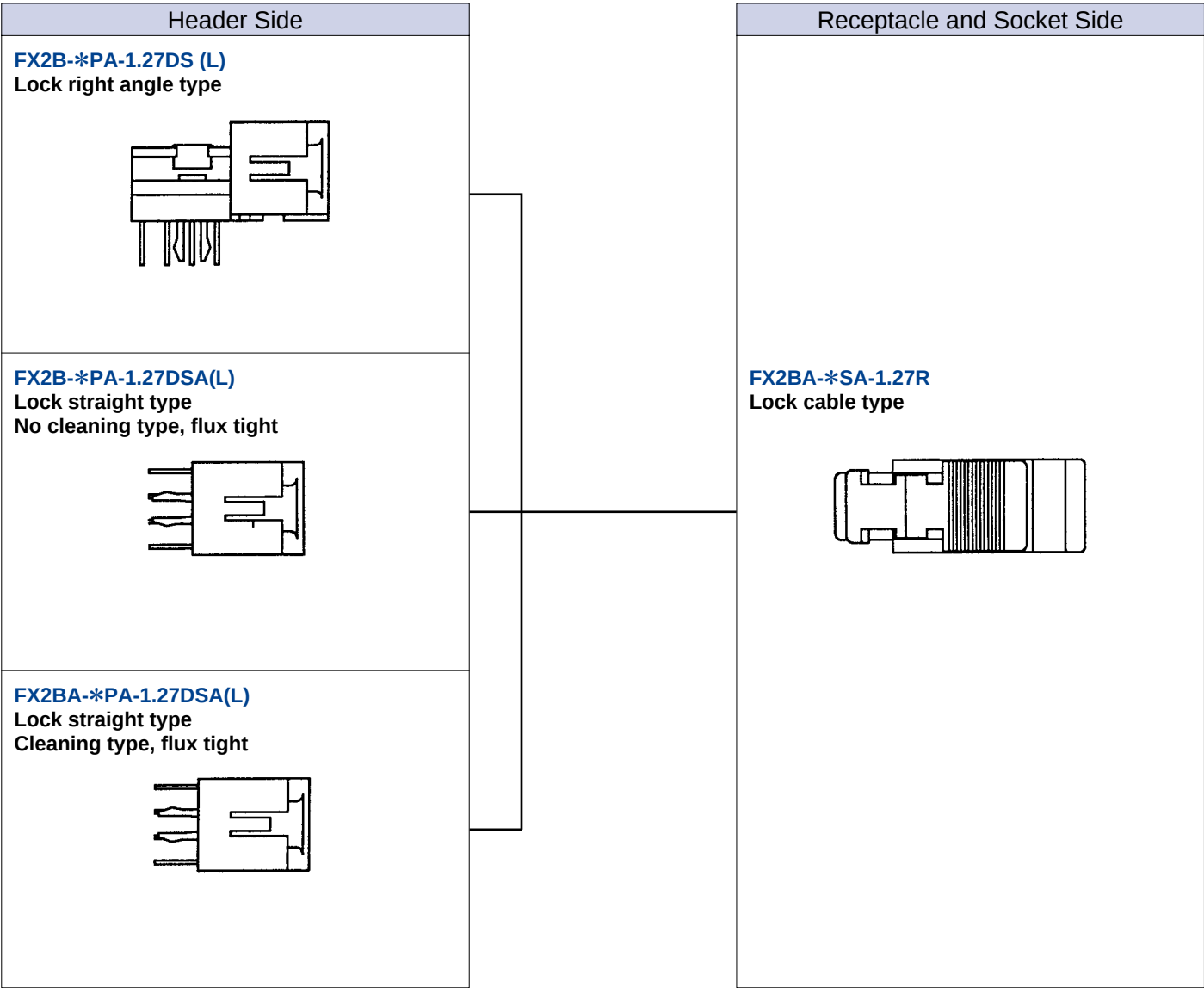
Board to Board Cable Type

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

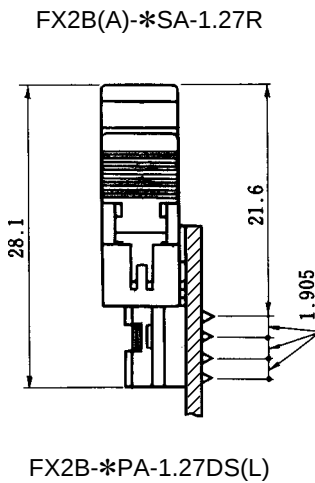
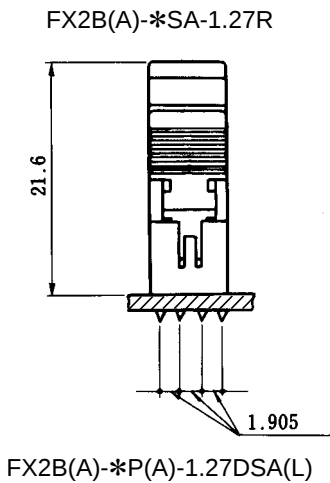
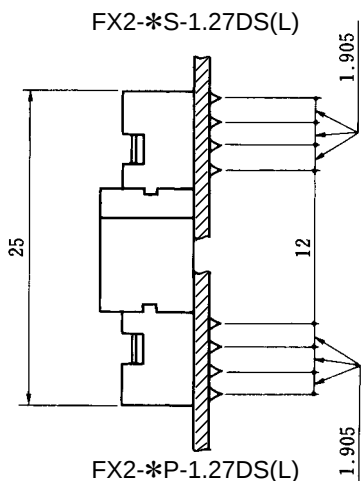
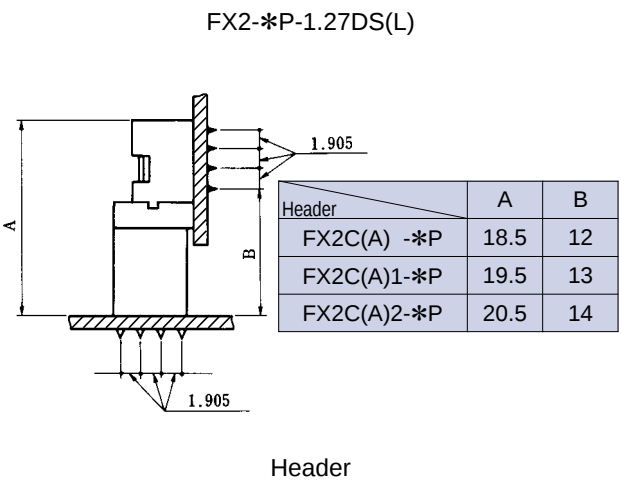
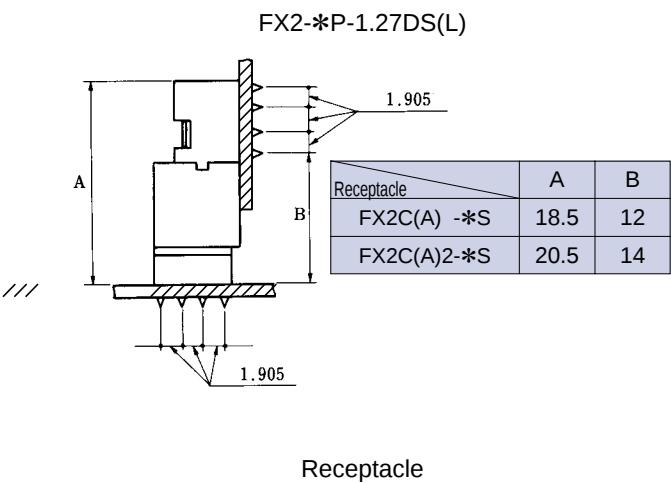
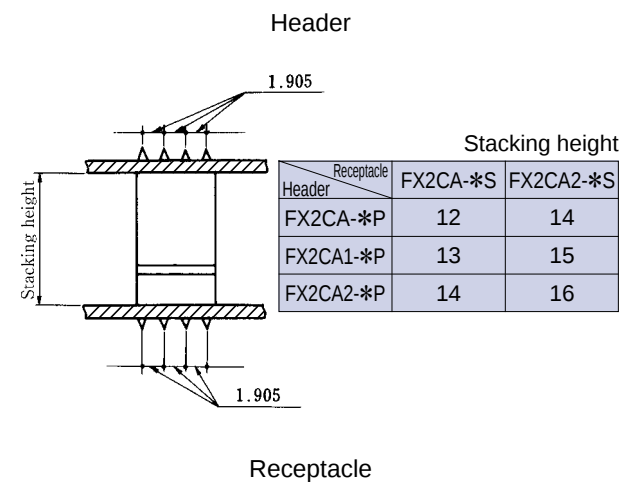
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◆FX2 Functional Flow Chart

Board to Board Cable Type



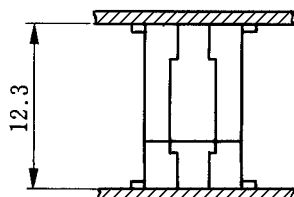
◆Through hole Type Application Pattern



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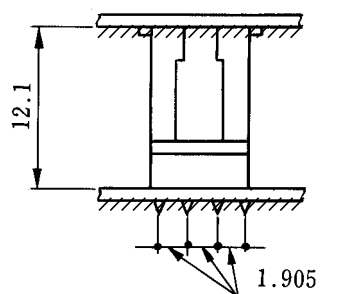
◆ SMT Type Application Pattern

FX2-*P-1.27SV(L)



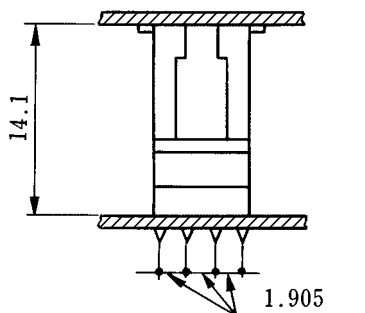
FX2-*S-1.27SV(L)

FX2-*P-1.27SV(L)



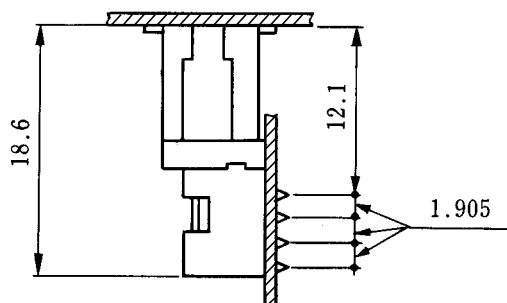
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FX2-*P-1.27SV(L)



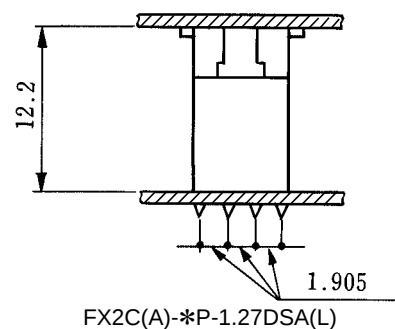
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FX2-*P-1.27SV(L)



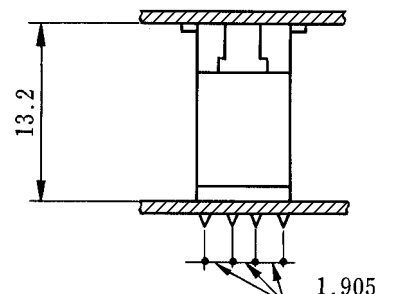
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FX2-*S-1.27SV(L)



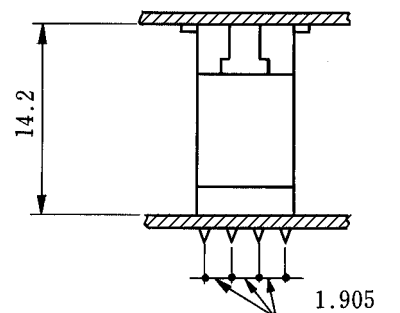
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FX2-*S-1.27SV(L)



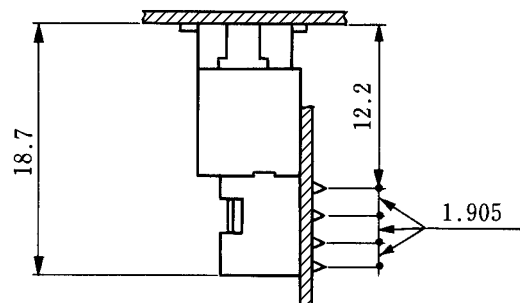
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FX2-*S-1.27SV(L)



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

FX2-*S-1.27SV(L)

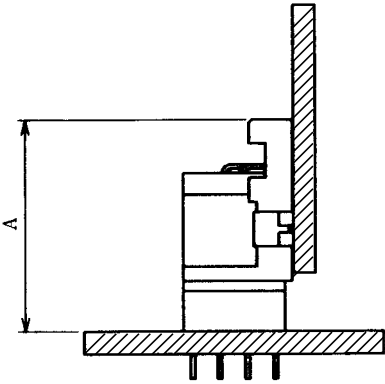


FX2-*P-1.27DS(L)

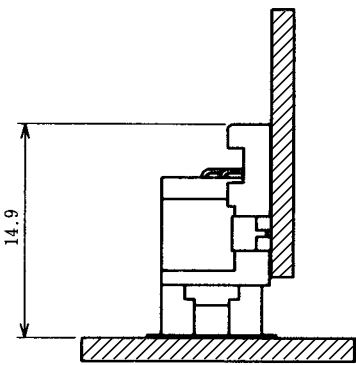
◆SMT Type Application Pattern

FX2(A)-*P-0.635SH

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



FX2(A)-*P-0.635SH

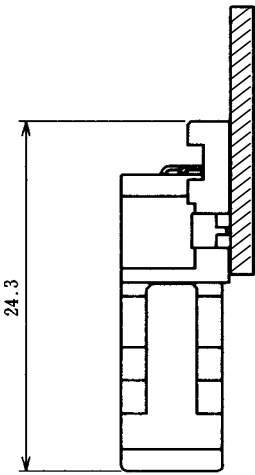
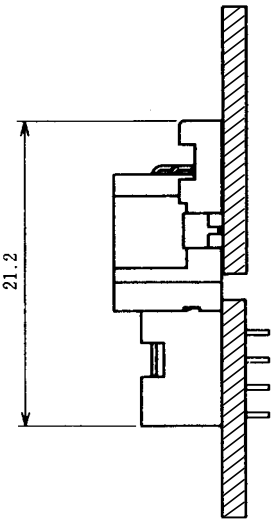


FX2C(A*2)-*S-1.27DSA(L)

FX2-*S-1.27SV(L)

FX2(A)-*P-0.635SH

FX2(A)-*P-0.635SH

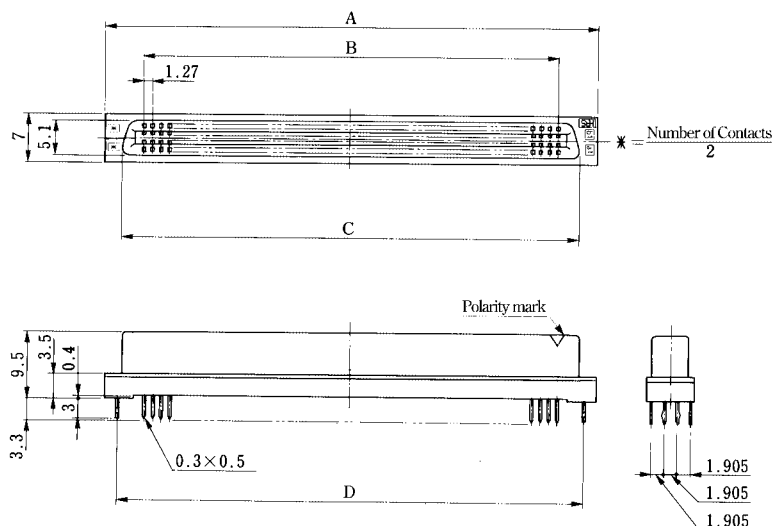
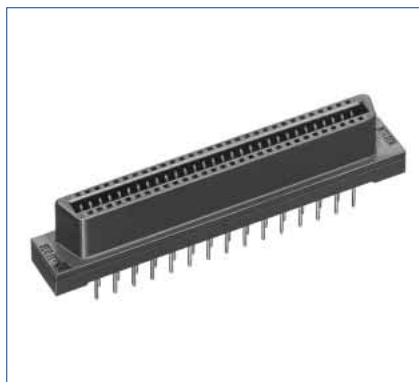


FX2-*S-1.27DS(L)

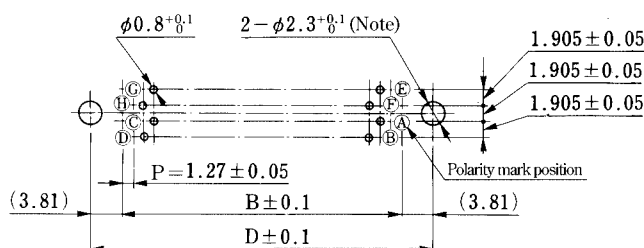
FX2BA-*SA-1.27R

■ Receptacle No Cleaning Type

● Straight Type



◆ PCB mounting pattern



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

n = Number of Contacts

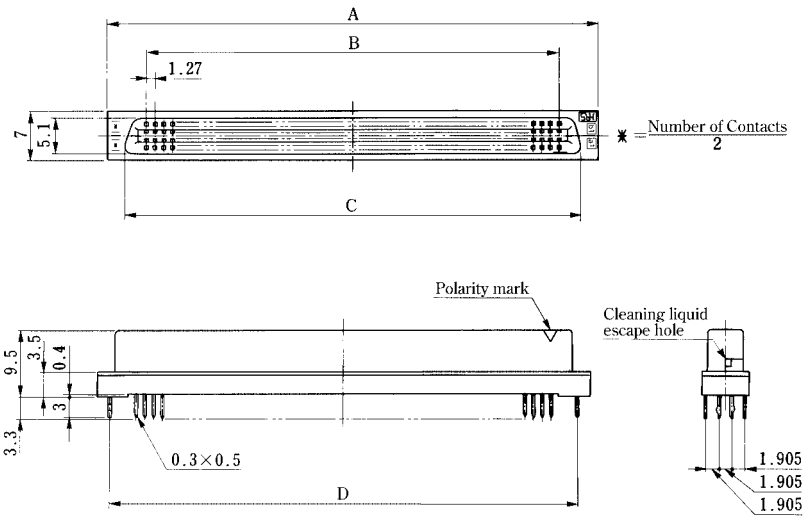
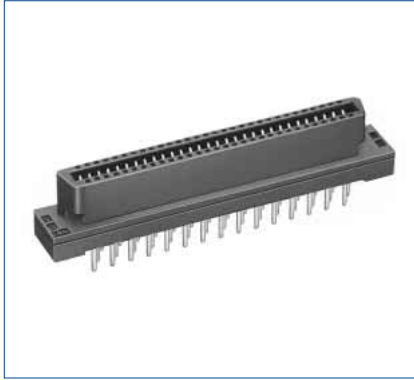
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|-----------------------|-----------------------|
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| Ⓑ a2 | Ⓕ b2 |
| Ⓒ $a \frac{n}{2} - 1$ | Ⓖ $b \frac{n}{2} - 1$ |
| Ⓓ $a \frac{n}{2}$ | Ⓗ $b \frac{n}{2}$ |

Unit : mm

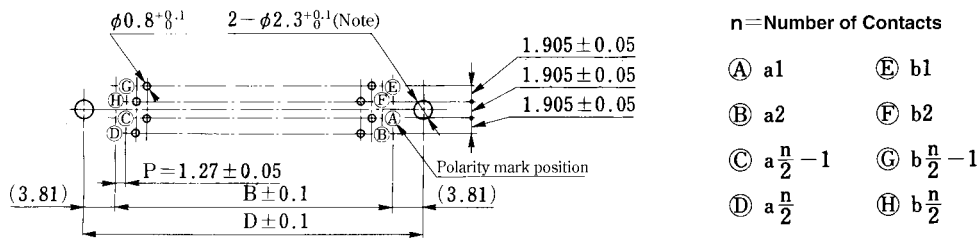
Part No.	HRS No.	No. of Contacts	A	B	C	D	RoHS
FX2C- 20S-1.27DSA(71)	572-2401-7 71	20	22.75	11.43	17.63	_____	YES
FX2C- 20S-1.27DSAL(71)	572-2451-5 71					19.05	
FX2C- 32S-1.27DSA(71)	572-2402-0 71	32	30.37	19.05	25.25	_____	
FX2C- 32S-1.27DSAL(71)	572-2452-8 71					26.67	
FX2C- 40S-1.27DSA(71)	572-2403-2 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



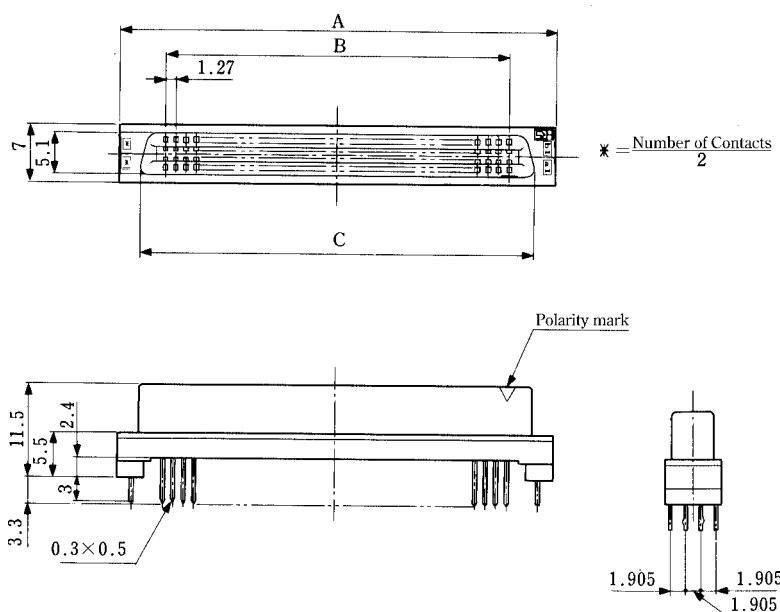
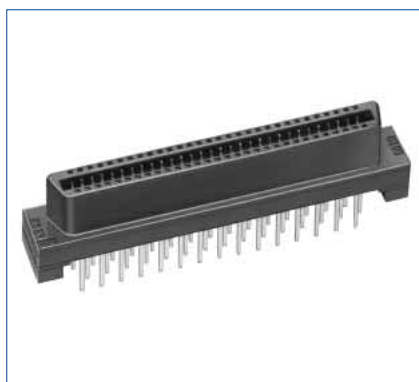
Note: Not required, if no prefixed pin is attached.

Unit : mm

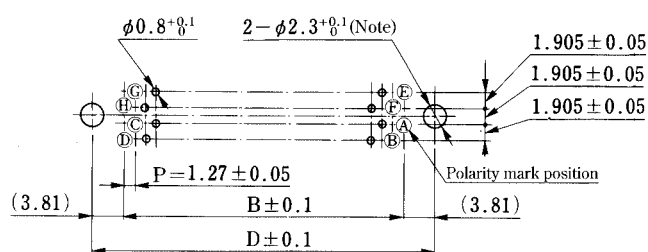
Part No.	HRS No.	No. of Contacts	A	B	C	D	RoHS
FX2CA- 20S-1.27DSA(71)	572-2501-1 71	20	22.75	11.43	17.63	_____	YES
FX2CA- 20S-1.27DSAL(71)	572-2551-0 71					19.05	
FX2CA- 32S-1.27DSA(71)	572-2502-4 71	32	30.37	19.05	25.25	_____	
FX2CA- 32S-1.27DSAL(71)	572-2552-2 71					26.67	
FX2CA- 40S-1.27DSA(71)	572-2503-7 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	

■Receptacle No Cleaning Type

●Straight Type



◆PCB mounting pattern



n = Number of Contacts

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

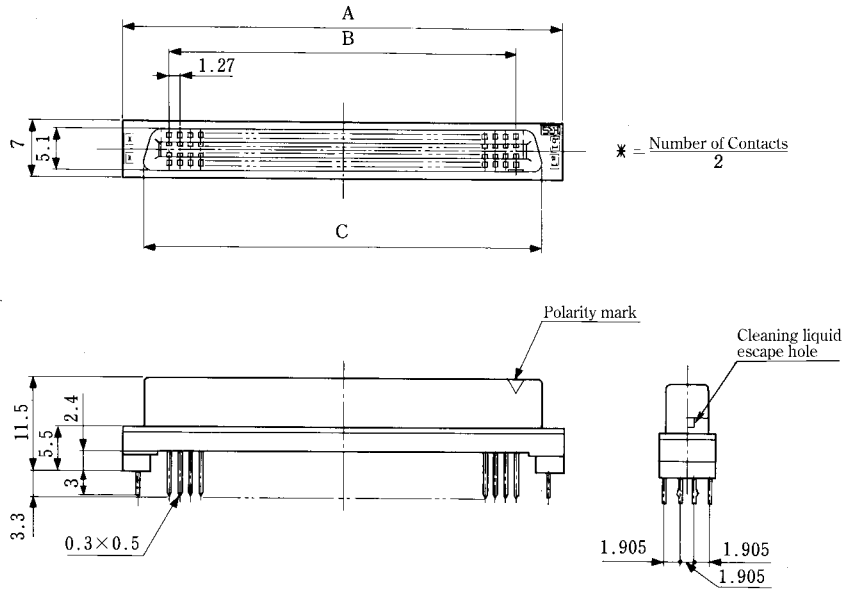
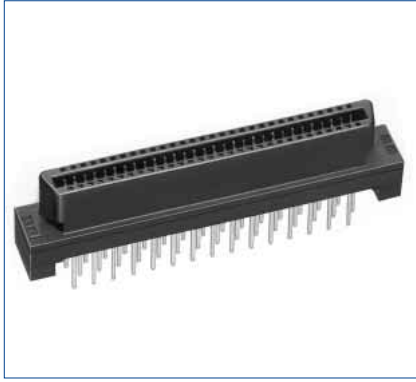
Note: Not required, if no prefixed pin is attached.

Unit : mm

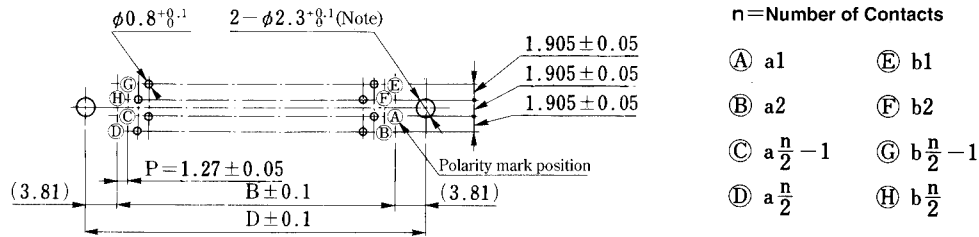
Part No.	HRS No.	No. of Contacts	A	B	C	D	RoHS
FX2C2- 20S-1.27DSA(71)	572-2421-4 71	20	22.75	11.43	17.63	_____	YES
FX2C2- 20S-1.27DSAL(71)	572-2471-2 71					19.05	
FX2C2- 32S-1.27DSA(71)	572-2422-7 71	32	30.37	19.05	25.25	_____	
FX2C2- 32S-1.27DSAL(71)	572-2472-5 71					26.67	
FX2C2- 40S-1.27DSA(71)	572-2423-0 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



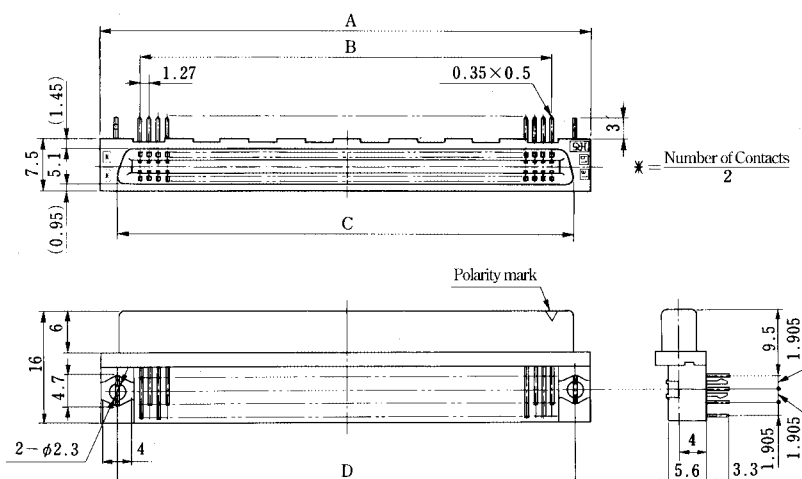
Note: Not required, if no prefixed pin is attached.

Unit : mm

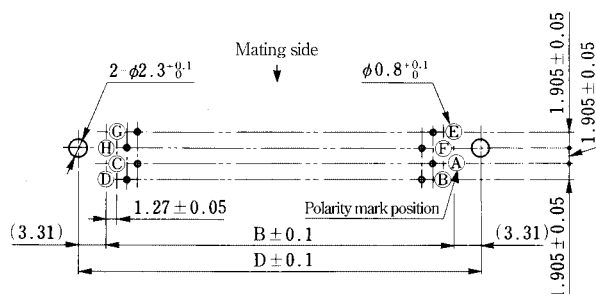
Part No.	HRS No.	No. of Contacts	A	B	C	D	RoHS
FX2CA2- 20S-1.27DSA(71)	572-2521-9 71	20	22.75	11.43	17.63	_____	YES
FX2CA2- 20S-1.27DSAL(71)	572-2571-7 71					19.05	
FX2CA2- 32S-1.27DSA(71)	572-2522-1 71	32	30.37	19.05	25.25	_____	
FX2CA2- 32S-1.27DSAL(71)	572-2572-0 71					26.67	
FX2CA2- 40S-1.27DSA(71)	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	

■ Receptacle

● Right Angle Type



◆ PCB mounting pattern



n = Number of Contacts

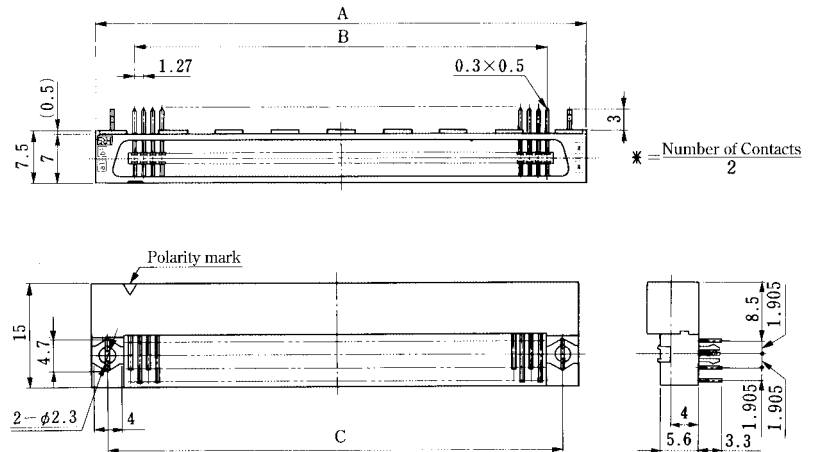
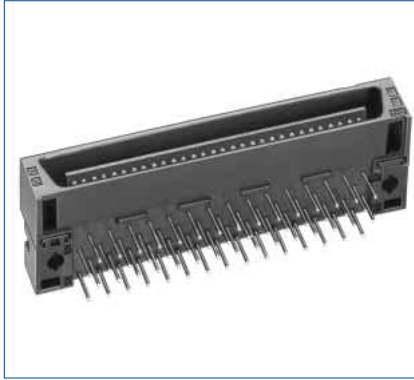
- | | |
|-----------------------|-----------------------|
| Ⓐ a1 | Ⓔ b1 |
| Ⓑ a2 | Ⓕ b2 |
| Ⓒ $a \frac{n}{2} - 1$ | Ⓖ $b \frac{n}{2} - 1$ |
| Ⓓ $a \frac{n}{2}$ | Ⓗ $b \frac{n}{2}$ |

Unit : mm

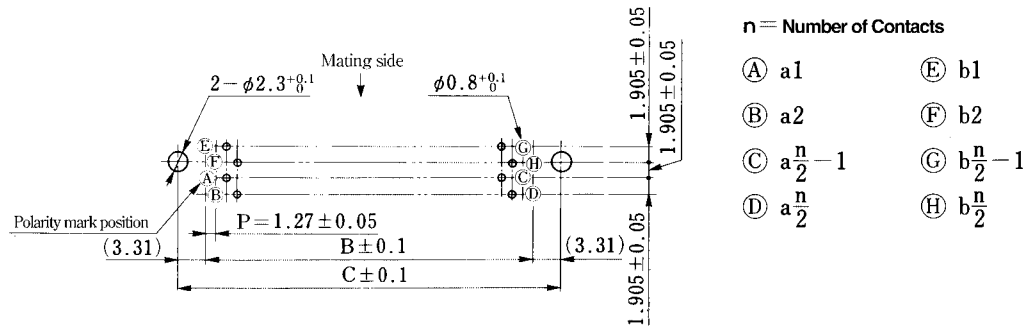
Part No.	HRS No.	No. of Contacts	A	B	C	D	D
FX2- 20S-1.27DS(71)	572-2701-0 71	20	22.75	11.43	17.63	18.05	YES
FX2- 20S-1.27DSL(71)	572-2751-9 71						
FX2- 32S-1.27DS(71)	572-2702-3 71	32	30.37	19.05	25.25	25.67	
FX2- 32S-1.27DSL(71)	572-2752-1 71						
FX2- 40S-1.27DS(71)	572-2703-6 71	40	35.45	24.13	30.33	30.75	
FX2- 40S-1.27DSL(71)	572-2753-4 71						
FX2- 52S-1.27DS(71)	572-2704-9 71	52	43.07	31.75	37.95	38.37	
FX2- 52S-1.27DSL(71)	572-2754-7 71						
FX2- 60S-1.27DS(71)	572-2705-1 71	60	48.15	36.83	43.03	43.45	
FX2- 60S-1.27DSL(71)	572-2755-0 71						
FX2- 68S-1.27DS(71)	572-2706-4 71	68	53.23	41.91	48.11	48.53	
FX2- 68S-1.27DSL(71)	572-2756-2 71						
FX2- 80S-1.27DS(71)	572-2707-7 71	80	60.85	49.53	55.73	56.15	
FX2- 80S-1.27DSL(71)	572-2757-5 71						
FX2-100S-1.27DS(71)	572-2708-0 71	100	73.55	62.23	68.43	68.85	
FX2-100S-1.27DSL(71)	572-2758-8 71						
FX2-120S-1.27DS(71)	572-2709-2 71	120	86.25	74.93	81.13	81.55	
FX2-120S-1.27DSL(71)	572-2759-0 71						

Header

Right Angle Type



PCB mounting pattern

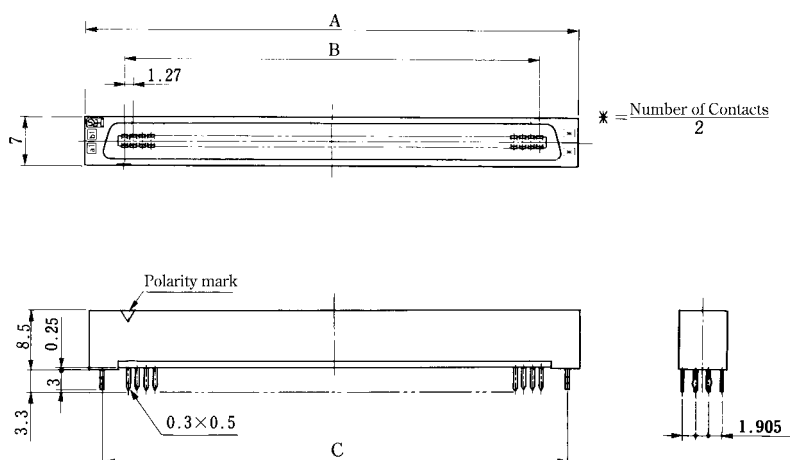
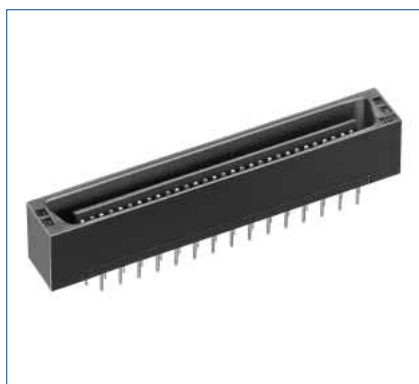


Unit : mm

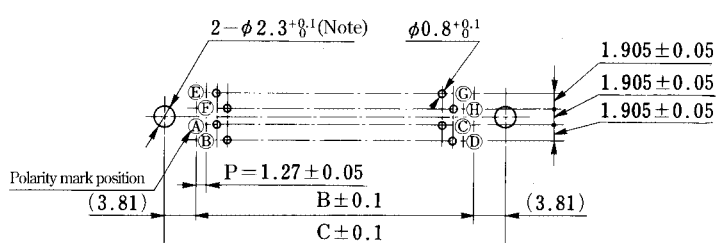
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2- 20P-1.27DS(71)	572-2601-6 71	20	22.75	11.43	18.05	YES
FX2- 20P-1.27DSL(71)	572-2651-4 71					
FX2- 32P-1.27DS(71)	572-2602-9 71	32	30.37	19.05	25.67	
FX2- 32P-1.27DSL(71)	572-2652-7 71					
FX2- 40P-1.27DS(71)	572-2603-1 71	40	35.45	24.13	30.75	
FX2- 40P-1.27DSL(71)	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	

●Straight Type

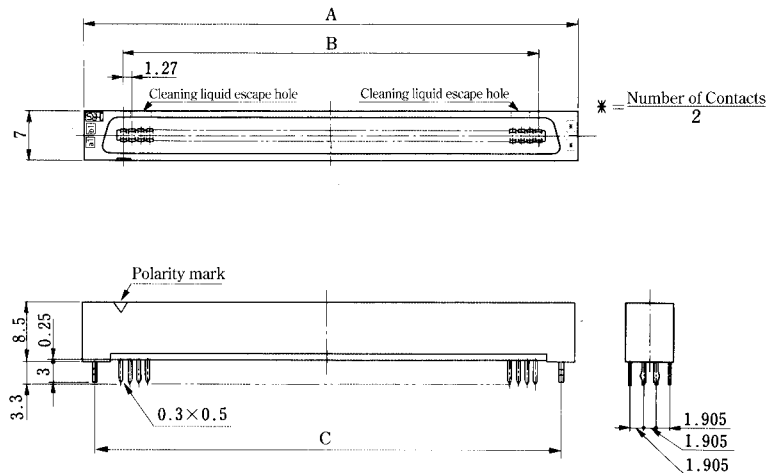


Figure 1 is a dimensional drawing of the test specimen. It shows a cylindrical component with various dimensions and labels. Key dimensions include: $2-\phi 2.3^{+0.1}_{-0.1}$ (Note) for the top hole, $\phi 0.8^{+0.1}_{-0.1}$ for the central hole, 1.905 ± 0.05 for the three vertical holes on the right, $P = 1.27 \pm 0.05$ for the distance between the top hole and the first vertical hole, $B \pm 0.1$ for the distance between the top hole and the second vertical hole, $C \pm 0.1$ for the distance between the top hole and the third vertical hole, and (3.81) for the distance between the top hole and the fourth vertical hole. The polarity mark position is indicated on the left.

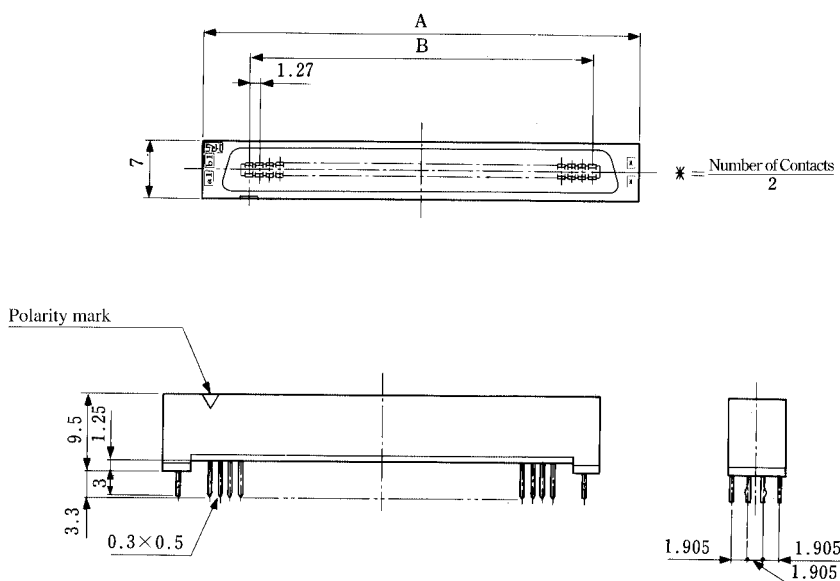
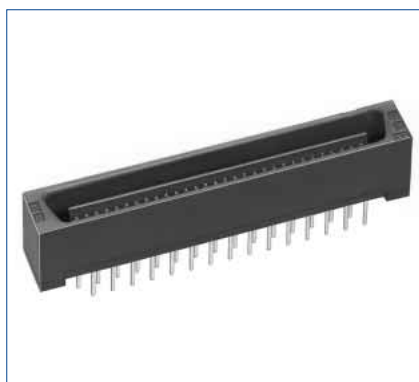
n = Number of Contacts

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

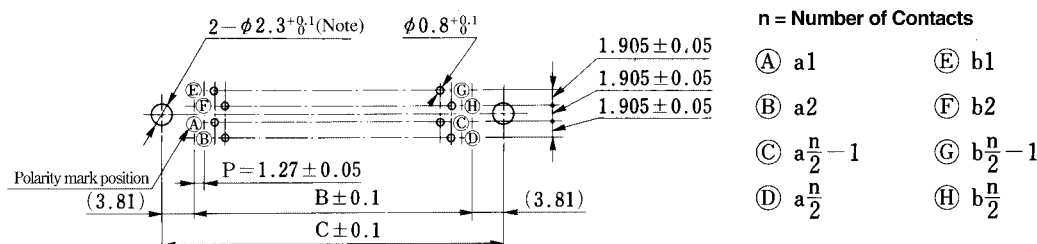
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2CA- 20P-1.27DSA(71)	572-2301-2 71	20	22.75	11.43	_____	YES
FX2CA- 20P-1.27DSAL(71)	572-2351-0 71				19.05	
FX2CA- 32P-1.27DSA(71)	572-2302-5 71	32	30.37	19.05	_____	
FX2CA- 32P-1.27DSAL(71)	572-2352-3 71				26.67	
FX2CA- 40P-1.27DSA(71)	572-2303-8 71	40	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



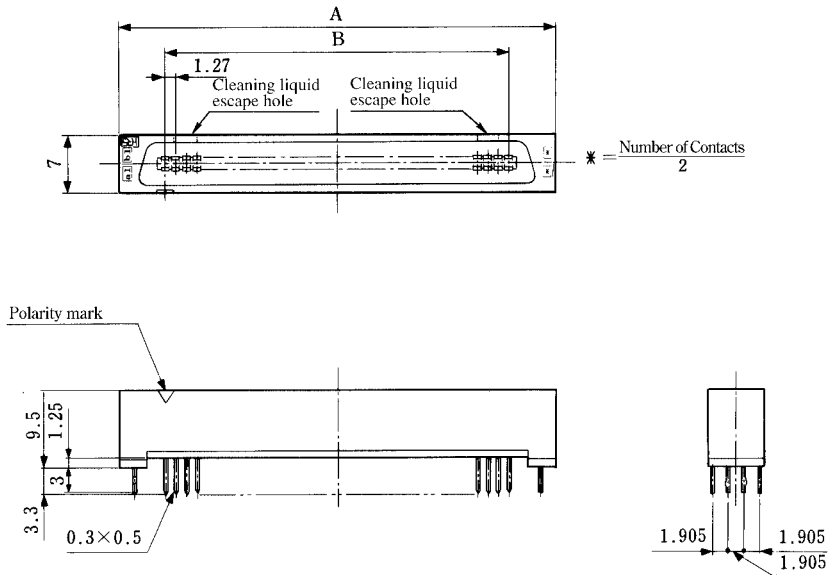
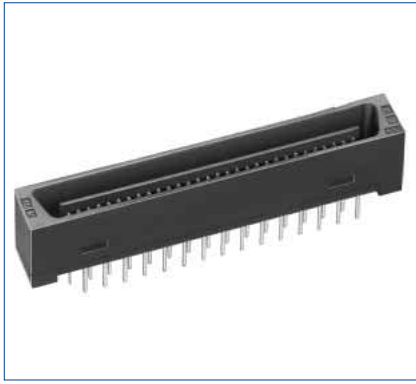
Note: Not required, if no prefixed pin is attached.

Unit : mm

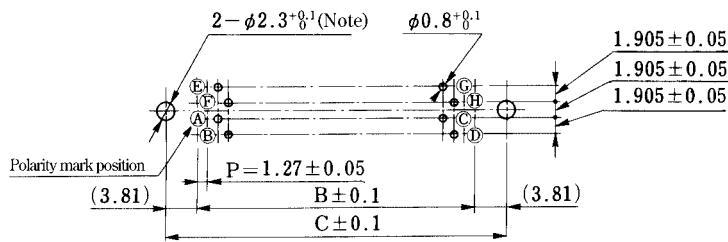
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2C1- 20P-1.27DSA(71)	572-2211-1 71	20	22.75	11.43	—	YES
FX2C1- 20P-1.27DSAL(71)	572-2261-0 71				19.05	
FX2C1- 32P-1.27DSA(71)	572-2212-4 71	32	30.37	19.05	—	
FX2C1- 32P-1.27DSAL(71)	572-2262-2 71				26.67	
FX2C1- 40P-1.27DSA(71)	572-2213-7 71	40	35.45	24.13	—	
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.

n = Number of Contacts

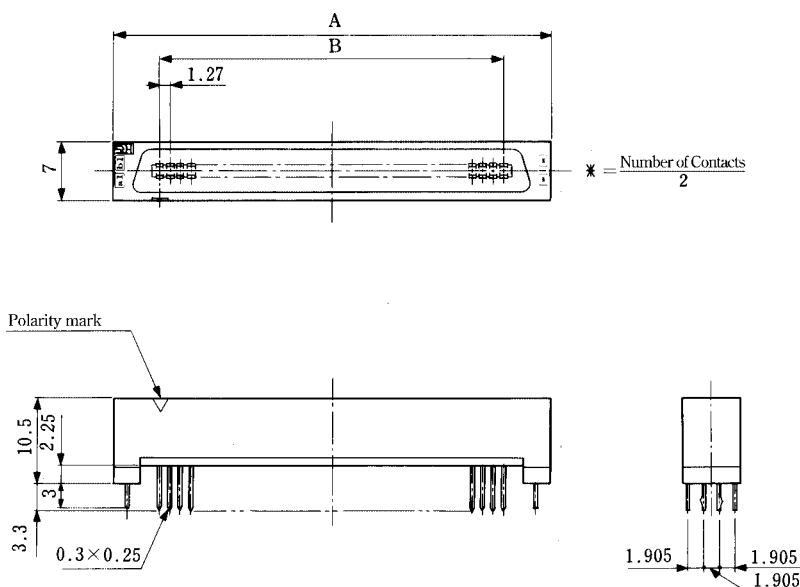
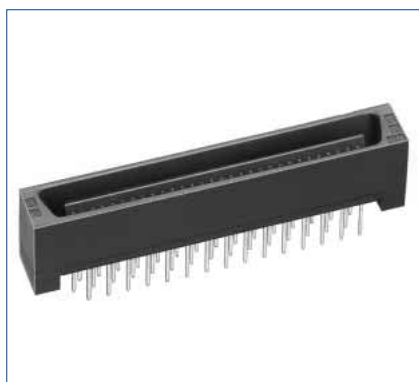
- | | |
|--------------------|--------------------|
| Ⓐ a1 | Ⓔ b1 |
| Ⓑ a2 | Ⓕ b2 |
| Ⓒ $a\frac{n}{2}-1$ | Ⓖ $b\frac{n}{2}-1$ |
| Ⓓ $a\frac{n}{2}$ | Ⓗ $b\frac{n}{2}$ |

Unit : mm

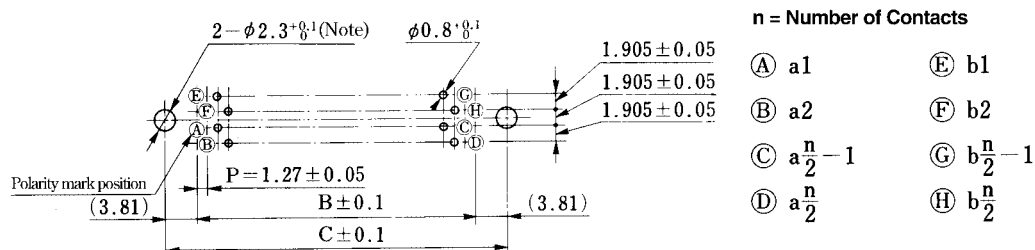
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2CA1- 20P-1.27DSA(71)	572-2311-6 71	20	22.75	11.43	—	YES
FX2CA1- 20P-1.27DSAL(71)	572-2361-4 71				19.05	
FX2CA1- 32P-1.27DSA(71)	572-2312-9 71	32	30.37	19.05	—	
FX2CA1- 32P-1.27DSAL(71)	572-2362-7 71				26.67	
FX2CA1- 40P-1.27DSA(71)	572-2313-1 71	40	35.45	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



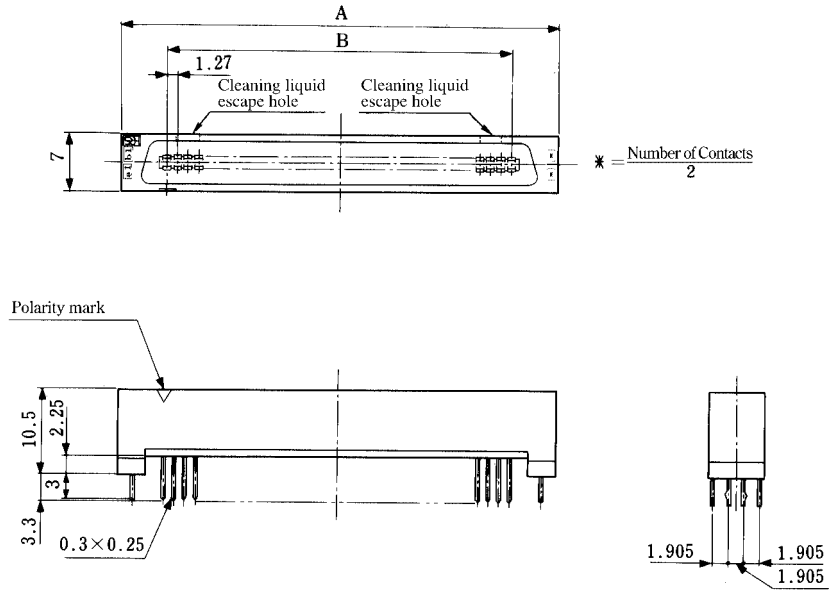
Note: Not required, if no prefixed pin is attached.

Unit : mm

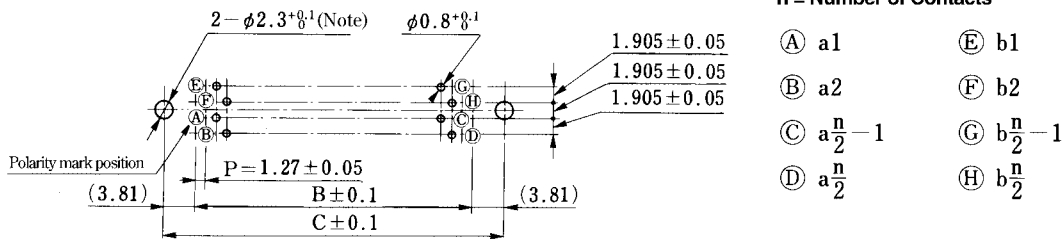
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2C2- 20P-1.27DSA(71)	572-2221-5 71	20	22.75	11.43	—	YES
FX2C2- 20P-1.27DSAL(71)	572-2271-3 71				19.05	
FX2C2- 32P-1.27DSA(71)	572-2222-8 71	32	30.37	19.05	—	
FX2C2- 32P-1.27DSAL(71)	572-2272-6 71				26.67	
FX2C2- 40P-1.27DSA(71)	572-2223-0 71	40	35.45	24.13	—	
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



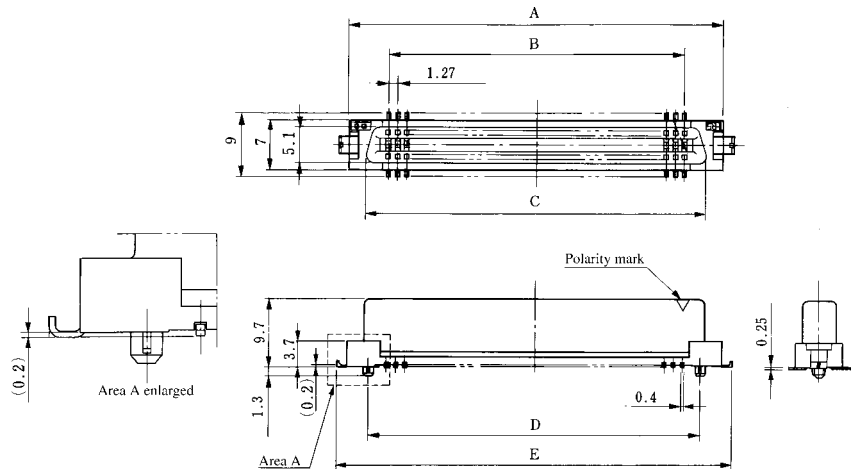
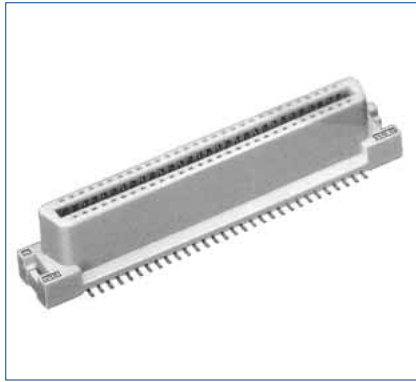
Note: Not required, if no prefixed pin is attached.

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

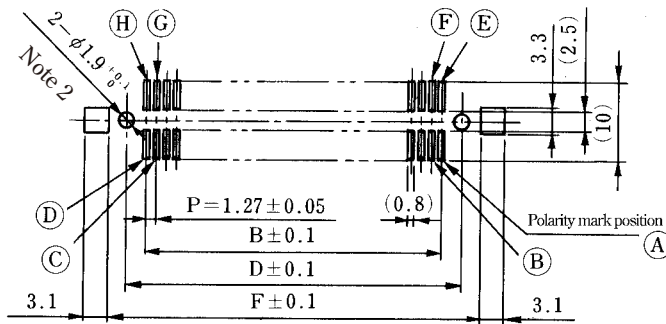
● Straight Type



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 |
| Ⓒ $a\frac{n}{2}-1$ | Ⓖ $b\frac{n}{2}-1$ |
| Ⓓ $a\frac{n}{2}$ | Ⓗ $b\frac{n}{2}$ |

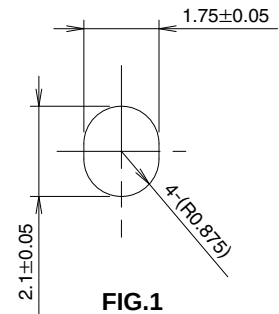
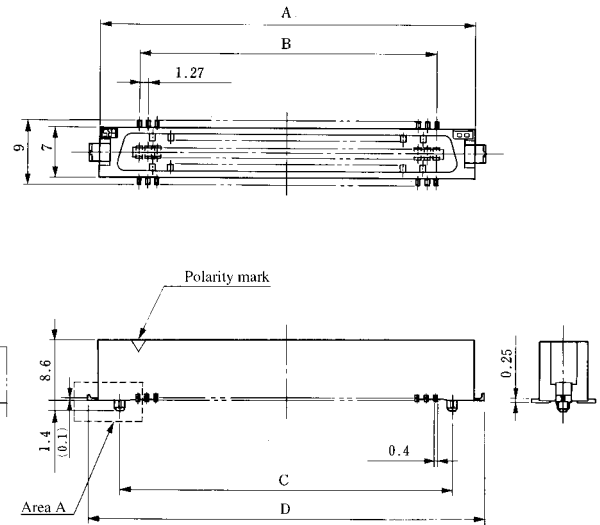


FIG.1

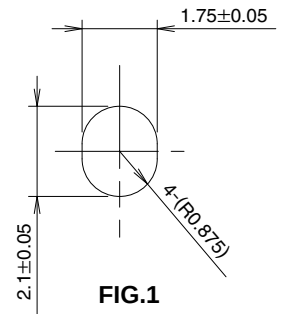
Unit : mm

Part 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	

●Straight Type



PCB mounting pattern

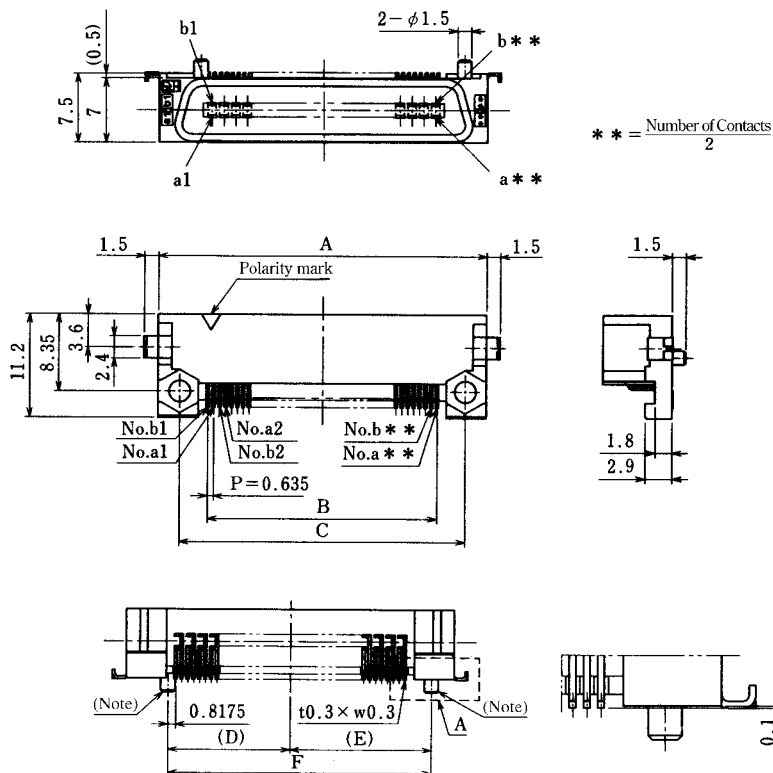


Unit : mm

HRS 23

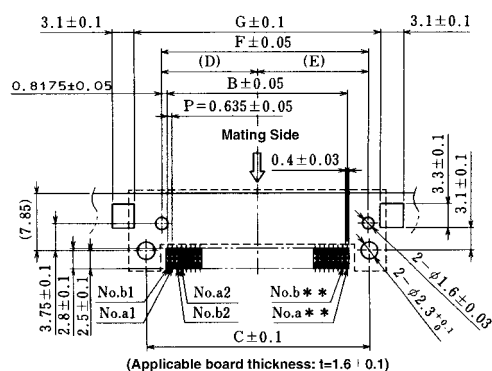
Header SMT Type

Right Angle Type

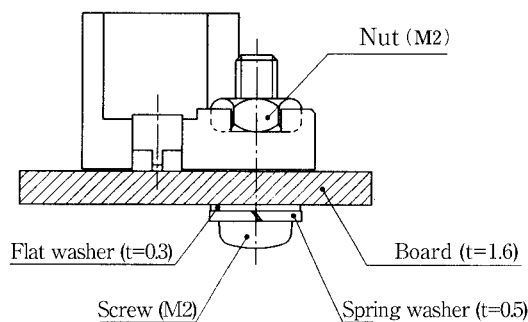


Note : The FX2A type does not have bosses as shown in the illustration.

PCB mounting Pattern



Recommended Screw Clamp



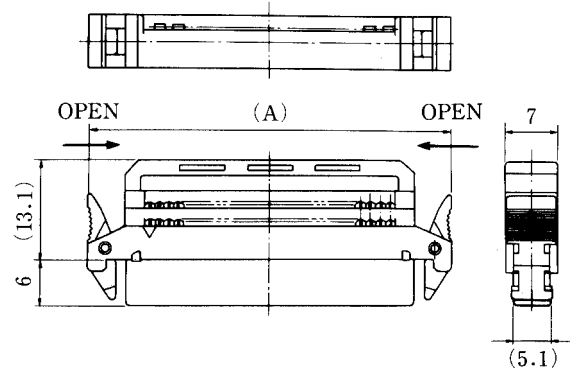
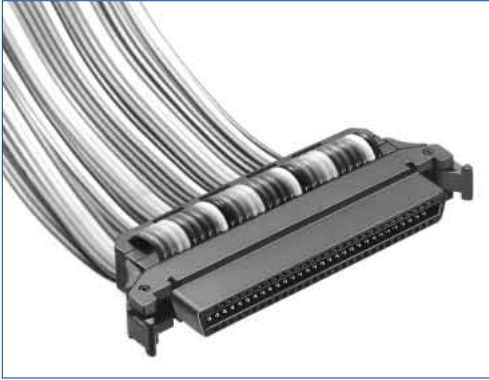
Use M2 screw for fixture.
Recommended torque is 0.15(N•m).

Unit : mm

Part 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

●Lock Cable Type

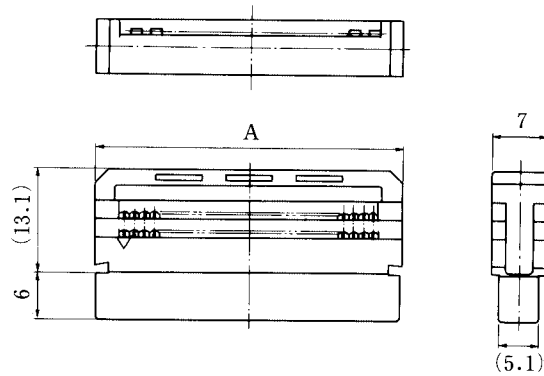
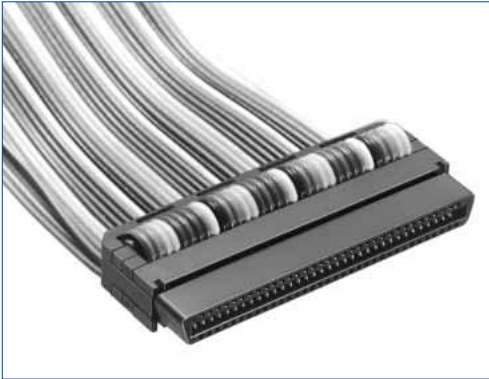


Combination View

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	

●Unlock Cable Type



Combination View

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	

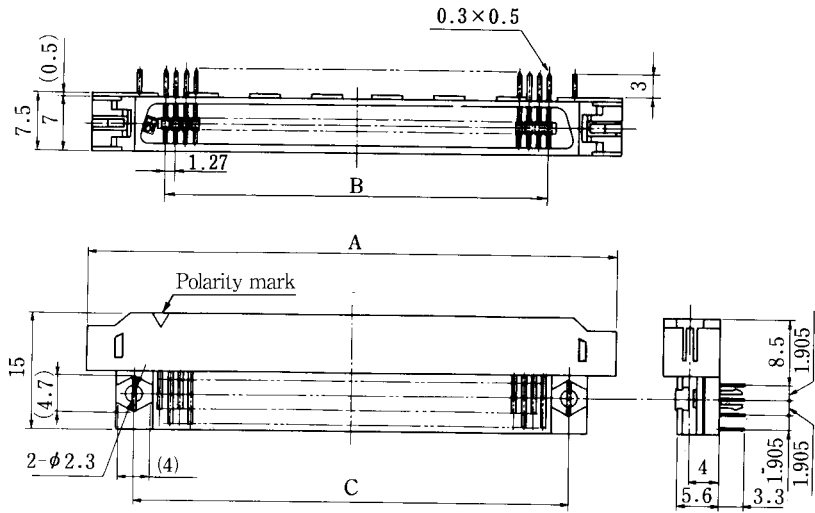
◆Connection Tool

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

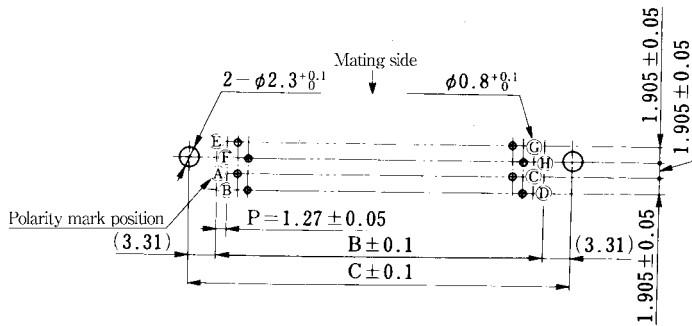
Note : HRS6 cable cutter FC601 isn't required for FX2B(A) connection.
(Connected without convex-concave cutting.)

■Header

●Right Angle Type for Lock



◆PCB mounting pattern



n= number of contacts

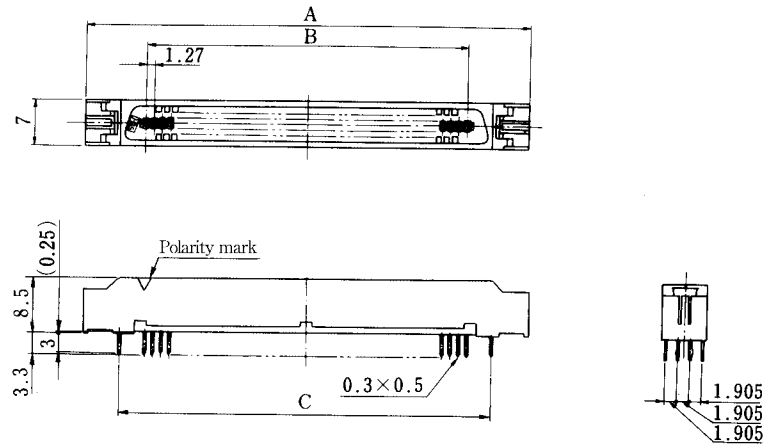
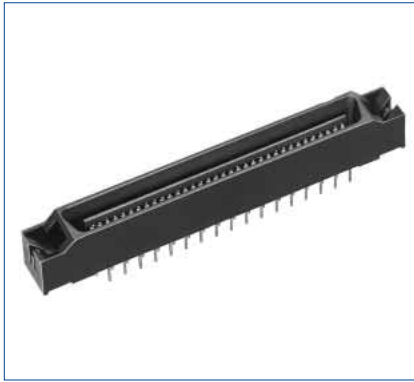
- Ⓐ a1
- Ⓑ a2
- Ⓒ $a\frac{n}{2}-1$
- Ⓓ $a\frac{n}{2}$
- Ⓔ b1
- Ⓕ b2
- Ⓖ $b\frac{n}{2}-1$
- Ⓗ $b\frac{n}{2}$

Unit : mm

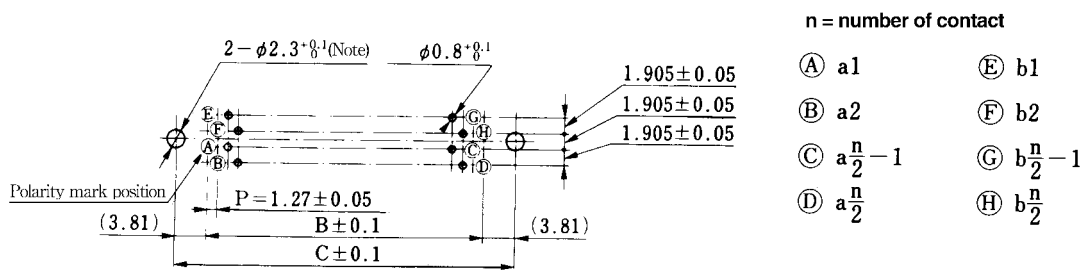
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2B- 20PA-1.27DS(71)	572-0721-7 71	20	30.33	11.43	18.05	YES
FX2B- 20PA-1.27DSL(71)	572-0771-5 71					
FX2B- 32PA-1.27DS(71)	572-0722-0 71	32	37.95	19.05	25.67	
FX2B- 32PA-1.27DSL(71)	572-0772-8 71					
FX2B- 40PA-1.27DS(71)	572-0723-2 71	40	43.03	24.13	30.75	
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 for Lock



◆PCB mounting pattern



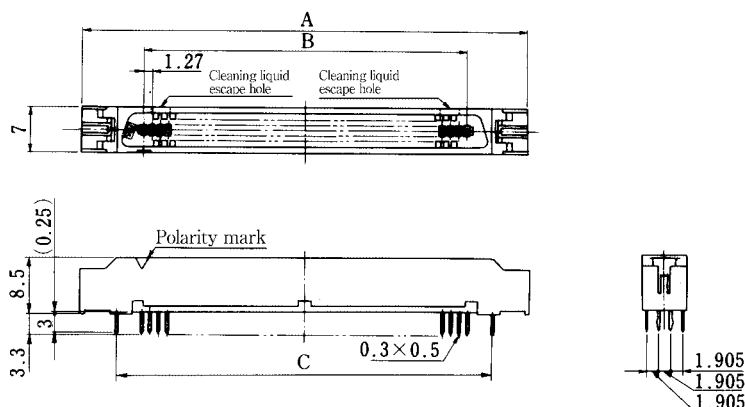
Note: Not required, unless the prefixed pin is attached.

Unit : mm

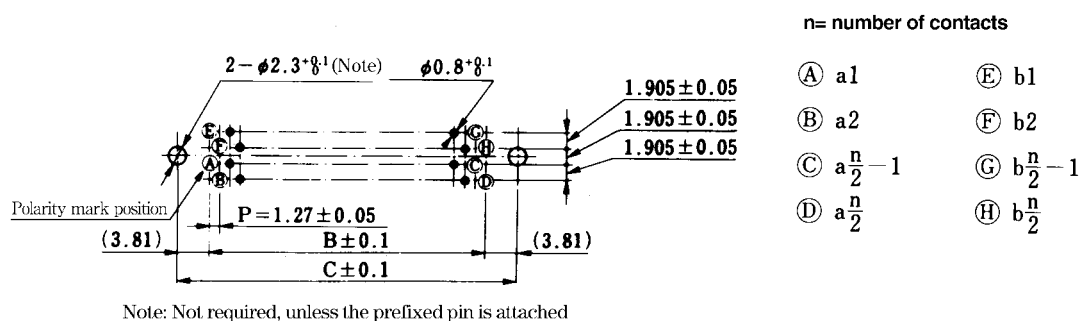
Part No.	HRS No.	No. of Contacts	A	B	C	RoHS
FX2B- 20P-1.27DSA(71)	572-0801-4 71	20	30.33	11.43	—	YES
FX2B- 20P-1.27DSAL(71)	572-0851-2 71				19.05	
FX2B- 32P-1.27DSA(71)	572-0802-7 71	32	37.95	19.05	—	
FX2B- 32P-1.27DSAL(71)	572-0852-5 71				26.67	
FX2B- 40PA-1.27DSA(71)	572-0823-7 71	40	43.03	24.13	—	
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 for Lock



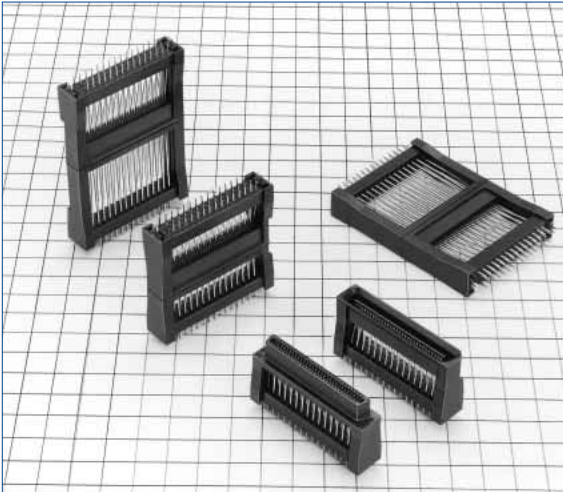
PCB mounting pattern



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



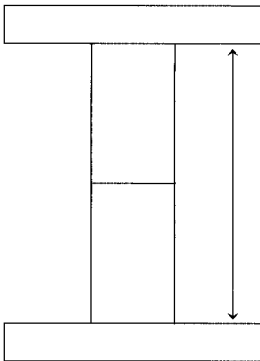
Ordering Information

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



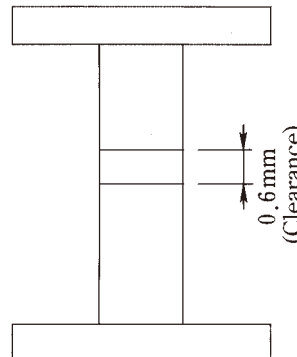
Unit : mm

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

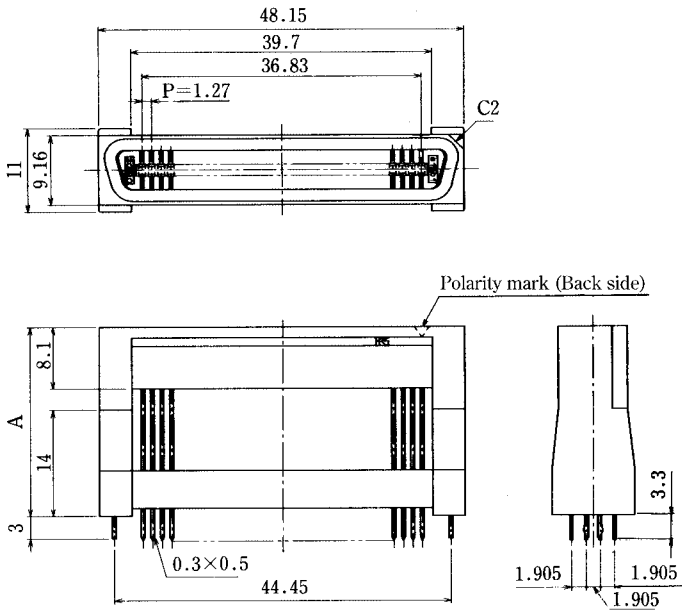
Note 1. Mate the male and female connectors to meet the allowable clearance within 1.0mm. However, set it within 0.4mm in combination *1. In case of combination *2, use as 1.6mm or less.

Note 2. In case of combination *2, 0.6mm clearance occurs on the mating side, but no problem.

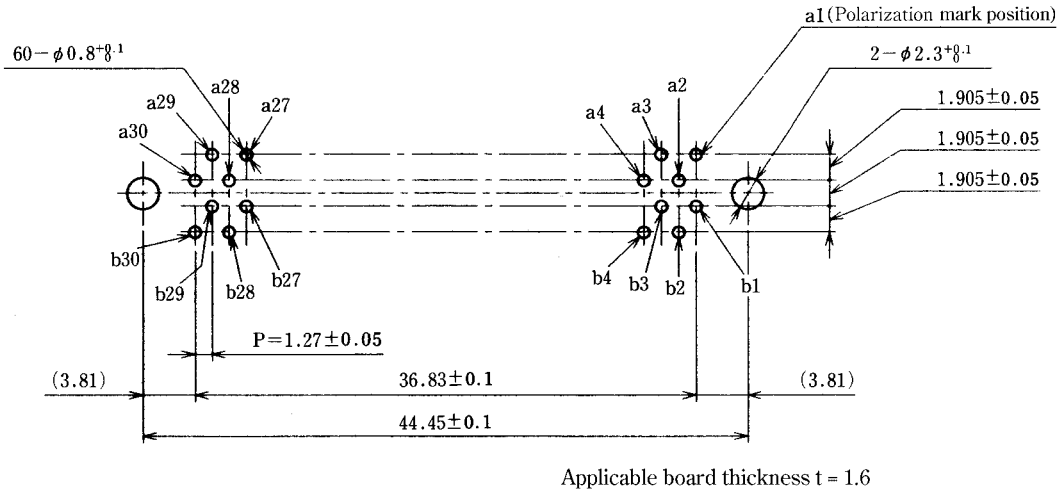
Note 3. After the board is mounted, fix the board by screws.



■Header



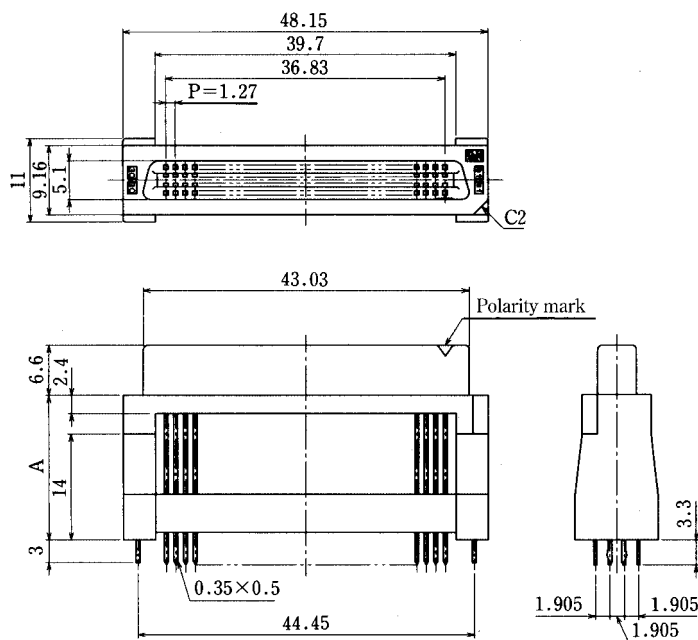
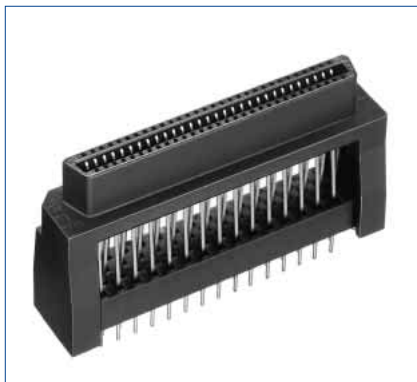
◆PCB mounting pattern



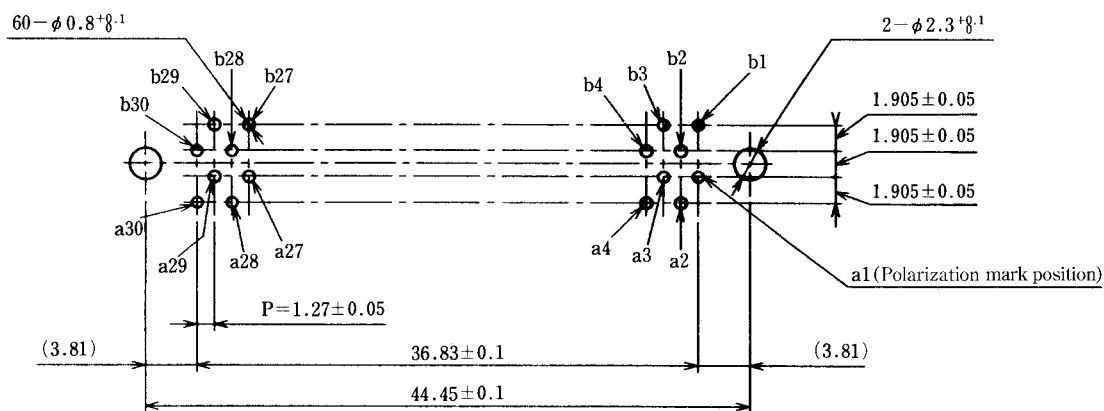
Unit : mm

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



Applicable board thickness $t = 1.6$

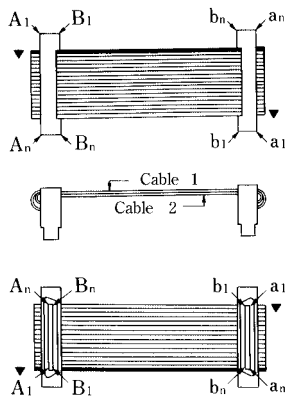
Unit : mm

Part No.	HRS No.	A	RoHS
FX2M6B-60S-1.27DSAL(71)	572-1042-0 71	19.1	YES

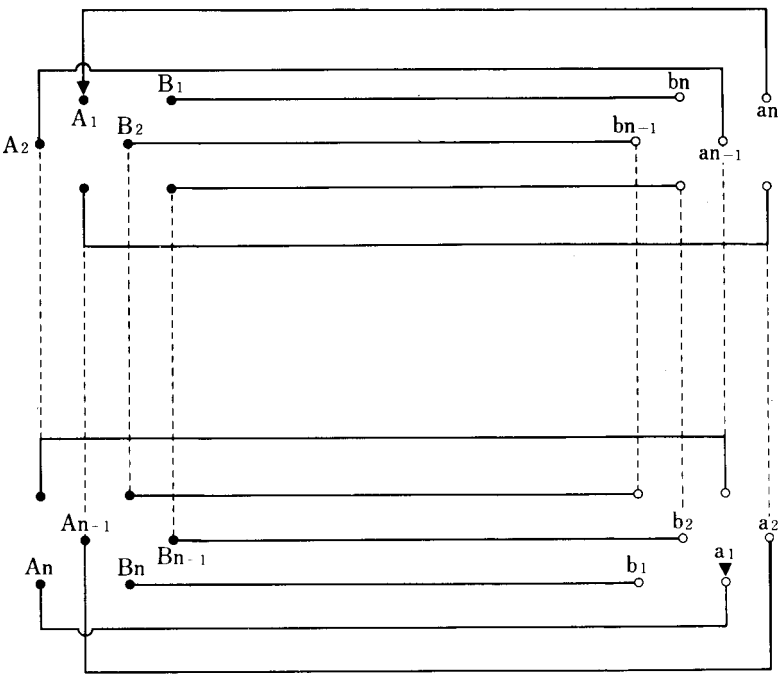
◆Connection Circuit Diagram

$$n = \frac{\text{Number of Contacts}}{2}$$

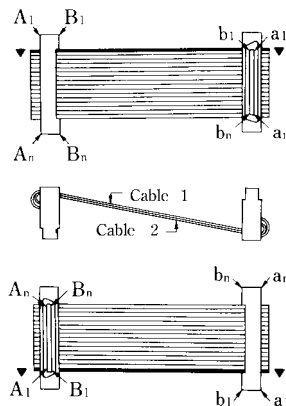
Type A, B



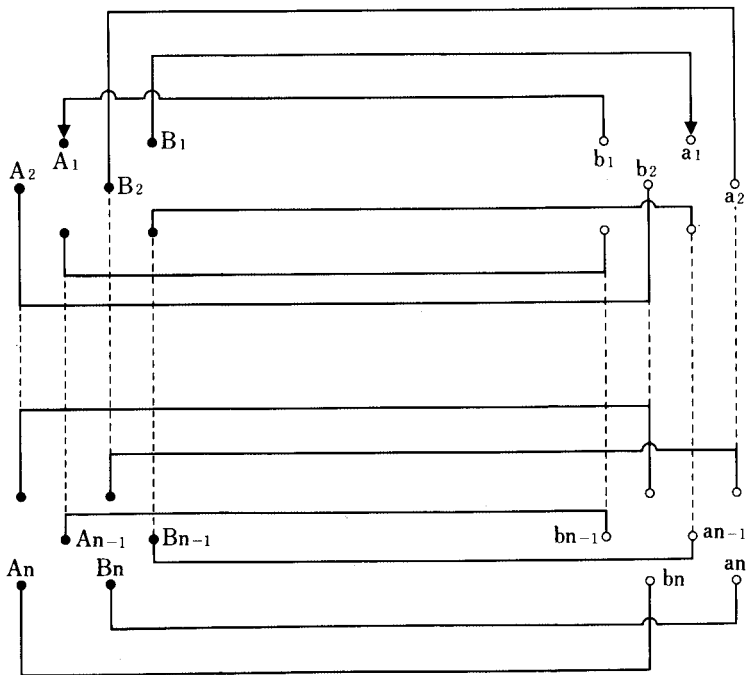
Connection to Cable 1	Connection to Cable 2
A1 — an	B1 — bn
A2 — an-1	B2 — bn-1
⋮	⋮
An — a1	Bn — b1



Type A, A

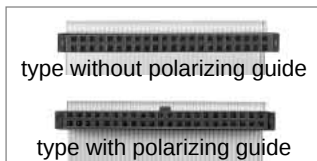
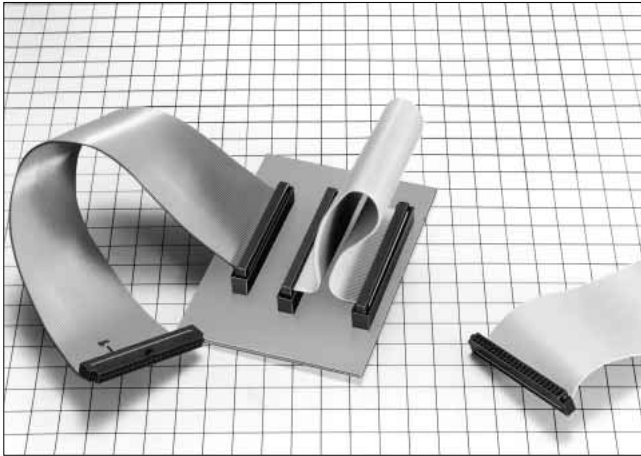


Connection to Cable 1	Connection to Cable 2
A1 — b1	B1 — a1
A2 — b2	B2 — a2
⋮	⋮
An — bn	Bn — an



2mm Pitch Miniature Connector for HDD

A3E Series



■Features

1. Variation in Number of Contacts

This connector can be chosen according to applications, using together with other series products as follows:

- (1) Cable crimping type (A3B series)
- (2) Cable ID type (A3E series)
- (3) FFC connection type (MA18 series, A3C series)

(However, the A3E series pin header corresponds to the A3E series socket only.)

On the other hand, 44 contacts are available for AT bus connection, and 55 contacts for SCSI connection.

2. Batch Insulation Displacement

1 mm pitch ribbon cable can be insulated and displaced.

3. Mechanism to Prevent Mis-insertion

The connector on the socket side contains a mechanism to prevent mis-insertion in the connector on the header side.

■Product Specifications

Rating	Current rating: 0.5A	Operating Temperature Range:-55 to +85°C (Note 1)	Storage Temperature Range:-10 to +60°C (Note 2)
	Voltage rating: 125V AC	Operating Moisture 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	40m ohms max.	0.1A
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)	Insulation resistance: 1000M ohms min.	96 hours at temperature of 40°C and humidity of 90% to 95%
6. Temperature Cycle	No damage, cracks, or parts looseness.	(-55°C: 30 minutes →15 to 35°C: 5 minutes max. → +85°C: 30 minutes →15 to 35°C: 5 minutes max.) 5 cycles
7. Durability (Mating/un-mating)	Contact resistance: 50m ohms max.	100 cycles
8. Resistance to Soldering heat	No deformation of components affecting performance.	Solder bath: 260°C for 10 seconds
		Manual soldering: 350°C for 3 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

Part		Material	Finish	Remarks
Insulator	Pin header	Polyamid	Black	UL94V-0
	Socket	PBT		
Contact	Pin header	Brass	Selective gold plated over nickel underplated	—
	Socket	Beryllium copper		

■Ordering Information

●Pin Header

A3E - * P A - 2 DSA
① ② ③ ④ ⑤ ⑥

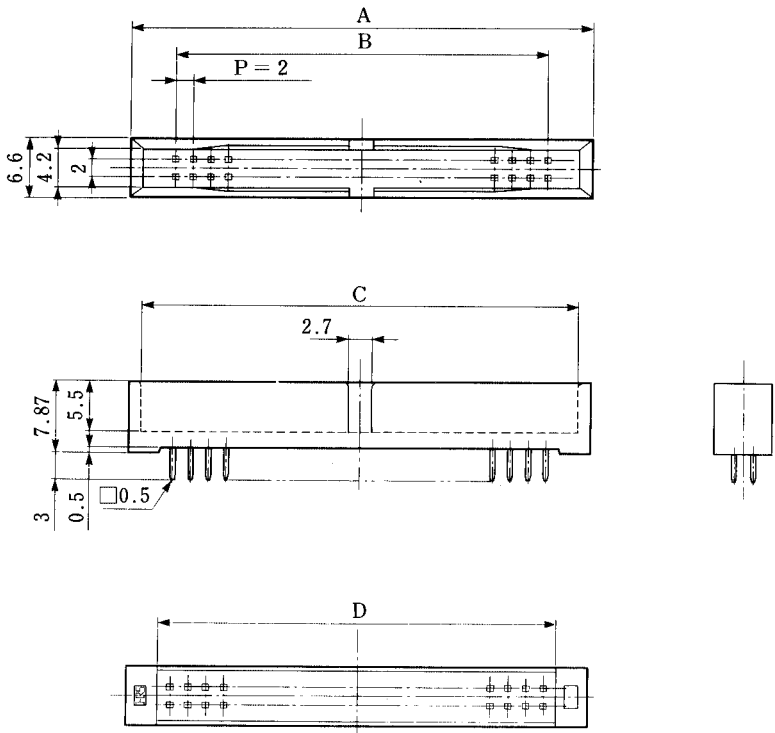
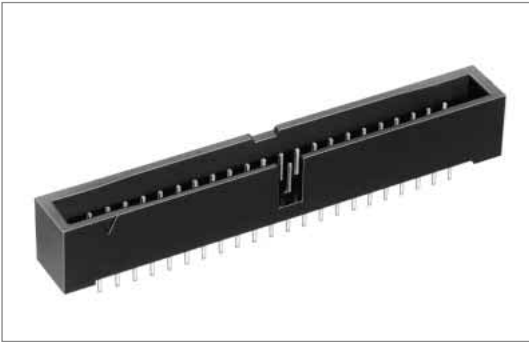
①	Series Name	: A3E
②	Number of contacts:	44, 50
③	P:	Pin header
④	A:	Selective gold plated
⑤	Contact pitch :	2mm
⑥	Contact type:	DSA : Straight dip type

●Socket

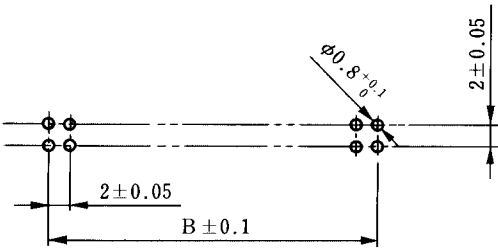
A3E - * D - 2 R
① ② ③ ④ ⑤

①	Series Name	: A3E : With polarizing guide A3EA : Without polarizing guide
②	Number of contacts:	44, 50
③	D:	Receptacle
④	Contact pitch:	2mm
⑤	Connection type:	R : ID type

Pin Header



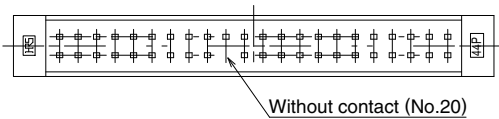
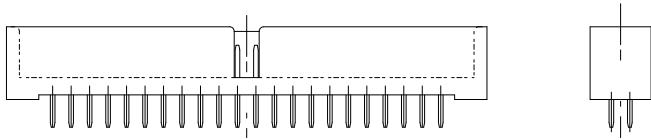
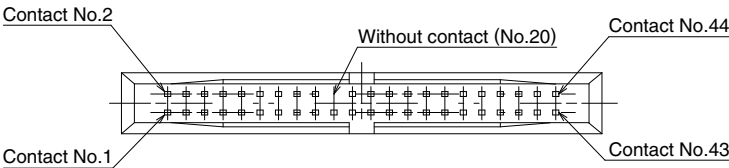
PCB mounting pattern



Unit: mm

Part Number	CL No.	A	B	C	D	RoHS
A3E-44PA-2DSA(71)	621-0911-8-71	52.0	42.0	49.2	45.0	YES
A3E-50PA-2DSA(71)	621-0914-6-71	58.0	48.0	55.2	51.0	

For 44 pos., without contact No. 20 pin header is available. A3E-44PA-2DSA(81)

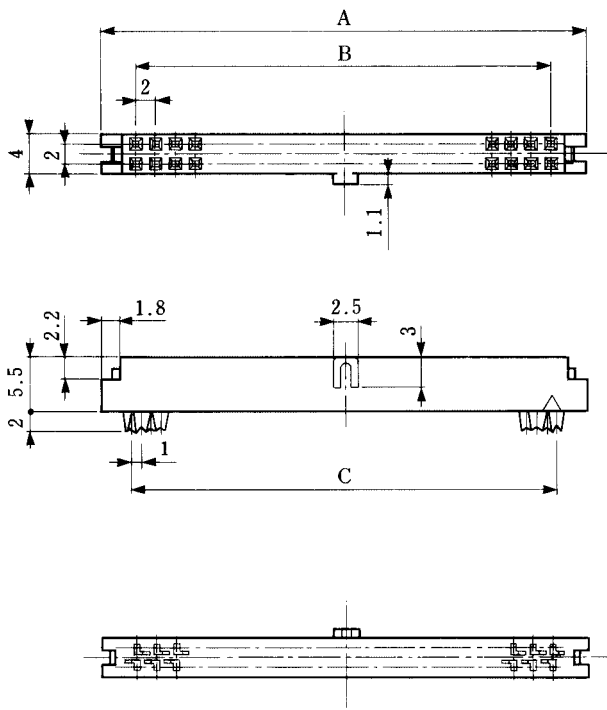


Socket

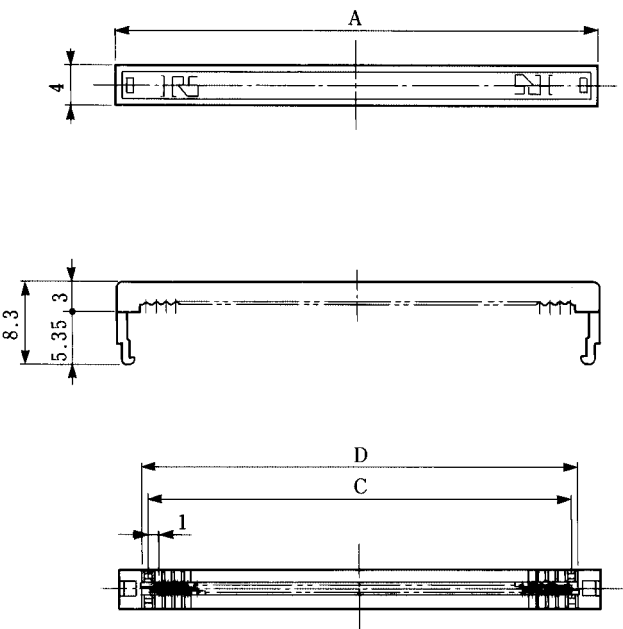
●Type with polarizing guide to prevent mis-insertion (A3E)



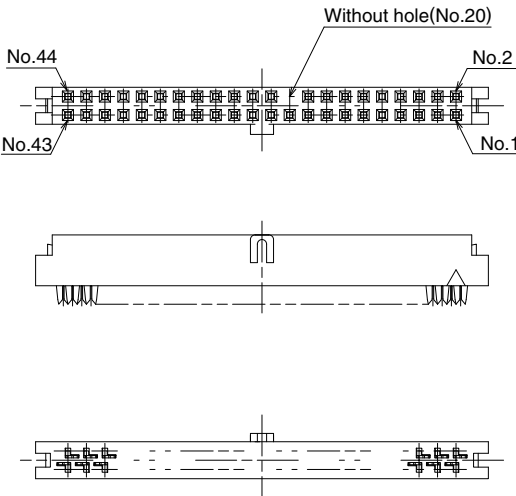
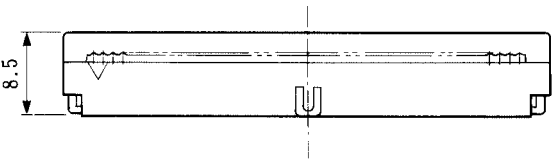
Body



Protector



Combination View

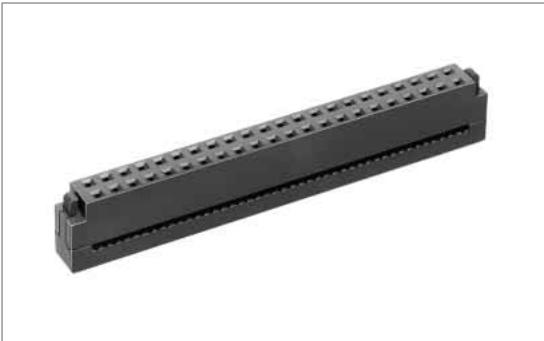


Unit: mm

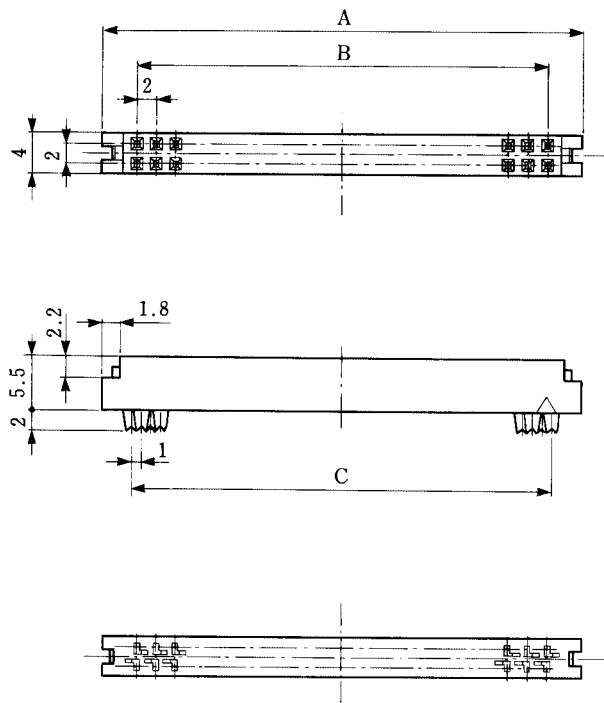
Part Number	CL No.	A	B	C	D	RoHS
A3E-44D-2R	621-0811-3	49.0	42.0	43.0	44.3	YES
A3E-50D-2R	621-0814-1	55.0	48.0	49.0	50.3	

Note : For 44 pos., without contact No. 20 hole soket is available.

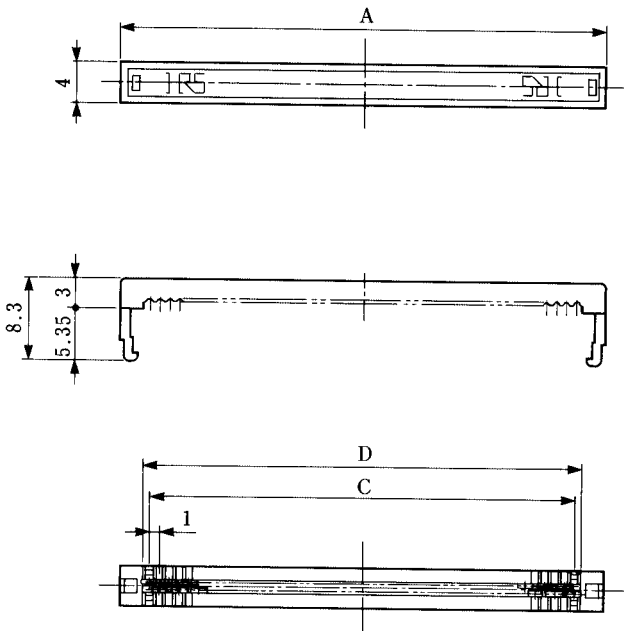
●Type without polarizing guide to prevent false-insertion (A3EA)



Body



Protector



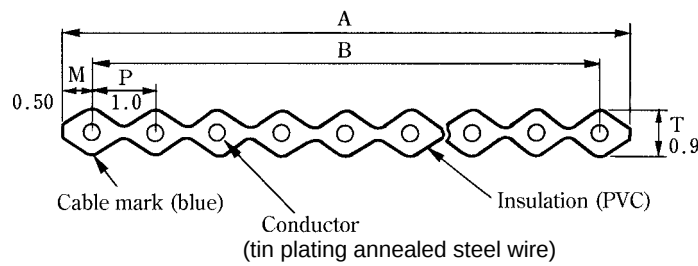
Combination View



Unit: mm

Part Number	CL No.	A	B	C	D	RoHS
A3EA-44D-2R	621-0861-1	49.0	42.0	43.0	44.3	YES
A3EA-50D-2R	621-0864-0	55.0	48.0	49.0	50.3	

■Recommended Cable for A3E Socket



Ribbon Cable

Number of Contacts	Core wire Construction (pc./mm)	A	B
44	7/0.127	44	43
50	7/0.127	50	49

◆Table of A3E Series Connection Tools

●Connection Press

Part Number: HI-FLEX Connection Press HHP502
CL550-0082-2



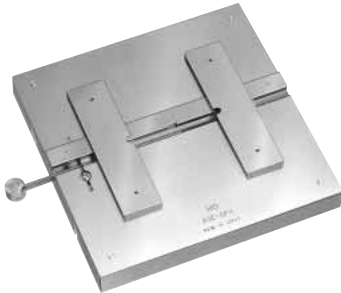
●Pressing Block

Part Number: Pressing Block A-01
CL550-0133-1



●Applicator

Universal Guide Plate
Part Number: A3E-GPA
CL550-0216-7



MA18 Series

The MA18 series is a 2mm pitch FFC socket connector developed for miniature HDD and main port connection. 44 contacts are provided for AT bus connection.

■Ordering Information

MA18A - 44 D A - 2 DSA

① ② ③ ④ ⑤ ⑥

① Series Name : MA18A	⑥ Contact type (Straight type) DSA : Dip length 3mm DSB : Dip length 2.5mm DSC : Dip length 2mm
② Number of contacts : 44	
③ Contact alignment : D : Double row	
④ Contact plating type A : Selective gold plated	
⑤ Contact pitch : 2mm	

■Variation in Number of Contacts

Part Number	CL No.	Remarks	RoHS
MA18A-44DA-2DSA(71)	588-0247-3-71	—	YES
MA18A-44DA-2DSB(71)	588-0255-1-71	—	
MA18A-44DA-2DSC(71)	588-0253-6-71	—	
MA18M-44DA-2DSB(71)	588-0291-5-71	High profile mount type	

Variation in Connection between HDD and Main Board

■Pin Heade

(1) Conventional product (used as conventional HDD interface pin header)

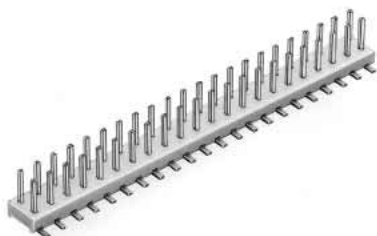
- Straight through hole type (see catalog page C15)



44 contacts : A3C-44P-2DSA (see photo)

50 contacts : A3C-50P-2DSA

- Straight SMT type (see catalog page C22)



44 contacts : A3-44PA-2SV(71) (see photo)

50 contacts : A3-50PA-2SV(71)

(With boss type available)

- Right angle through hole type (see catalog page C13)

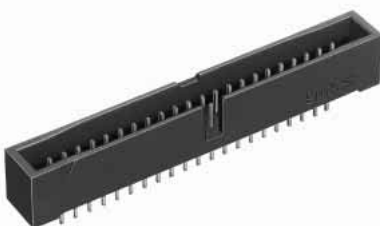


44 contacts : A3B-44PA-2DS(71) (see photo)

50 contacts : A3B-50PA-2DS(71)

(2) Box type product (Socket side prevents mis-insertion)

- Straight through hole type(see catalog page C28)



44 contacts : A3E-44PA-2DSA(71) (see photo)

50 contacts : A3E-50PA-2DSA(71)

Note: Correspond to A3E series socket only.

■Socket

(1) Products suitable to various cables

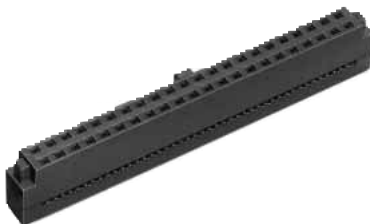
- Discrete wire Crimping Type (see catalog page C19)



44 contacts: A3B-44D-2C

Crimping contacts and crimping tools are detailed on page C20.

- Ribbon Cable (1mm pitch) Batch ID Type (see catalog page C29)



44 contacts: A3E-44D-2R (see photo)

50 contacts: A3E-50D-2R

Insulation displacement is detailed on page C31.

- FPC Connection Type



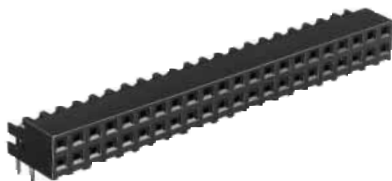
44 contacts: MA18A-44DA-2DSA(71) (photo)

(For a typical example, products
are provided corresponding to
various board thickness.
For details, refer to page C32.)

50 contacts: A3C-50DA-2DSC(71)

(For a typical example, products
are provided corresponding to
various board thickness.
For details, refer to page C17.)

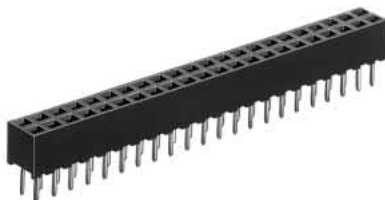
(2) Right Angle through hole Type (see catalog page C16.)



44 contacts: A3-44DA-2DS(71) (see photo)

50 contacts: A3-50DA-2DS(71)

(3) Straight through hole Type



44 contacts: MA18A-44DA-2DSA(71) (see photo)
(See catalog page C32.)

50 contacts: A3C-50DA-2DSA(71) (see catalog page C17.)

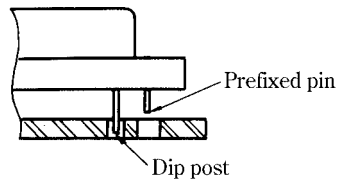
Connector Use Hand book

1. Selecting connector

- ① The FX2 series is the perfect flux tight connector for the straight type in the soldering process, but it depends on the soldering process whether non-cleaning type (FX2C-*, FX2B-*) or cleaning type (FX2CA-*, FX2BA-*) should be selected. Please be sure to clean the right angle type (FX2-*, FX2B-*) connector. To clean the connector, please be sure to use detergent, containing no contaminant.
- ② To use the socket cable type, if a vibration or shock load is applied to the cable, select the lock type. In addition, if a load is applied to the cable, please be sure to use the cable clamp.

2. Prefixed Process to Board

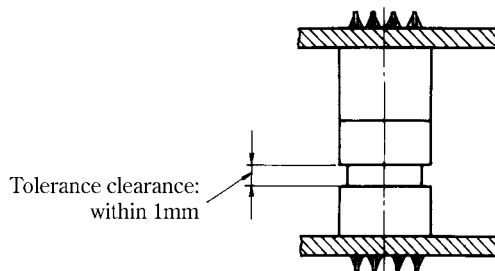
If the prefixed process is required for mounting the board, please use the prefixed pin type. (Applicable board thickness $t = 1.6 \pm 0.1$)



Note : In order to prevent the dip post breakage in the connector installation to the board, please insert the board in parallel to the connector so that the prefixed pin may be forcibly pushed in, after the dip post is guided to the board through-hole.

3. Mating Side Tolerance Clearance

(Example) FX2C-*P-1.27DSA and FX2C-*S-1.27DSA



Set the tolerance clearance within 1mm to mate the male and female connectors.
(Except for the lock cable type)

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
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