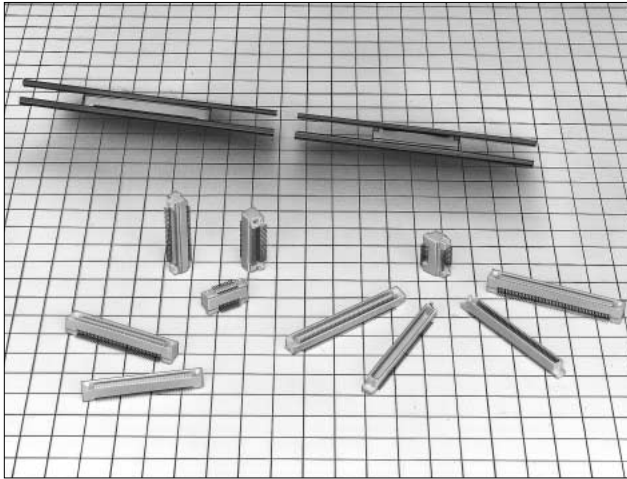
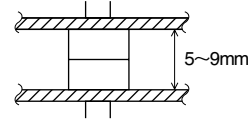


0.8mm Pitch Stacking Height 5~9mm Connector

FX6 Series



Stacking Height: 5~9mm



Mounting area 50% OFF, compared with the half pitch connector



Half pitch connector
(FX2 series)



FX6 series
(If compared with 60 contacts)

Features

1. Stacking Height 5~9mm

The board to board stacking height can be set at every millimeter between 5 and 9mm.

2. Effective Contact Length 1.7mm

Despite the low profile type connector, the connector has the 1.7mm long effective contact length and provides a margin sufficient to contact.

3. Mating Guide

The self-alignment for mating action exhibits a high guide level at ± 1 mm, and makes the mating process easier by providing the guide rib.

4. Automatic Mounting

The standard packaging specification specifies the stick package, considering the automatic mount, while the emboss package can also correspond to the connector with less than 80 contacts. (However, the product is limited to 80 contacts.)

5. SMT Coplanarity

The lead coplanarity on the SMT soldered area is maintained with the high accuracy of less than 0.1mm.

Applications

Note PC, business equipments such as handy terminals, and other equipment which require miniaturization or light-weight.

Product Specifications

Rating	Rated Current 0.5A	Operating Temperature Range -55°C~+85°C Note 1.	Storage Temperature Range -10°C~+60°C Note 2.
	Rated Voltage 100V AC	Operating Humidity Range 40%~80%	Storage Humidity Range 40%~70%

Item	Specification	Condition	
1. Insulation Resistance	100MΩ min	Measured at 250V DC	
2. Withstand voltage	Neither short or insulation breakdown	300V AC for 1 minute	
3. Contact Resistance	40mΩ max.	Measured at 100mA	
4. Vibration	Electrical discontinuity, 1μS max.	10~55Hz and single amplitude 0.75mm in 3 directions for 10 cycles, respectively	
5. Moisture Resistance	Contact resistance: 50mΩ max. Insulation resistance: 100mΩ min.	Exposed to temperature 40±2°C and humidity 90~95% for 96 hours	
6. Temperature Cycle	Contact resistance: 50mΩ max. Insulation resistance: 100mΩ min.	(-55°C: 30 minutes 15~35°C: 2~3 minutes 85°C: 30 minutes 15~35°C: 2~3minutes)5 cycles	
7. Operating Life	Contact resistance: 50mΩ max.	100 cycles	
8. Resistance to Soldering heat	No resin area fusion to degrade performance	SMT type	Reflow: According to the recommended temperature profile
		DIP Type	Soldering iron temperature: 300°C for 3 seconds

Note 1. Temperature rise included when energized

Note 2. This storage indicates a long-term storage state for the unused product before the board mounted.

The operating temperature and humidity ranges are applied to the non-energized state after the connector is installed in the board. In addition, the operating temperature and humidity ranges can be set up to +85°C in the temporal storage state for a transportation period.

Note 3. The above standards represent this series. Individual formal agreement should be based on the "Specification".

Material

Part	Material	Finish		Remarks
Insulation	PPS	Light brown		UL94V-0
Header Contact	Phosphor bronze	Contact area	Gold plating	————
Receptacle Contact		Lead area	Solder plating	————

Ordering Information

Please determine the specific product. If needed, select and order the products from the product No. as listed on catalog A215~214.

FX 6 (A) - ※ P - 0.8 SV 1 (21)

①
②
③
④
⑤
⑥
⑦
⑧
⑨

① Series Name: FX	⑦ Contact type SV: Board vertical type
② Series No. : 6	⑧ Product Height Variable None : Standard, 1: +1mm 2 : +2mm
③ None: With boss A : Without boss	
④ Number of Contacts : 20,40,50,60,80,100	⑨ Packaging Style None : Stick packaging (No pick & place tape) (21) : Stick packaging (Pick & place tape) (22) : Embossed tape packaging (No pick & place tape) (23) : Embossed tape packaging (Pick & place Stick tape)
⑤ Connector Type P: Header S: Receptacle	
⑥ Contact Pitch: 0.8mm	

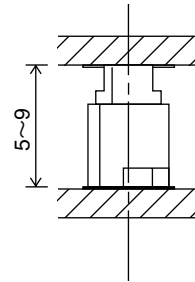
Note: Note that the header specification (21), (23) and receptacle specification (22) can't be applied.

Stacking Height Variation

Unit: mm

	FX6(A)-※P-0.8SV	FX6(A)-※S-0.8SV2
FX6(A)-※P-0.8SV0	5	7
FX6(A)-※P-0.8SV1	6	8
FX6(A)-※P-0.8SV2	7	9

(※ indicates 20, 40, 50, 60, 80, and 100 contacts.)

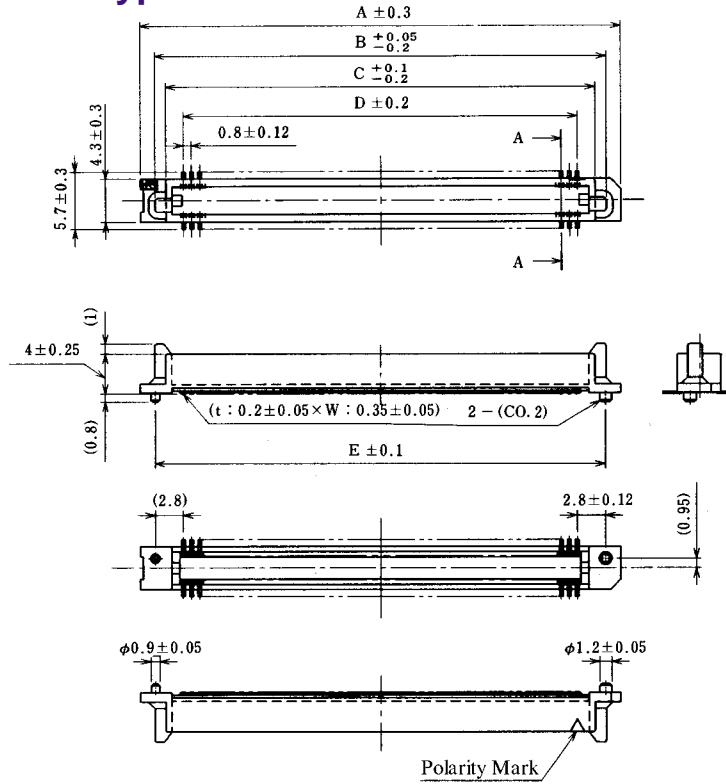


Packaging Type

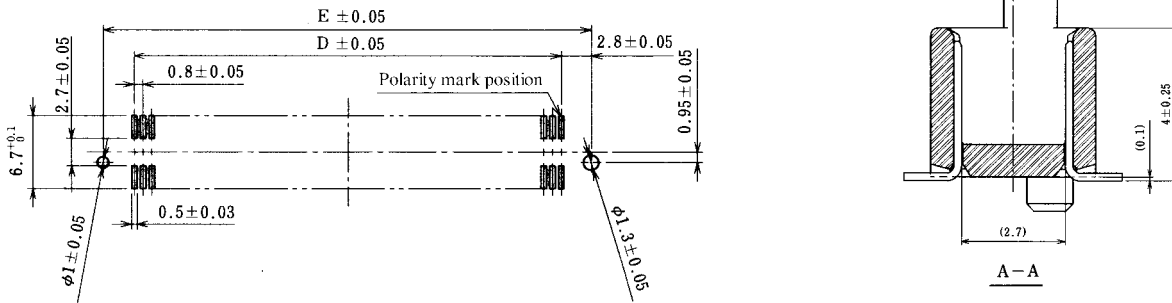
Packaging Type	Number of Contacts	20 contacts	40 contacts	50 contacts	60contacts	80 contacts	100 contacts	
Stick Packaging	Packaged Product Pieces	33 pieces	22 pieces	19 pieces	16 pieces	13 pieces	11 pieces	
	Sales Unit	Order by doubling the number of pieces contained in the product. (Example) In case of 20 contacts,33 pieces, 66 pieces,...						
Embossed Tape Packaging	Tape Width	24mm	44mm	44mm	44mm	56mm	X	
	Product Pitch	12mm						
	Emboss Reel Diameter	FX6(A)-*S-0.8SVφ330mm FX6(A)-*P-0.8SV.FX6(A)-*S-0.8SV2φ360mm FX6(A)-*P-0.8SV1.FX6(A)-*P-0.8SV2φ380mm						
	Packaged Product Pieces	1000 pieces packaged per reel						
	Sales Unit	Per reel						

With Boss Type

Header-Stacking Height: Standard type



Recommended Land Pattern Size (Connector Mounting Surface Side)



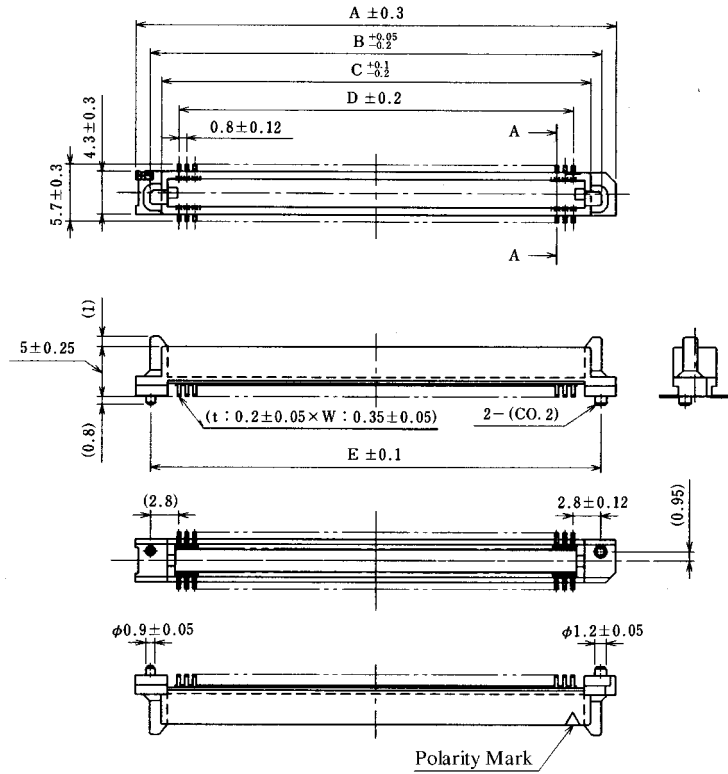
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D	E
FX6- 20P-0.8SV	CL576-0001-3	20	15.8	12.9	10.7	7.2	12.8
FX6- 40P-0.8SV	CL576-0003-9	40	23.8	20.9	18.7	15.2	20.8
FX6- 50P-0.8SV	CL576-0004-1	50	27.8	24.9	22.7	19.2	24.8
FX6- 60P-0.8SV	CL576-0005-4	60	31.8	28.9	26.7	23.2	28.8
FX6- 80P-0.8SV	CL576-0007-0	80	39.8	36.9	34.7	31.2	36.8
FX6-100P-0.8SV	CL576-0008-2	100	47.8	44.9	42.7	39.2	44.8

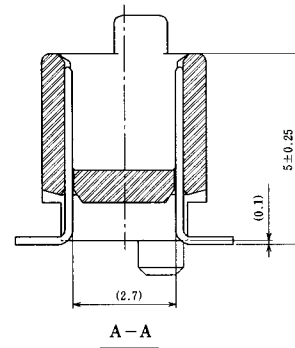
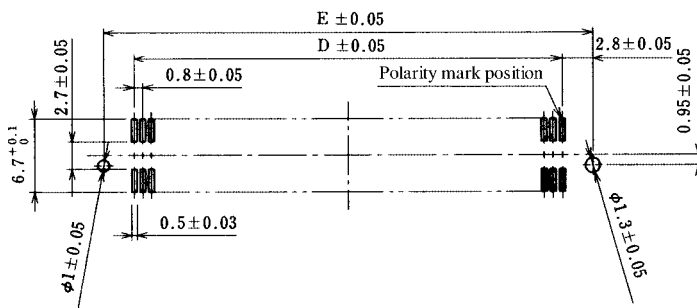
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer.
Please make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces).
(Refer to the delivery form item on page A214 for details.)

With Boss Type

Header-Stacking Height: Standard type



Recommended Land Pattern Size (Connector Mounting Surface Side)



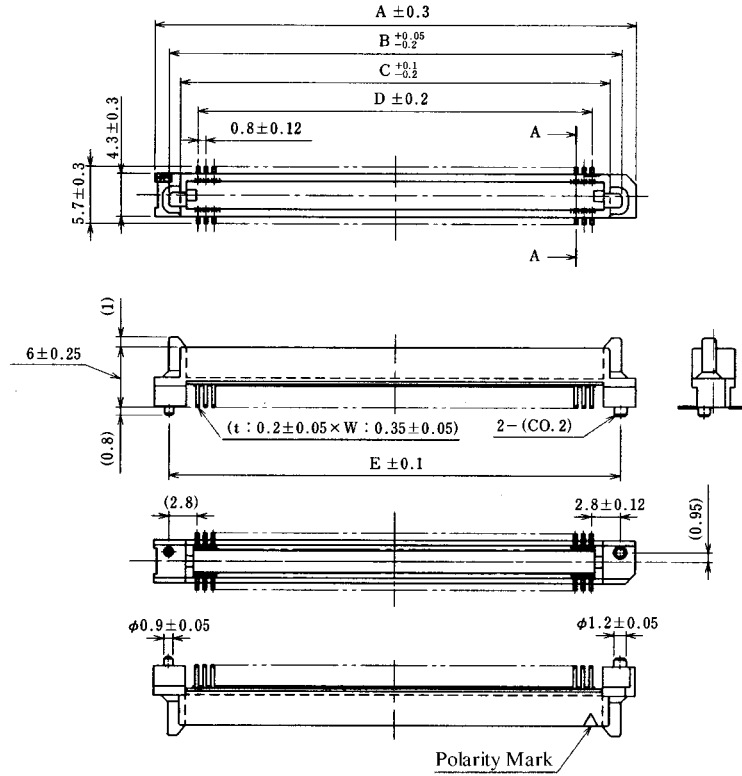
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D	E
FX6- 20P-0.8SV1	CL576-0021-0	20	15.8	12.9	10.7	7.2	12.8
FX6- 40P-0.8SV1	CL576-0023-6	40	23.8	20.9	18.7	15.2	20.8
FX6- 50P-0.8SV1	CL576-0024-9	50	27.8	24.9	22.7	19.2	24.8
FX6- 60P-0.8SV1	CL576-0025-1	60	31.8	28.9	26.7	23.2	28.8
FX6- 80P-0.8SV1	CL576-0027-7	80	39.8	36.9	34.7	31.2	36.8
FX6-100P-0.8SV1	CL576-0028-0	100	47.8	44.9	42.7	39.2	44.8

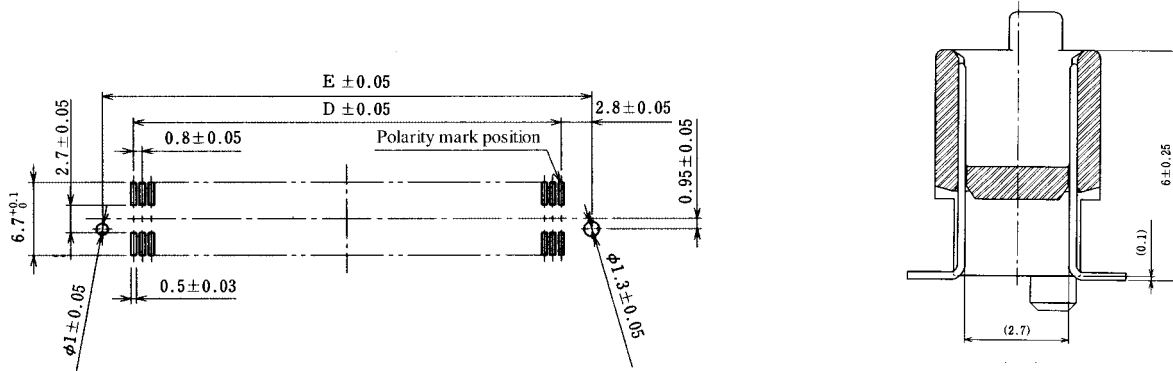
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer. Make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces). (Refer to the delivery form item on page A214 for details.)

With Boss Type

Header-Stacking Height: Standard+2mm type



Recommended Land Pattern Size (Connector Mounting Surface Side)



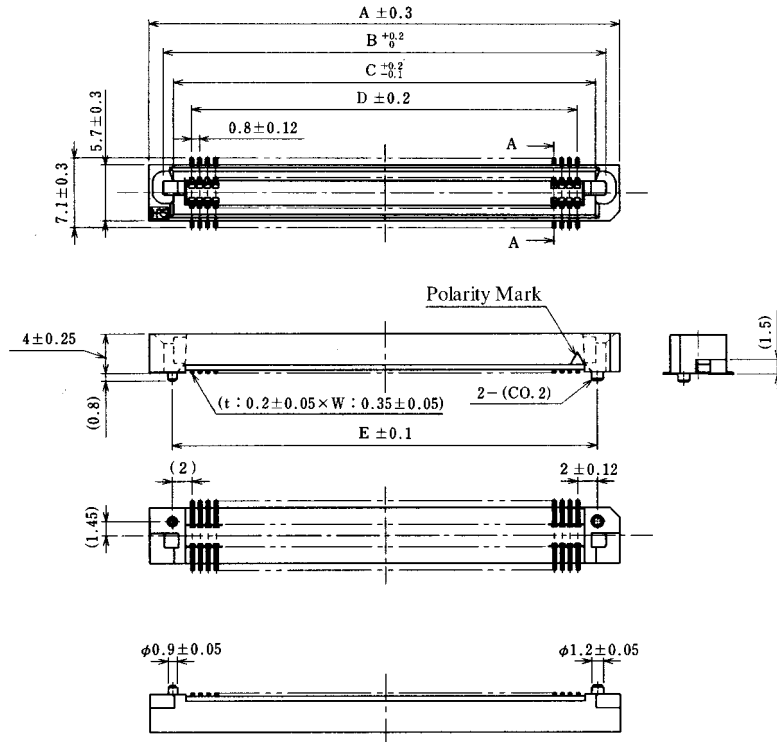
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D	E
FX6- 20P-0.8SV2	CL576-0041-8	20	15.8	12.9	10.7	7.2	12.8
FX6- 40P-0.8SV2	CL576-0043-3	40	23.8	20.9	18.7	15.2	20.8
FX6- 50P-0.8SV2	CL576-0044-6	50	27.8	24.9	22.7	19.2	24.8
FX6- 60P-0.8SV2	CL576-0045-9	60	31.8	28.9	26.7	23.2	28.8
FX6- 80P-0.8SV2	CL576-0047-4	80	39.8	36.9	34.7	31.2	36.8
FX6-100P-0.8SV2	CL576-0048-7	100	47.8	44.9	42.7	39.2	44.8

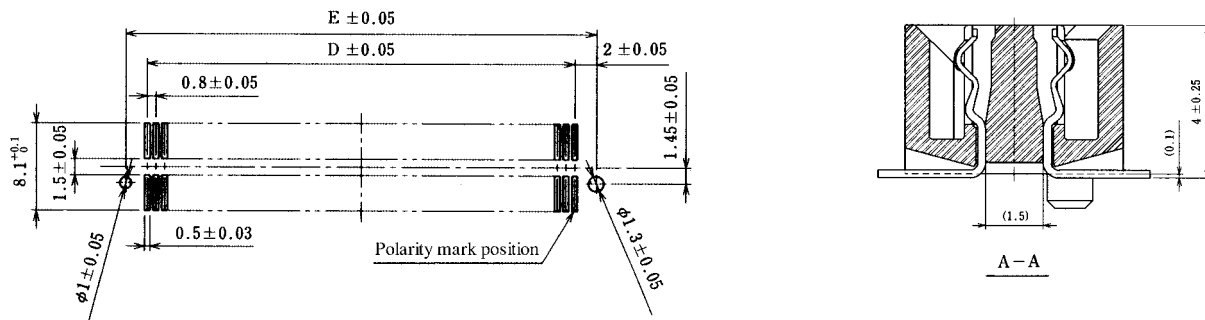
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer.
 Make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces).
 (Refer to the delivery form item on page A214 for details.)

With Boss Type

■ Receptacle-Stacking Height: Standard type



◆ Recommended Land Pattern Size (Connector Mounting Surface Side)



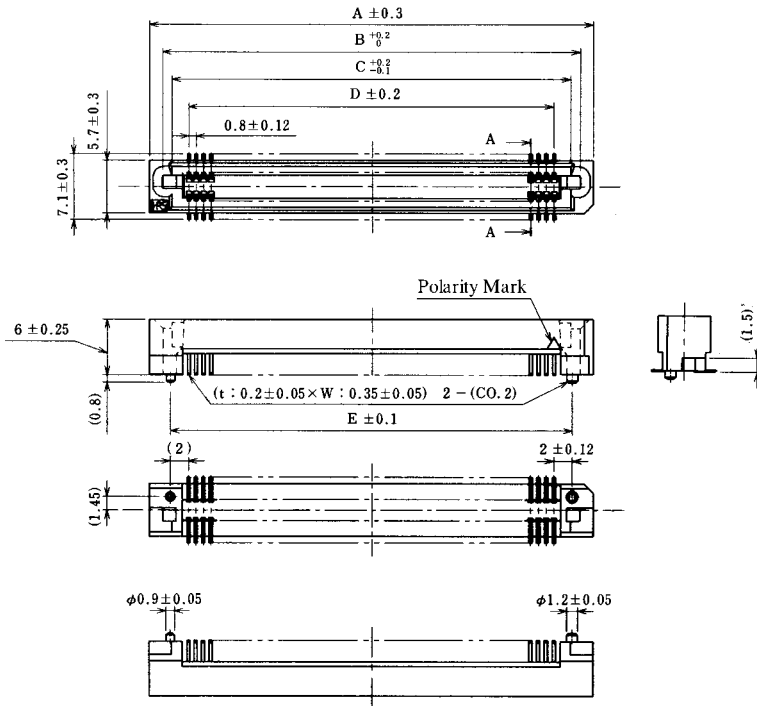
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D	E
FX6- 20S-0.8SV	CL576-0101-8	20	15.8	12.95	10.9	7.2	11.2
FX6- 40S-0.8SV	CL576-0103-3	40	23.8	20.95	18.9	15.2	19.2
FX6- 50S-0.8SV	CL576-0104-6	50	27.8	24.95	22.9	19.2	23.2
FX6- 60S-0.8SV	CL576-0105-9	60	31.8	28.95	26.9	23.2	27.2
FX6- 80S-0.8SV	CL576-0107-4	80	39.8	36.95	34.9	31.2	35.2
FX6-100S-0.8SV	CL576-0108-7	100	47.8	44.95	42.9	39.2	43.2

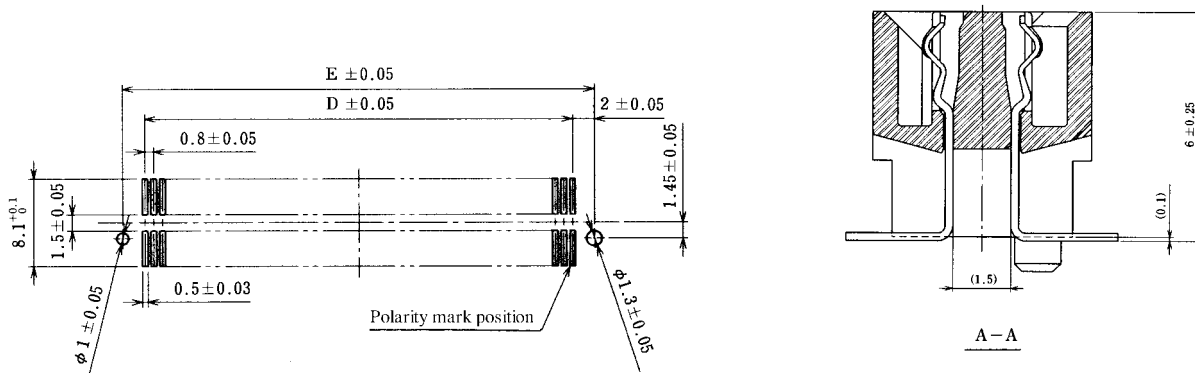
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer.
 Make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces).
 (Refer to the delivery form item on page A214 for details.)

With Boss Type

■ Receptacle-Stacking Height: Standard+2mm type



◆ Recommended Land Pattern Size (Connector Mounting Surface Side)



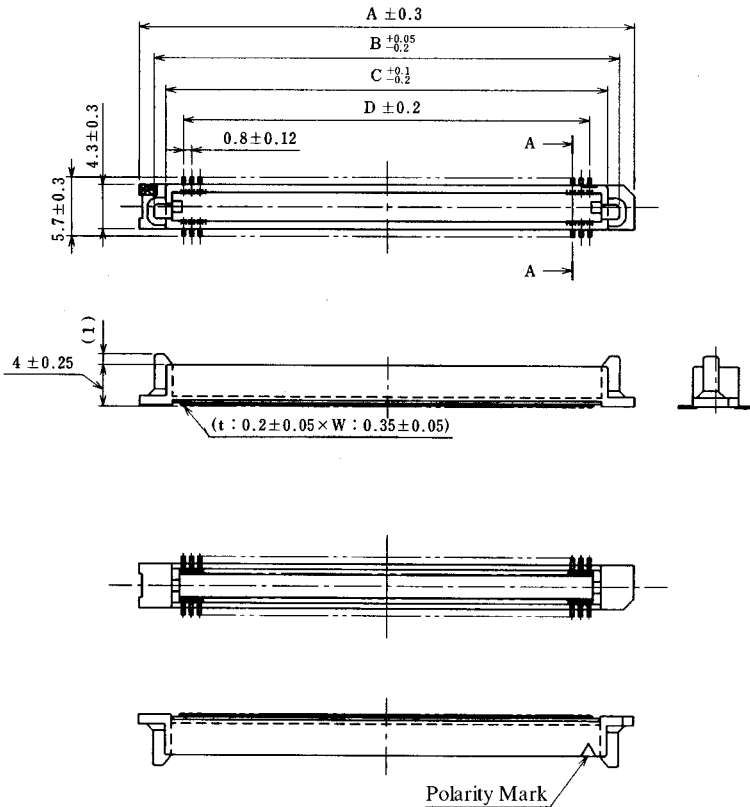
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D	E
FX6- 20S-0.8SV2	CL576-0121-5	20	15.8	12.95	10.9	7.2	11.2
FX6- 40S-0.8SV2	CL576-0123-0	40	23.8	20.95	18.9	15.2	19.2
FX6- 50S-0.8SV2	CL576-0124-3	50	27.8	24.95	22.9	19.2	23.2
FX6- 60S-0.8SV2	CL576-0125-6	60	31.8	28.95	26.9	23.2	27.2
FX6- 80S-0.8SV2	CL576-0127-1	80	39.8	36.95	34.9	31.2	35.2
FX6-100S-0.8SV2	CL576-0128-4	100	47.8	44.95	42.9	39.2	43.2

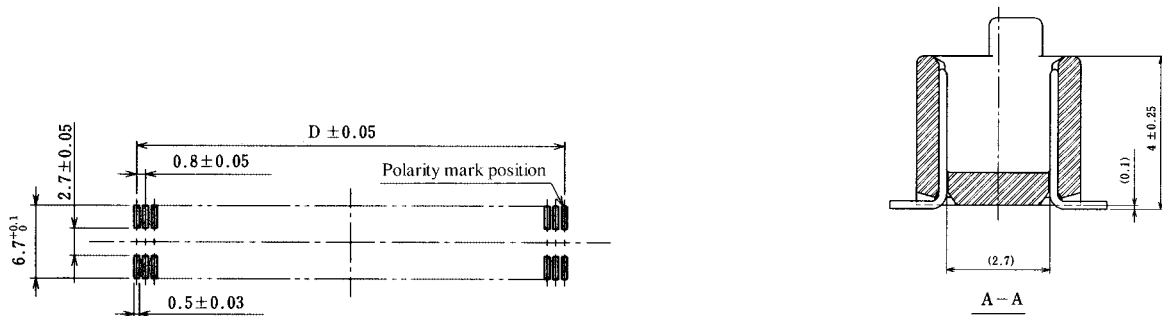
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer.
 Make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces).
 (Refer to the delivery form item on page A214 for details.)

With Boss Type

Header-Stacking Height: Standard type



Recommended Land Pattern Size (Connector Mounting Surface Side)



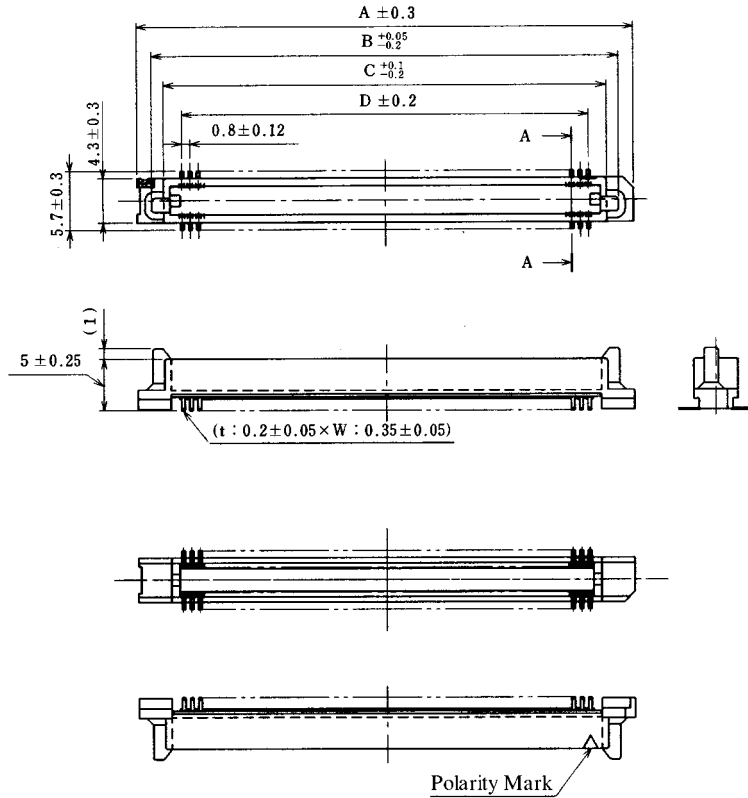
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D
FX6A- 20P-0.8SV	CL576-0201-2	20	15.8	12.9	10.7	7.2
FX6A- 40P-0.8SV	CL576-0203-8	40	23.8	20.9	18.7	15.2
FX6A- 50P-0.8SV	CL576-0204-0	50	27.8	24.9	22.7	19.2
FX6A- 60P-0.8SV	CL576-0205-3	60	31.8	28.9	26.7	23.2
FX6A- 80P-0.8SV	CL576-0207-9	80	39.8	36.9	34.7	31.2
FX6A-100P-0.8SV	CL576-0208-1	100	47.8	44.9	42.7	39.2

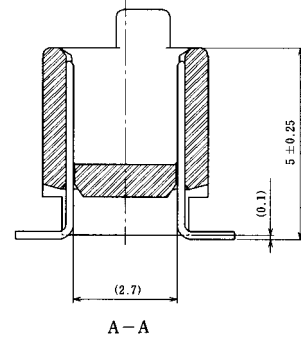
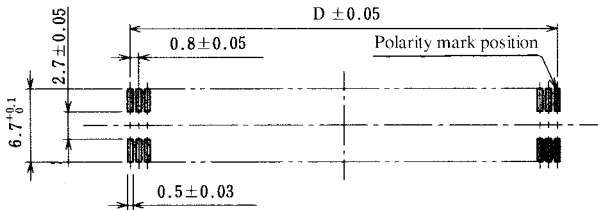
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer. Please make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces). (Refer to the delivery form item on page A214 for details.)

Without Boss Type

Header-Stacking Height: Standard+1 type



Recommended Land Pattern Size (Connector Mounting Surface Side)



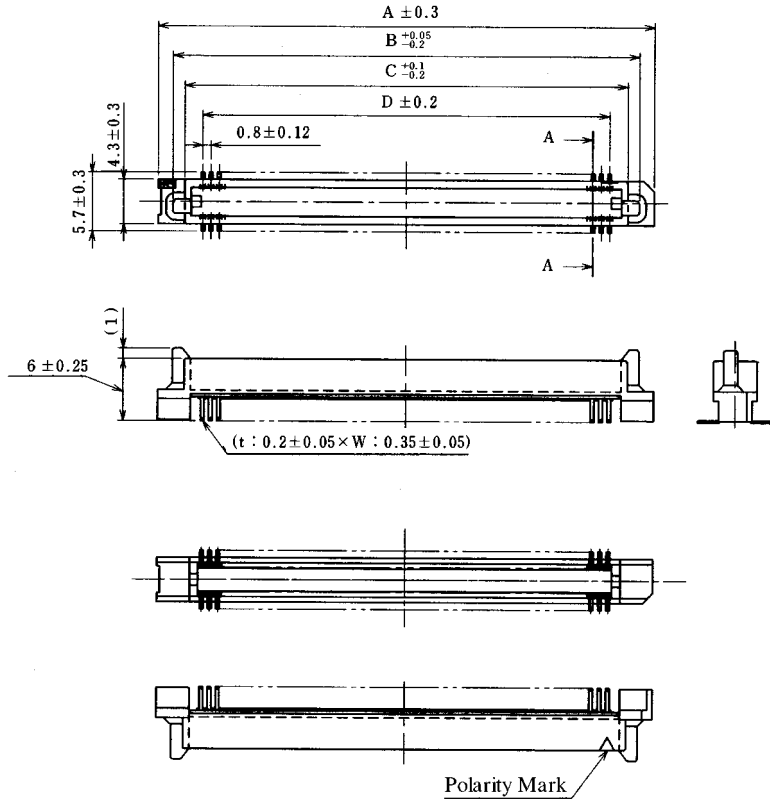
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D
FX6A- 20P-0.8SV1	CL576-0221-0	20	15.8	12.9	10.7	7.2
FX6A- 40P-0.8SV1	CL576-0223-5	40	23.8	20.9	18.7	15.2
FX6A- 50P-0.8SV1	CL576-0224-8	50	27.8	24.9	22.7	19.2
FX6A- 60P-0.8SV1	CL576-0225-0	60	31.8	28.9	26.7	23.2
FX6A- 80P-0.8SV1	CL576-0227-6	80	39.8	36.9	34.7	31.2
FX6A-100P-0.8SV1	CL576-0228-9	100	47.8	44.9	42.7	39.2

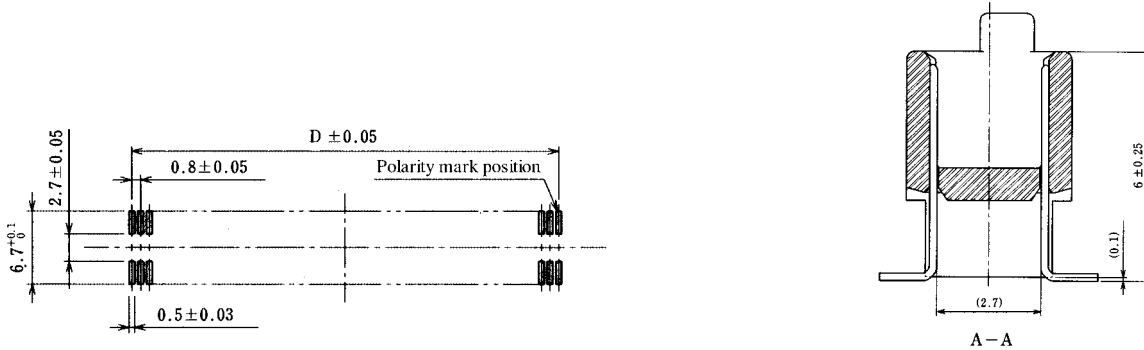
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer. Please make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces). (Refer to the delivery form item on page A214 for details.)

Without Boss Type

■ Receptacle-Stacking Height: Standard+2mm type



◆ Recommended Land Pattern Size (Connector Mounting Surface Side)



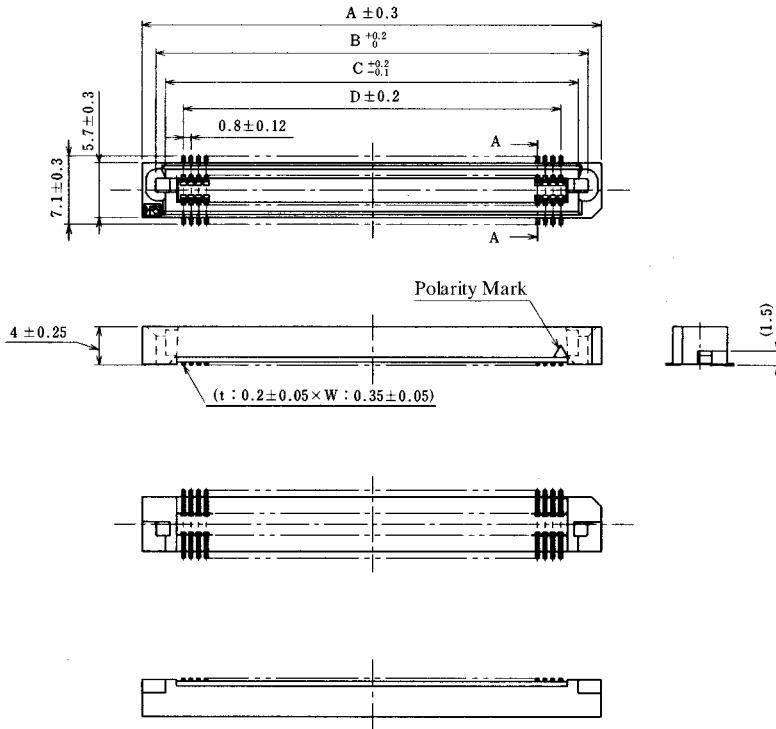
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D
FX6A- 20P-0.8SV2	CL576-0241-7	20	15.8	12.9	10.7	7.2
FX6A- 40P-0.8SV2	CL576-0243-2	40	23.8	20.9	18.7	15.2
FX6A- 50P-0.8SV2	CL576-0244-5	50	27.8	24.9	22.7	19.2
FX6A- 60P-0.8SV2	CL576-0245-8	60	31.8	28.9	26.7	23.2
FX6A- 80P-0.8SV2	CL576-0247-3	80	39.8	36.9	34.7	31.2
FX6A-100P-0.8SV2	CL576-0248-6	100	47.8	44.9	42.7	39.2

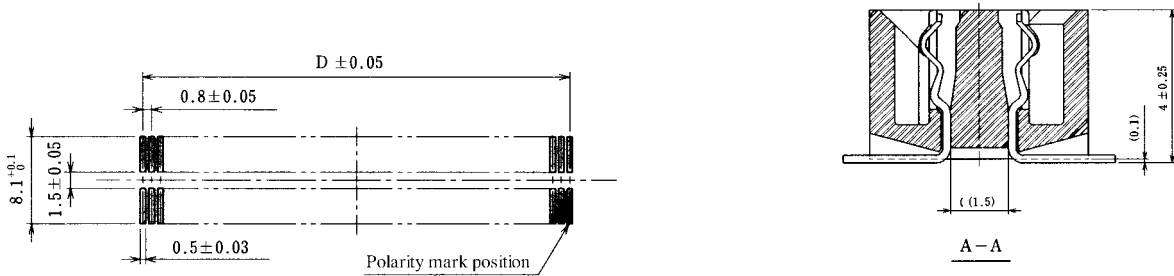
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer. Please make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces). (Refer to the delivery form item on page A214 for details.)

Without Boss Type

■ Receptacle-Stacking Height: Standard type



◆ Recommended Land Pattern Size (Connector Mounting Surface Side)



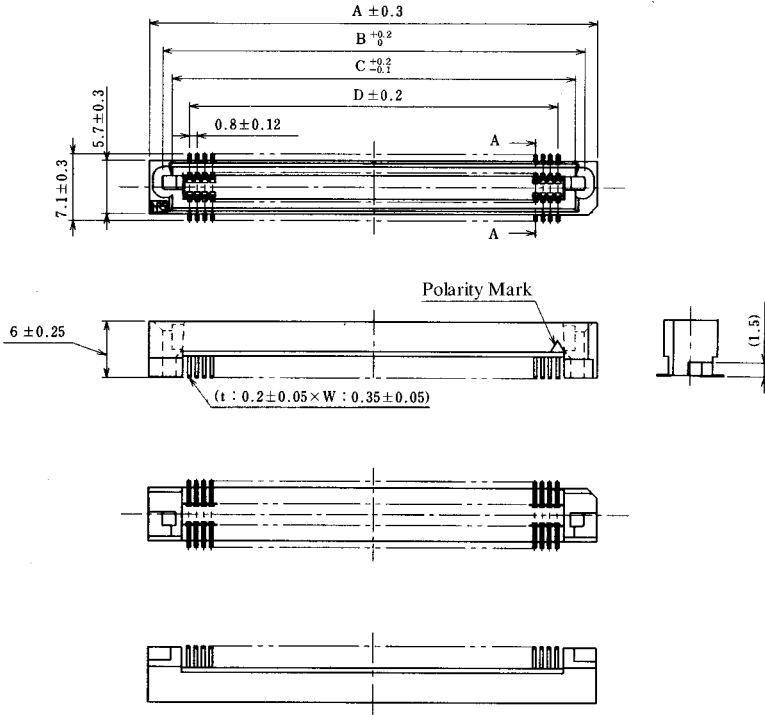
Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D
FX6A- 20S-0.8SV	CL576-0301-7	20	15.8	12.95	10.9	7.2
FX6A- 40S-0.8SV	CL576-0303-2	40	23.8	20.95	18.9	15.2
FX6A- 50S-0.8SV	CL576-0304-5	50	27.8	24.95	22.9	19.2
FX6A- 60S-0.8SV	CL576-0305-8	60	31.8	28.95	26.9	23.2
FX6A- 80S-0.8SV	CL576-0307-3	80	39.8	36.95	34.9	31.2
FX6A-100S-0.8SV	CL576-0308-6	100	47.8	44.95	42.9	39.2

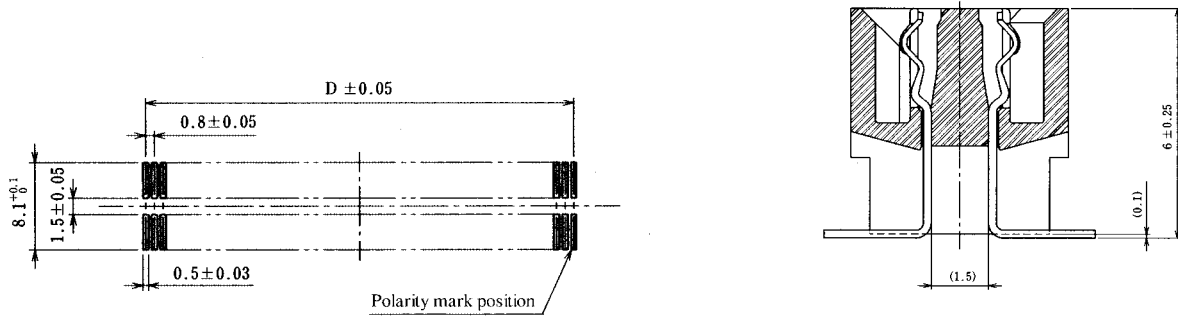
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer. Please make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces). (Refer to the delivery form item on page A214 for details.)

Without Boss Type

■ Receptacle-Stacking Height: Standard+2mm type



◆ Recommended Land Pattern Size (Connector Mounting Surface Side)



Unit: mm

Product No.	HRS No.	Number of Contacts	A	B	C	D
FX6A- 20S-0.8SV2	CL576-0321-4	20	15.8	12.95	10.9	7.2
FX6A- 40S-0.8SV2	CL576-0323-0	40	23.8	20.95	18.9	15.2
FX6A- 50S-0.8SV2	CL576-0324-2	50	27.8	24.95	22.9	19.2
FX6A- 60S-0.8SV2	CL576-0325-5	60	31.8	28.95	26.9	23.2
FX6A- 80S-0.8SV2	CL576-0327-0	80	39.8	36.95	34.9	31.2
FX6A-100S-0.8SV2	CL576-0328-3	100	47.8	44.95	42.9	39.2

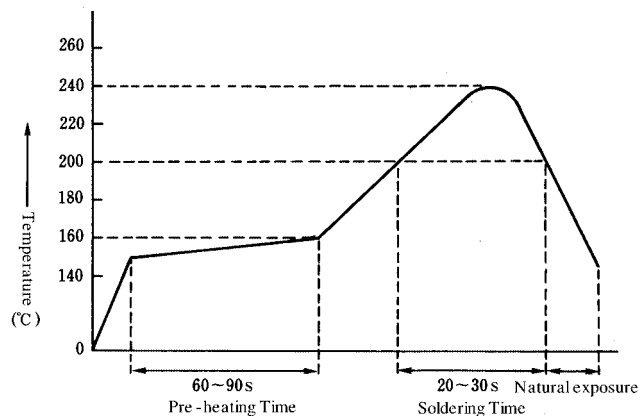
Note: Determine a quantity of the stick package product for delivery, multiplying the insertion pieces per contact number by an integer. Please make sure that a quantity of the stick package product for delivery is determined per reel (1000 pieces). (Refer to the delivery form item on page A214 for details.)

◆ Connector Precautions for Use

1. Tolerance Clearance on Mating Side

The effective contact length of the product is set to 1.7mm. Please use the products as to set the clearance within 1.0mm between the header and the receptacle in the mating process.

2. Mounting Temperature Profile (Reference)



Setting Condition

- Board
Size: 110×55×1.6(mm)
Material: Glass Epoxy
- Solder paste
Contains: 63Sn/37Pb (Flux content: 11Wt%)
Metal Mask Thickness: 0.15mm
- Reflow Method
IR Reflow

3. Board to Board Size

The board to board size of the male/female connector shown in the application pattern doesn't include the solder paste thickness. Thus, after the connector is mounted on the board, consider that the board to board size will be widened in proportion to the solder paste thickness.