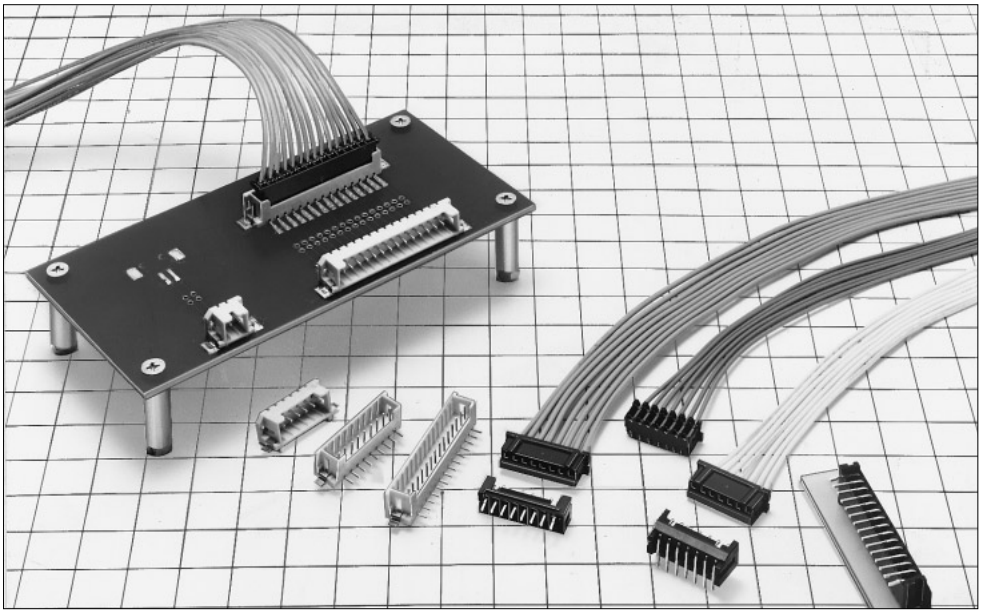


■Features

Correspond to Board Design in Wide Variation

●ID Socket
(1) Low profile design with the mounting height of 6.8mm
(2) Achieves the multi-harness by the full automatic ID machine in combination with the DF11 series ID type.
(DF11 series represents the 2mm pitch single-row product.Please refer to page A266 to A277.)

●Crimp Socket
(1) Low profile design with mounting height 7.5mm.
(Please refer to the application pattern figure on page A256 for details.)
(2) Provide the contact crimping area with the sufficient space, and secures the stable crimping operation.

●Receptacle
(1) The board can be connected horizontally or vertically in combination with the straight header with the right angle header.
(2) For horizontal connection, the board to board size is the low profile of 6.6mm.
(Please refer to the application pattern on page A256 for details.)
(3) Compatibility with the in-line plug allows the receptacle to set the board side to the receptacle and the cable side to the plug in the board to cable connection.

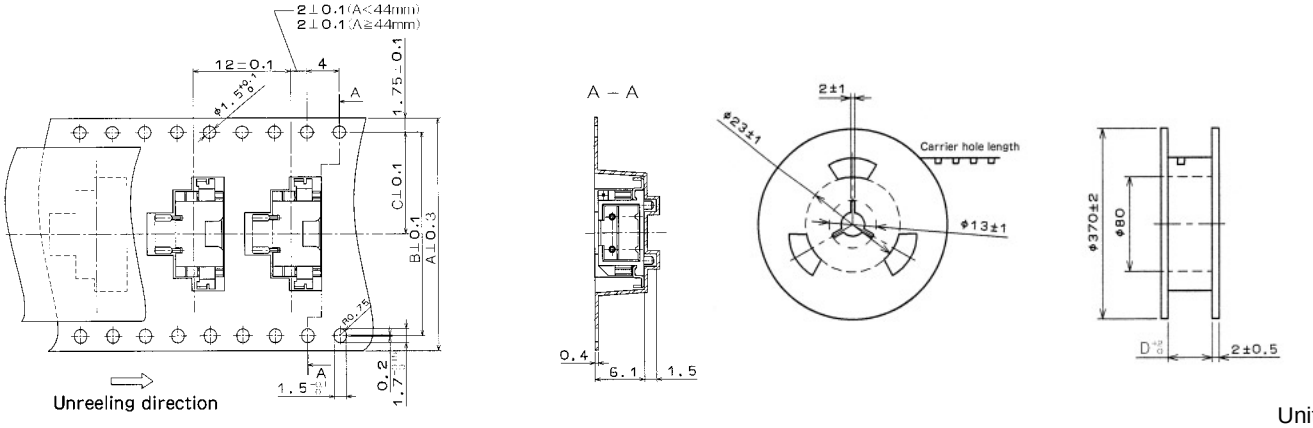
●Pin Header
(1) The board pre-fixed kink is treated with the post pin.
(2) The style employs a scoop-proof and sturborn box type.
(3) The type corresponding to SMT is avilable, using the heat-proof resin.
This SMT header is equipped with the metal tab to prevent peeling in the solder joint area.

●In-line Plug
(1) The crimping in-line plug consits of two types, one type, which has pursued after space merits, and the other employs the panel lock type, which can be fixed to the panel.
(2) The in-line adapter is available to insert and in-line the ID socket from both sides.

■Applications

Business equipment such as copy machine and printer

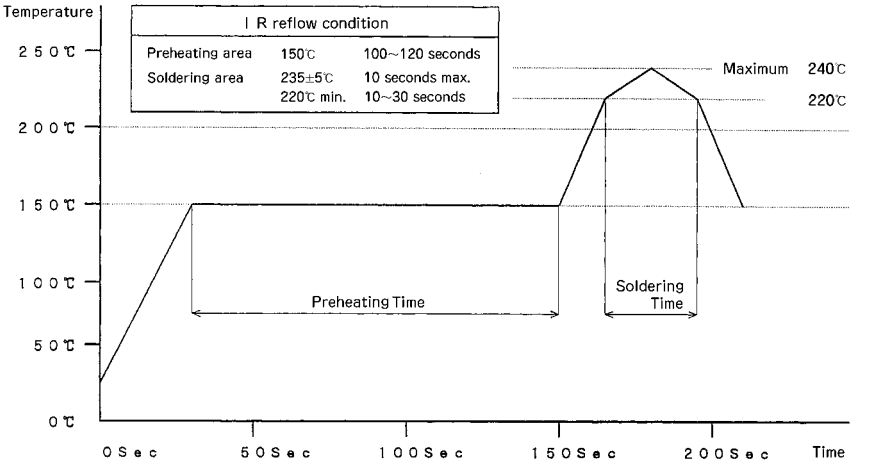
◆Embossed Carrier Tape Dimensions



Unit: mm

Product Type / Size	Number of Contacts	A	B	C	D
DF3/3D-✻P-2H	2 to 4	24	——	11.5	24.4
	5 to 7	32	28.4	14.2	32.4
	8 to 12	44	40.4	20.2	44.4
	13 to 15	56	52.4	26.2	56.4

◆Precautions

1. Recommended Temperature Profile (SMT)	 Note1: Maximum twice action is allowed under the same condition. However, the interval between the first and second actions must be maintained at room temperature. Note2: The temperature indicates the board surface temperature on the connector lead area.
2. Recommended Manual Soldering Condition (SMT)	Soldering iron temperature: 290±10℃, Soldering time: Within 2 seconds
3. Recommended Screen Thickness (SMT)	0.15 to 0.2mm
4. Board Warpage (SMT)	Based on both connector edges, 0.03mm max. in the connector center portion
5. Recommended Soldering Condition (DIP)	■Flow Condition with Automatic Soldering Tool. Soldering temperature: 250±5℃, Soldering time: Within 3 seconds ■Manual Soldering Condition. Soldering iron temperature: 290±10℃, Soldering time: Within 2 seconds
6. Cleaning Condition	Refer to the "Nylon Connector Use Hand book".
7. Connection Condition	Refer to the "Nylon Connector Use Hand book".

■Product Specifications

Rating	Current rating Note 1	Crimping	Wire size		AWG 22 to 24:3A AWG 26 :2A AWG 28 :1A	Operating Temperature Range Operating Humidity Range	-30℃ to +85℃ Note 2. 40% to 80%
		IDC	Wire size		AWG 26, 28:1A	Storage Temperature Range Storagg Humidity Range	-10℃ to +60℃ Note 3. 40% to 70%
	Voltage rating AC100V	Crimping	Press-fit: 250V AC	IDC	Press-connect: 100V AC		

UL-CSA Safety Standard and Approved specification			
Rating	Rated Current	Wire size	AWG 24 to 28: 1A
	Rated Voltage	30V AC	

■UL CSA Safety Standard File No.
UL :E52653
CSA :LR95109
■UL CSA Acquisition Objective Item
①DF3-✻S-2C
②DF3/3A-✻P-2DSA/DS
③DF3/DF3AA-✻EP-2C
④DF3-✻S-2R26/28
⑤DF3-✻P-2H

Item	Specification	Condition	
1. Insulation Resistance	1000M ohms min.	500V DC	
2. Withstanding voltage	No flashover or insulation breakdown.	650V AC/1 minute	
3. Contact Resistance	30m ohms max	100mA	
4. Single Insertor/Extraction Force	MIN0.3N (30gf), MAX4.4N(450gf)	Measure by the square steel pin with 0.5±0.002mm	
5. 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.	
6. Humidity (Steady state)	Contact resistance: 30m ohms max.Insulation resistance: 500M ohms min.	96 hours at temperature of 40℃ and humidity of 90% to 95%	
7. Temperature Cycle	Contact resistance: 30m ohms max..Insulation resistance: 1000M ohms min.	(-55℃: 30 minutes 5 to 35℃: 10 minutes 85℃: 30 minutes 5 to 35℃: 10minutes) 5 cycles	
8. Durability (Mating/un-mating)	Contact resistance: 30m ohms max.	Tin plating: 30 cycles Gold plating: 50 cycles	
9. Resistance to Soldering Heat	No deformation of components affecting performance.	Flow: 250℃ for 10 seconds	Manual soldering: 300℃ for 2 seconds
		Reflow: At the recommended temperature profile	Manual soldering: 300℃ 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.

■Material

Product	Part	Materia	Finish	Remarks
Crimping Socket	Insulator	Polyamide	Black	UL94V-0
IDC Contact for Socket	Contact	Phosphor bronze	Tin plated or gold plated	————
ID Socket	Insulator	Polyamide	Black	UL94V-0
	Contact	Phosphor bronze	Tin plated or gold plated	————
Receptacle	Insulator	Polyamide	Black	UL94V-0
	Contact	Phosphor bronze	Tin plated or gold plated	————
Pin Header	Insulator	Polyamide	Black	UL94V-0
	Contact	Brass	Tin plated or gold plated	————
SMT Pin Header	Insulator	Polyamide	Beige	UL94V-0
	Contact	Phosphor bronze	Tin plated or gold plated	————
	Metal tab	Brass	Tin plated	————
In-line Plug	Insulator	Polyamide	Black	UL94V-0
In-line IDC Contact	Contact	Phosphor bronze	Tin plated or gold plated	————
In-line Adapter	Insulator	Polyamide	Black	UL94V-0
	Contact	Brass	Tin plated	————

Note:HRS's tin plating takes actions against whisker.

■Ordering Information

●Connector

DF 3 - ＊ S - 2C
❶ ❷ ❸ ❹ ❺ ❻

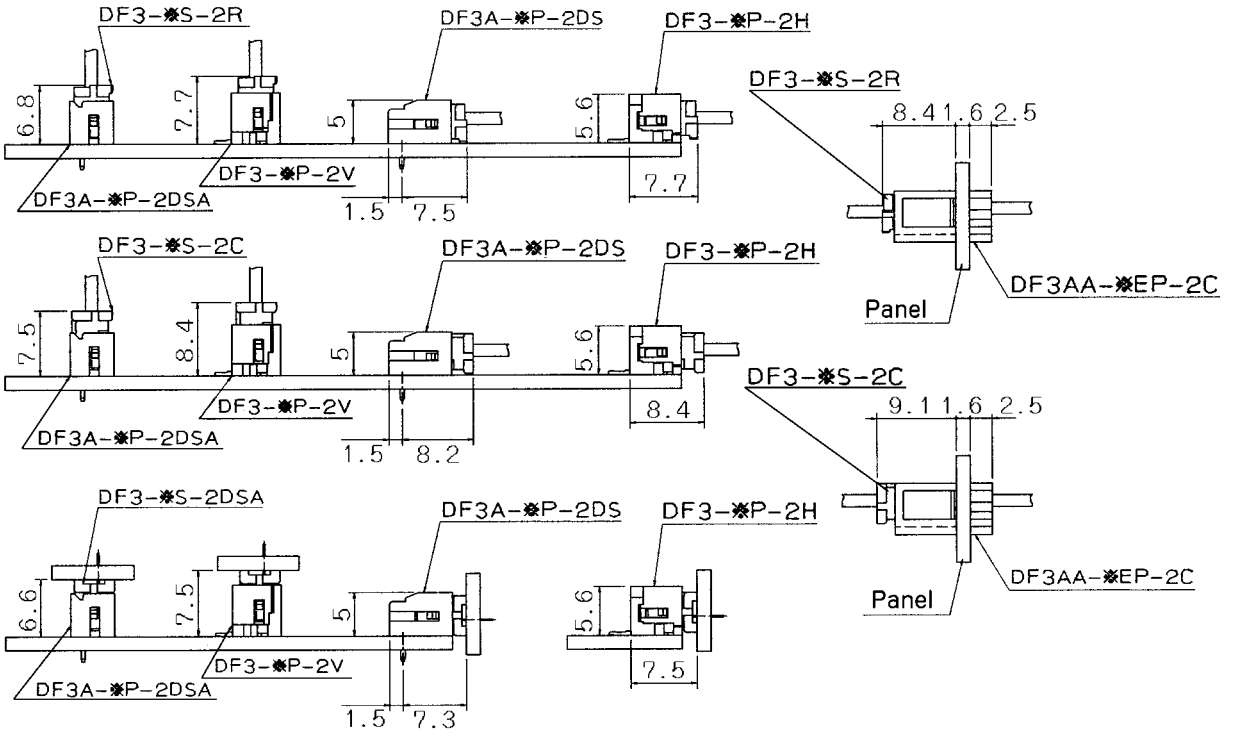
❶ Series Name : DF	❻ Connection Form/Contact Style
❷ Series No. : 3, 3A, 3AA	C : Crimp socket
❸ Number of Contacts : 2~15	R26 : ID socket for AWG26
❹ Connector Type	R28 : ID socket for AWG28
S : Socket	DSA : Straight through hole
P : Pin Header	DS : Right angle through hole
EP : In-line Plug	V : Straight SMT
❺ Contact Pitch : 2mm	H : Right angle SMT
	A : Adapter

●Contact

DF3 - EP2428PCFA
❶ ❷ ❸ ❹

❶ Contact Type	❸ Contact Type/Packaging Type
NONE : For socket	SCF : Socket contact, Embossed tape
EP : For in-line plug	SC : Socket contact, Bag
❷ Applicable Wire Size	PCF : Plug contact, Embossed tape
22 : AWG22	PC : Plug contact, Bag
2428 : AWG24 to 28	❹ Plating Type
	Blank : Tin plated
	A : Gold plated
	C : Gold plated

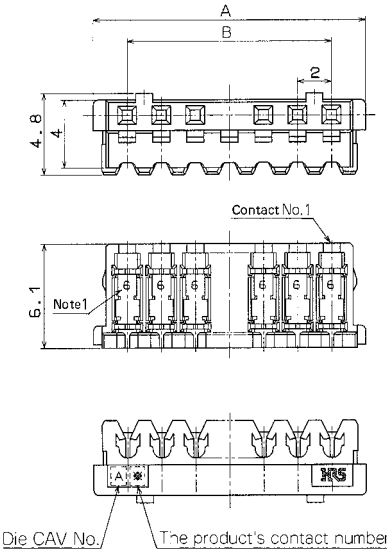
■Application pattern



■ID Socket



This picture shows the cable assembled status.



[Specific No.]–＊＊, (＊＊)
Blank : Tin plated, 100 pieces per bag
(01) : Gold plated, 100 pieces per bag
(20) : Tin plated, Tube packaging

Note 1.
Mark to determine the socket name
Mark6: R26, Mark8: R28

●AWG26

Unit: mm

Part Number	CL No.	Number of Contacts	A	B	Tube packaging Quantity
DF3- 2S-2R26(＊＊)	543-0078-7-＊＊	2	6	2	190 pieces
DF3- 3S-2R26(＊＊)	543-0079-0-＊＊	3	8	4	142
DF3- 4S-2R26(＊＊)	543-0080-9-＊＊	4	10	6	114
DF3- 5S-2R26(＊＊)	543-0081-1-＊＊	5	12	8	94
DF3- 6S-2R26(＊＊)	543-0082-4-＊＊	6	14	10	80
DF3- 7S-2R26(＊＊)	543-0083-7-＊＊	7	16	12	70
DF3- 8S-2R26(＊＊)	543-0084-0-＊＊	8	18	14	62
DF3- 9S-2R26(＊＊)	543-0085-2-＊＊	9	20	16	56
DF3-10S-2R26(＊＊)	543-0086-5-＊＊	10	22	18	52
DF3-11S-2R26(＊＊)	543-0087-8-＊＊	11	24	20	46
DF3-12S-2R26(＊＊)	543-0088-0-＊＊	12	26	22	44
DF3-13S-2R26(＊＊)	543-0089-3-＊＊	13	28	24	40
DF3-14S-2R26(＊＊)	543-0090-2-＊＊	14	30	26	38
DF3-15S-2R26(＊＊)	543-0091-5-＊＊	15	32	28	34

●AWG28

Unit: mm

Part Number	CL No.	Number of Contacts	A	B	Tube packaging Quantity
DF3- 2S-2R28(＊＊)	543-0092-8-＊＊	2	6	2	190 pieces
DF3- 3S-2R28(＊＊)	543-0093-0-＊＊	3	8	4	142
DF3- 4S-2R28(＊＊)	543-0094-3-＊＊	4	10	6	114
DF3- 5S-2R28(＊＊)	543-0095-6-＊＊	5	12	8	94
DF3- 6S-2R28(＊＊)	543-0096-9-＊＊	6	14	10	80
DF3- 7S-2R28(＊＊)	543-0097-1-＊＊	7	16	12	70
DF3- 8S-2R28(＊＊)	543-0098-4-＊＊	8	18	14	62
DF3- 9S-2R28(＊＊)	543-0099-7-＊＊	9	20	16	56
DF3-10S-2R28(＊＊)	543-0100-4-＊＊	10	22	18	52
DF3-11S-2R28(＊＊)	543-0101-7-＊＊	11	24	20	46
DF3-12S-2R28(＊＊)	543-0102-0-＊＊	12	26	22	44
DF3-13S-2R28(＊＊)	543-0103-2-＊＊	13	28	24	40
DF3-14S-2R28(＊＊)	543-0104-5-＊＊	14	30	26	38
DF3-15S-2R28(＊＊)	543-0105-8-＊＊	15	32	28	34

Note 2.The quantity for delivery of the specific No. "None" and (01) is determined per bag (100pcs.). If needed, please order the productsper bag.
Note 3.If the Full automatic IDC machine to hit the DF11 single core,the (20) tube packaging specification will be applied.
Note 4.Order the tube packaging product, multiplying the tube packaging quantity (pieces).

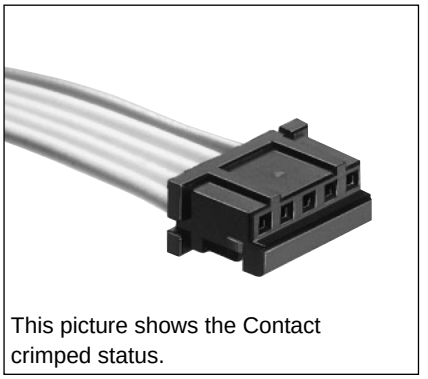
■Applicable Cable

Part Number	Applicable Cable	Jacket Diameter
DF3-＊S-2R26	UL1061 AWG26 (7/0.16)	ϕ0.9 to 1mm
DF3-＊S-2R28	UL1061 AWG28 (7/0.127)	ϕ0.9 to 1mm

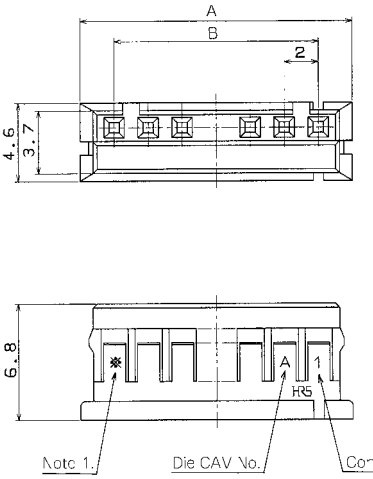
■Applicable ID Connection Tool

Type	Part Number	Connection Type	Remarks
DF11 Single Contact Punching Full Automatic ID Machine	AM700/DF11	■ Effective Harness Form ①DF11-Both ended, single ended ②DF11-DF11, Separation ③DF11-DF3, Separation ■ Effective Harness Length 100 to 2,000mm ■ Conduction Inspection Mechanism Installed	Connector is the specification (20). Tube packaging applied
DF3 DF4 Desktop ID Machine	DF3(4)/ID-MO	DF3 No restriction DF4 No restriction	Desktop machine for small lot

■Crimping Socket



This picture shows the Contact crimped status.



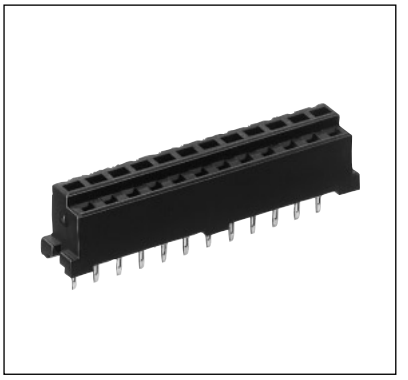
[Specific No.] –＊＊, (＊＊)
Blank: 100 pieces per pack

Unit: mm

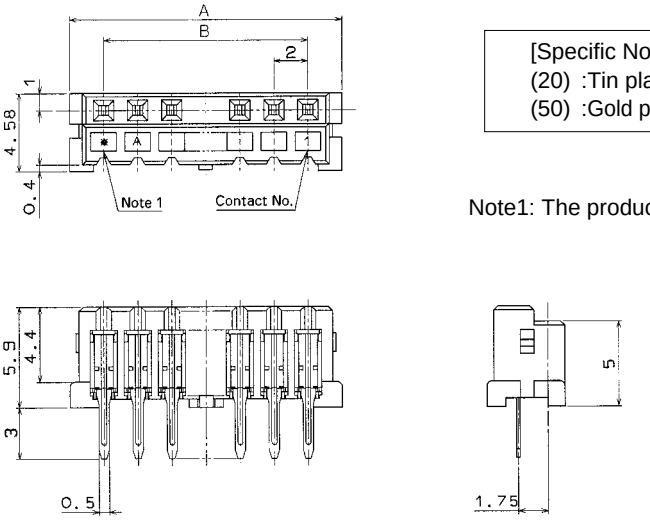
Part Number	CL No.	Number of Contacts	A	B	Part Number	CL No.	Number of Contacts	A	B
DF3-2S-2C(＊＊)	543-0003-8-＊＊	2	6	2	DF3- 9S-2C(＊＊)	543-0010-3-＊＊	9	20	16
DF3-3S-2C(＊＊)	543-0004-0-＊＊	3	8	4	DF3-10S-2C(＊＊)	543-0011-6-＊＊	10	22	18
DF3-4S-2C(＊＊)	543-0005-3-＊＊	4	10	6	DF3-11S-2C(＊＊)	543-0012-9-＊＊	11	24	20
DF3-5S-2C(＊＊)	543-0006-6-＊＊	5	12	8	DF3-12S-2C(＊＊)	543-0013-1-＊＊	12	26	22
DF3-6S-2C(＊＊)	543-0007-9-＊＊	6	14	10	DF3-13S-2C(＊＊)	543-0014-4-＊＊	13	28	24
DF3-7S-2C(＊＊)	543-0008-1-＊＊	7	16	12	DF3-14S-2C(＊＊)	543-0015-7-＊＊	14	30	26
DF3-8S-2C(＊＊)	543-0009-4-＊＊	8	18	14	DF3-15S-2C(＊＊)	543-0016-0-＊＊	15	32	28

Note1: The product's contact number indicated.
Note2: The quantity for delivery of the specification No. "None" is determined per bag (100 pcs.).
If needed, please order the products per bag.
Note3: A quantity of "500 pieces package" and "1000 pieces package" for delivery is dealt with pieces. Order example: 500, 1000, and 1500 pieces...

■Receptacle



●Board Through-hole Diameter: $\phi 0.7^{+0.1}_{0}$



[Specific No.] –＊＊, (＊＊)
(20) :Tin plated, Tube packaging
(50) :Gold plated, Tube packaging

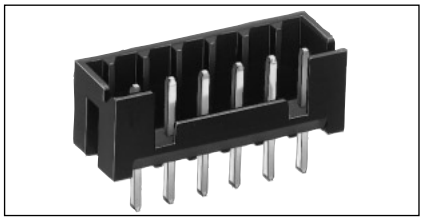
Note1: The product's contact number indicated

Unit: mm

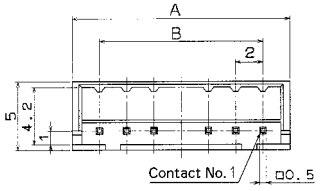
Part Number	CL No.	Number of Contacts	A	B	Tube Package Quantity	Part Number	CL No.	Number of Contacts	A	B	Tube Package Quantity
DF3-2S-2DSA(＊＊)	543-0048-6-＊＊	2	6	2	80 pieces	DF3- 9S-2DSA(＊＊)	543-0055-1-＊＊	9	20	16	24 pieces
DF3-3S-2DSA(＊＊)	543-0049-9-＊＊	3	8	4	60	DF3-10S-2DSA(＊＊)	543-0056-4-＊＊	10	22	18	21
DF3-4S-2DSA(＊＊)	543-0050-8-＊＊	4	10	6	48	DF3-11S-2DSA(＊＊)	543-0057-7-＊＊	11	24	20	20
DF3-5S-2DSA(＊＊)	543-0051-0-＊＊	5	12	8	40	DF3-12S-2DSA(＊＊)	543-0058-0-＊＊	12	26	22	18
DF3-6S-2DSA(＊＊)	543-0052-3-＊＊	6	14	10	34	DF3-13S-2DSA(＊＊)	543-0059-2-＊＊	13	28	24	17
DF3-7S-2DSA(＊＊)	543-0053-6-＊＊	7	16	12	30	DF3-14S-2DSA(＊＊)	543-0060-1-＊＊	14	30	26	16
DF3-8S-2DSA(＊＊)	543-0054-9-＊＊	8	18	14	27	DF3-15S-2DSA(＊＊)	543-0061-4-＊＊	15	32	28	15

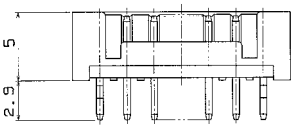
Note2: Please order the tube packaging at the multiplied tube packaging quantity (pieces).

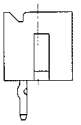
■Straight Pin Header



●Board Through-hole Diameter: $\phi 0.8^{+0.1}_{0}$
●Kink Pre-fixed Effective Diameter: $\phi 0.8^{+0.05}_{0}$





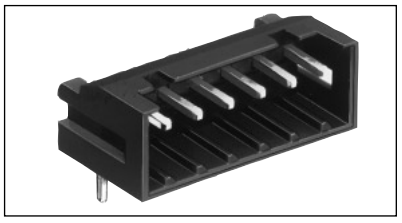


Unit: mm

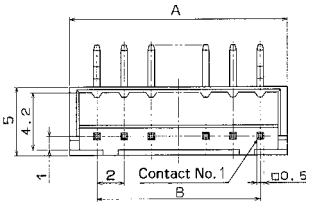
Tin Plating		Gold Plating		Number of Contacts	A	B
Part Number	CL No.	Part Number	CL No.			
DF3A- 2P-2DSA	543-0165-0	DF3- 2P-2DSA(01)	543-0017-2-01	2	6	2
DF3A- 3P-2DSA	543-0166-2	DF3- 3P-2DSA(01)	543-0018-5-01	3	8	4
DF3A- 4P-2DSA	543-0167-5	DF3- 4P-2DSA(01)	543-0019-8-01	4	10	6
DF3A- 5P-2DSA	543-0168-8	DF3- 5P-2DSA(01)	543-0020-7-01	5	12	8
DF3A- 6P-2DSA	543-0169-0	DF3- 6P-2DSA(01)	543-0021-0-01	6	14	10
DF3A- 7P-2DSA	543-0170-0	DF3- 7P-2DSA(01)	543-0022-2-01	7	16	12
DF3A- 8P-2DSA	543-0171-2	DF3- 8P-2DSA(01)	543-0023-5-01	8	18	14
DF3A- 9P-2DSA	543-0172-5	DF3- 9P-2DSA(01)	543-0024-8-01	9	20	16
DF3A-10P-2DSA	543-0173-8	DF3-10P-2DSA(01)	543-0025-0-01	10	22	18
DF3A-11P-2DSA	543-0174-0	DF3-11P-2DSA(01)	543-0026-3-01	11	24	20
DF3A-12P-2DSA	543-0175-3	DF3-12P-2DSA(01)	543-0027-6-01	12	26	22
DF3A-13P-2DSA	543-0176-6	DF3-13P-2DSA(01)	543-0028-9-01	13	28	24
DF3A-14P-2DSA	543-0177-9	DF3-14P-2DSA(01)	543-0029-1-01	14	30	26
DF3A-15P-2DSA	543-0178-1	DF3-15P-2DSA(01)	543-0030-0-01	15	32	28

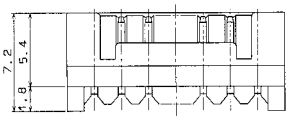
Note : The quantity for delivery is determined per bag (100 pcs.). If needed, please order the products per bag.

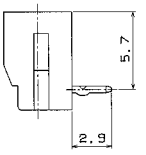
■Right Angle Pin Header



●Board Through-hole Diameter: $\phi 0.8^{+0.1}_{0}$
●Kink Pre-fixed Effective Diameter: $\phi 0.8^{+0.05}_{0}$





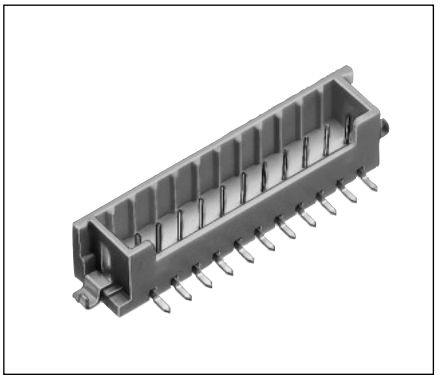


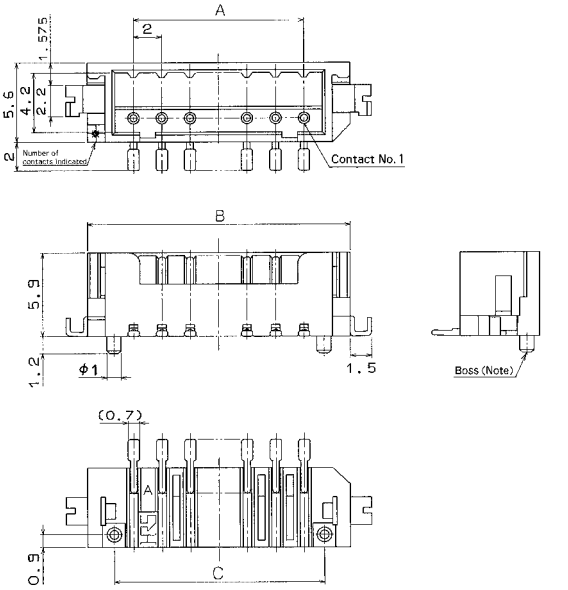
Unit: mm

Tin Plating		Gold Plating		Number of Contacts	A	B
Part Number	CL No.	Part Number	CL No.			
DF3A- 2P-2DS	543-0179-4	DF3- 2P-2DS(01)	543-0031-3-01	2	6	2
DF3A- 3P-2DS	543-0180-3	DF3 -3P-2DS(01)	543-0032-6-01	3	8	4
DF3A- 4P-2DS	543-0181-6	DF3- 4P-2DS(01)	543-0033-9-01	4	10	6
DF3A- 5P-2DS	543-0182-9	DF3- 5P-2DS(01)	543-0034-1-01	5	12	8
DF3A- 6P-2DS	543-0183-1	DF3- 6P-2DS(01)	543-0035-4-01	6	14	10
DF3A- 7P-2DS	543-0184-4	DF3- 7P-2DS(01)	543-0036-7-01	7	16	12
DF3A- 8P-2DS	543-0185-7	DF3- 8P-2DS(01)	543-0037-0-01	8	18	14
DF3A- 9P-2DS	543-0186-0	DF3- 9P-2DS(01)	543-0038-2-01	9	20	16
DF3A-10P-2DS	543-0187-2	DF3-10P-2DS(01)	543-0039-5-01	10	22	18
DF3A-11P-2DS	543-0188-5	DF3-11P-2DS(01)	543-0040-4-01	11	24	20
DF3A-12P-2DS	543-0189-8	DF3-12P-2DS(01)	543-0041-7-01	12	26	22
DF3A-13P-2DS	543-0190-7	DF3-13P-2DS(01)	543-0042-0-01	13	28	24
DF3A-14P-2DS	543-0191-0	DF3-14P-2DS(01)	543-0043-2-01	14	30	26
DF3A-15P-2DS	543-0192-2	DF3-15P-2DS(01)	543-0044-5-01	15	32	28

Note : The quantity for delivery is determined per bag(100 pcs.). If needed, please order the products per bag.

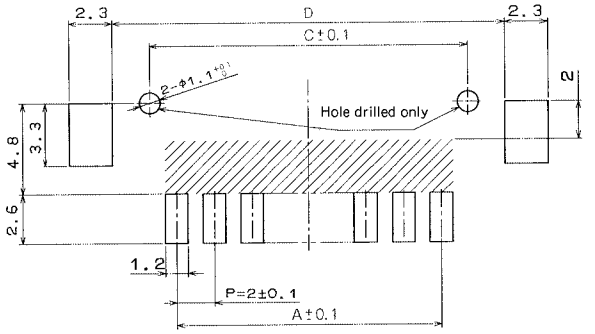
■Straight Pin Header (SMT)

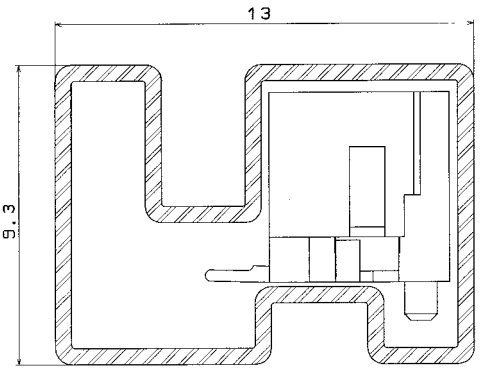




Note: " Without Boss " indicates a pattern, not including this boss.

◆PCB mounting pattern





Note : ▨ If a pattern is included in the shaded area and is not treated with resist, it could touch the connector contact.

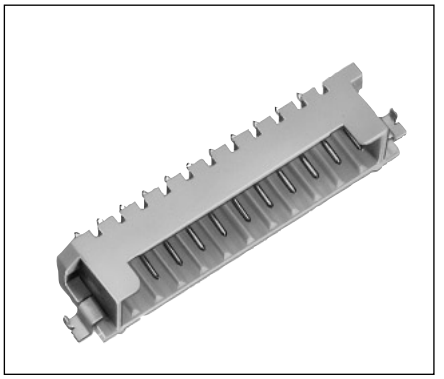
[Specific No.] –＊＊, (＊＊)
(20) :Tin plated tube packaging
(50) :Gold plated tube packaging

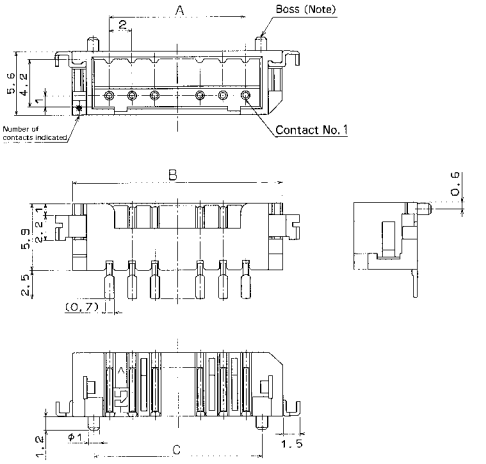
Unit: mm

With Boss		Without Boss		Number of Contacts	A	B	C	D	Tube Packaging Quantity
Part Number	CL No.	Part Number	CL No.						
DF3- 2P-2V(＊＊)	543-0121-4-＊＊	DF3D- 2P-2V(＊＊)	543-0207-8-＊＊	2	2	8.5	4.8	8.74	41 pcs.
DF3- 3P-2V(＊＊)	543-0122-7-＊＊	DF3D- 3P-2V(＊＊)	543-0208-0-＊＊	3	4	10.5	6.8	10.74	34
DF3- 4P-2V(＊＊)	543-0123-0-＊＊	DF3D- 4P-2V(＊＊)	543-0209-3-＊＊	4	6	12.5	8.8	12.74	30
DF3- 5P-2V(＊＊)	543-0124-2-＊＊	DF3D- 5P-2V(＊＊)	543-0210-2-＊＊	5	8	14.5	10.8	14.74	26
DF3- 6P-2V(＊＊)	543-0125-5-＊＊	DF3D- 6P-2V(＊＊)	543-0211-5-＊＊	6	10	16.5	12.8	16.74	23
DF3- 7P-2V(＊＊)	543-0126-8-＊＊	DF3D- 7P-2V(＊＊)	543-0212-8-＊＊	7	12	18.5	14.8	18.74	21
DF3- 8P-2V(＊＊)	543-0127-0-＊＊	DF3D- 8P-2V(＊＊)	543-0213-0-＊＊	8	14	20.5	16.8	20.74	19
DF3- 9P-2V(＊＊)	543-0128-3-＊＊	DF3D- 9P-2V(＊＊)	543-0214-3-＊＊	9	16	22.5	18.8	22.74	18
DF3-10P-2V(＊＊)	543-0129-6-＊＊	DF3D-10P-2V(＊＊)	543-0215-6-＊＊	10	18	24.5	20.8	24.74	17
DF3-11P-2V(＊＊)	543-0130-5-＊＊	DF3D-11P-2V(＊＊)	543-0216-9-＊＊	11	20	26.5	22.8	26.74	15
DF3-12P-2V(＊＊)	543-0131-8-＊＊	DF3D-12P-2V(＊＊)	543-0217-1-＊＊	12	22	28.5	24.8	28.74	14
DF3-13P-2V(＊＊)	543-0132-0-＊＊	DF3D-13P-2V(＊＊)	543-0218-4-＊＊	13	24	30.5	26.8	30.74	14
DF3-14P-2V(＊＊)	543-0133-3-＊＊	DF3D-14P-2V(＊＊)	543-0219-7-＊＊	14	26	32.5	28.8	32.74	13
DF3-15P-2V(＊＊)	543-0134-6-＊＊	DF3D-15P-2V(＊＊)	543-0220-6-＊＊	15	28	34.5	30.8	34.74	12

Note : Please order the tube packaging product, multiplying by tube package quantity (pcs.).

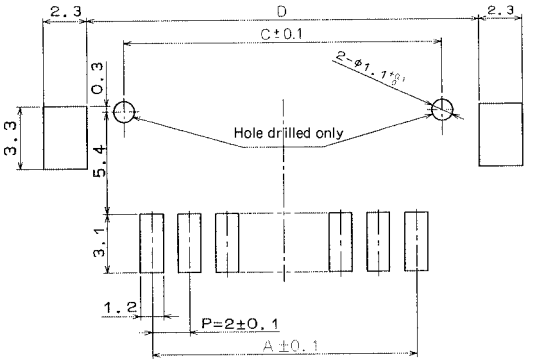
■Right Angle Pin Header (SMT)



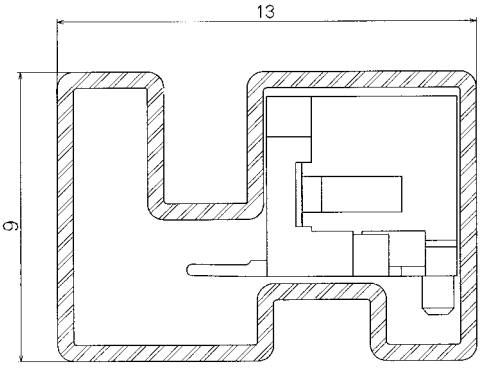


Note: "without boss" indicates a pattern, not including this boss

◆PCB mounting pattern



◆Tube Size



■Number of Contacts for Embossed Packaging Available

	Numbers of Contacts	2	3	4	5	6	7	8	9	10	11	12	13	14	15
DF3 -✻P-2H	(21)Tin plated	○	○	○	○	○	×	○	×	○	○	○	×	×	○
	(51)Gold plated	○	○	○	×	×	○	×	×	×	○	○	×	×	○
DF3D-✻P-2H	(21)Tin plated	○	○	○	○	○	○	○	×	○	○	○	○	×	○
	(51)Gold plated	×	○	○	○	○	○	○	×	○	○	○	×	×	×

[Specific No.] –✻✻, (✻✻)
(20) :Tin plated tube packaging
(21) :Tin plated embossed packaging (Note the number of contacts for marchandization.)
(50) :Gold plated tube packaging
(51) :Gold plated embossded packaging

Unit: mm

With Boss		Without Boss		Number of Contacts	A	B	C	D	Tube Packaging Quantity
Part Number	CL No.	Part Number	CL No.						
DF3- 2P-2H(✻✻)	543-0107-3-✻✻	DF3D- 2P-2H(✻✻)	543-0221-9-✻✻	2	2	8.5	4.8	8.74	41 pcs.
DF3- 3P-2H(✻✻)	543-0108-6-✻✻	DF3D- 3P-2H(✻✻)	543-0222-1-✻✻	3	4	10.5	6.8	10.74	34
DF3- 4P-2H(✻✻)	543-0109-9-✻✻	DF3D- 4P-2H(✻✻)	543-0223-4-✻✻	4	6	12.5	8.8	12.74	30
DF3- 5P-2H(✻✻)	543-0110-8-✻✻	DF3D- 5P-2H(✻✻)	543-0224-7-✻✻	5	8	14.5	10.8	14.74	26
DF3- 6P-2H(✻✻)	543-0111-0-✻✻	DF3D- 6P-2H(✻✻)	543-0225-0-✻✻	6	10	16.5	12.8	16.74	23
DF3- 7P-2H(✻✻)	543-0112-3-✻✻	DF3D- 7P-2H(✻✻)	543-0226-2-✻✻	7	12	18.5	14.8	18.74	21
DF3- 8P-2H(✻✻)	543-0113-6-✻✻	DF3D- 8P-2H(✻✻)	543-0227-5-✻✻	8	14	20.5	16.8	20.74	19
DF3- 9P-2H(✻✻)	543-0114-9-✻✻	DF3D- 9P-2H(✻✻)	543-0228-8-✻✻	9	16	22.5	18.8	22.74	18
DF3-10P-2H(✻✻)	543-0115-1-✻✻	DF3D-10P-2H(✻✻)	543-0229-0-✻✻	10	18	24.5	20.8	24.74	17
DF3-11P-2H(✻✻)	543-0116-4-✻✻	DF3D-11P-2H(✻✻)	543-0230-0-✻✻	11	20	26.5	22.8	26.74	15
DF3-12P-2H(✻✻)	543-0117-7-✻✻	DF3D-12P-2H(✻✻)	543-0231-2-✻✻	12	22	28.5	24.8	28.74	14
DF3-13P-2H(✻✻)	543-0118-0-✻✻	DF3D-13P-2H(✻✻)	543-0232-5-✻✻	13	24	30.5	26.8	30.74	14
DF3-14P-2H(✻✻)	543-0119-2-✻✻	DF3D-14P-2H(✻✻)	543-0233-8-✻✻	14	26	32.5	28.8	32.74	13
DF3-15P-2H(✻✻)	543-0120-1-✻✻	DF3D-15P-2H(✻✻)	543-0234-0-✻✻	15	28	34.5	30.8	34.74	12

Note1: Please order the tube packaging product, multipliing the tube package quantity. (pcs.)
Note2: Please order the emboss packaging product by the reel number. (1 reel : 1000 pcs.)

■In-line Plug

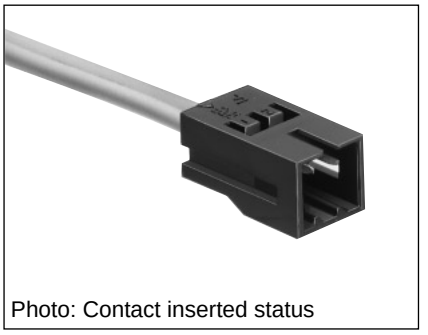
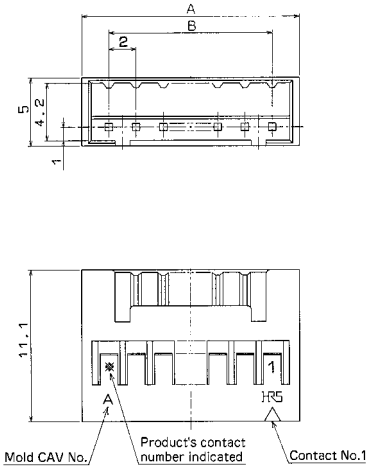


Photo: Contact inserted status



[Specific No.] –＊＊, (＊＊)
Blank: 1 pack

Unit: mm

Part Number	CL No.	Number of Contacts	A	B
DF3- 2EP-2C(**)	543-0064-2-**	2	6	2
DF3- 3EP-2C(**)	543-0065-5-**	3	8	4
DF3- 4EP-2C(**)	543-0066-8-**	4	10	6
DF3- 5EP-2C(**)	543-0067-0-**	5	12	8
DF3- 6EP-2C(**)	543-0068-3-**	6	14	10
DF3- 7EP-2C(**)	543-0069-6-**	7	16	12
DF3- 8EP-2C(**)	543-0070-5-**	8	18	14

Part Number	CL No.	Number of Contacts	A	B
DF3- 9EP-2C(**)	543-0071-8-**	9	20	16
DF3-10EP-2C(**)	543-0072-0-**	10	22	18
DF3-11EP-2C(**)	543-0073-3-**	11	24	20
DF3-12EP-2C(**)	543-0074-6-**	12	26	22
DF3-13EP-2C(**)	543-0075-9-**	13	28	24
DF3-14EP-2C(**)	543-0076-1-**	14	30	26
DF3-15EP-2C(**)	543-0077-4-**	15	32	28

Note : The specific No."None" item is delivered per bag (100 pcs.). Please order products per bag unit.

■In-line Plug with Panel Lock

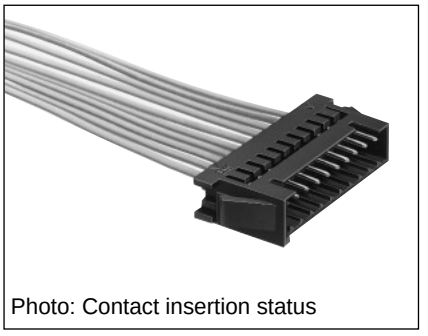
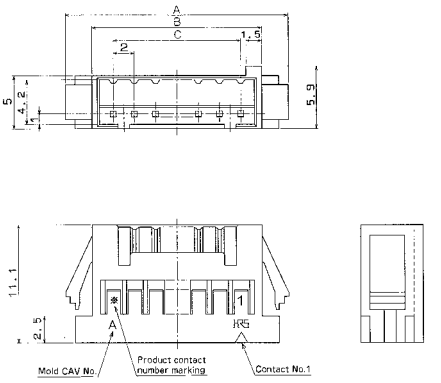
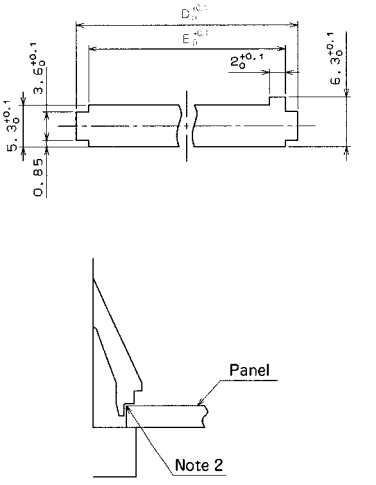


Photo: Contact insertion status



◆Panel Cutouts



Note1: Applicable panel thickness is 1.6 to 1.0mm. (However, a slight backlash is considered for the thickness other than 1.6 and 1.2mm.)
Note2: Use the non-radius surface at the hooking panel edge.
Note3: Contact No. indicates 1, 4, 8, 12, and 15.

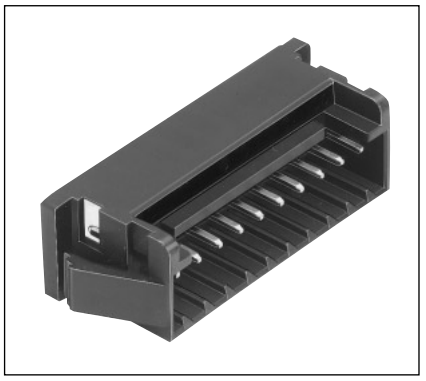
Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E
DF3AA- 2EP-2C(**)	543-0151-5-**	2	11	6	2	9.4	6.3
DF3AA- 3EP-2C(**)	543-0152-8-**	3	13	8	4	11.4	8.3
DF3AA- 4EP-2C(**)	543-0153-0-**	4	15	10	6	13.4	10.3
DF3AA- 5EP-2C(**)	543-0154-3-**	5	17	12	8	15.4	12.3
DF3AA- 6EP-2C(**)	543-0155-6-**	6	19	14	10	17.4	14.3
DF3AA- 7EP-2C(**)	543-0156-9-**	7	21	16	12	19.4	16.3
DF3AA- 8EP-2C(**)	543-0157-1-**	8	23	18	14	21.4	18.3
DF3AA- 9EP-2C(**)	543-0158-4-**	9	25	20	16	23.4	20.3
DF3AA-10EP-2C(**)	543-0159-7-**	10	27	22	18	25.4	22.3
DF3AA-11EP-2C(**)	543-0160-6-**	11	29	24	20	27.4	24.3
DF3AA-12EP-2C(**)	543-0161-9-**	12	31	26	22	29.4	26.3
DF3AA-13EP-2C(**)	543-0162-1-**	13	33	28	24	31.4	28.3
DF3AA-14EP-2C(**)	543-0163-4-**	14	35	30	26	33.4	30.3
DF3AA-15EP-2C(**)	543-0164-7-**	15	37	32	28	35.4	32.3

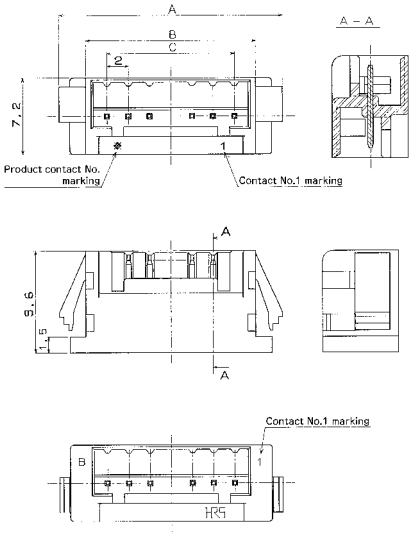
Note : Specific No."None" item is delivered per bag (100 pcs.). Please order products per bag unit.

[Specific No.] –＊＊, (＊＊)
Blank : 100 pcs. per bag

■In-line Adapter with Panel Lock



Adapter to in-line by pushing 2 pcs. of socket from both sides
No.1-No.1 connection circuit type

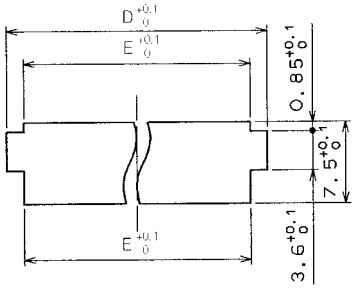


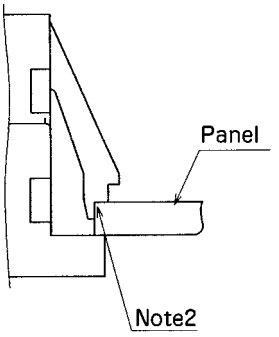
Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E
DF3- 2EP-2A(**)	543-0267-0-**	2	11	6	2	9.4	6.3
DF3- 3EP-2A(**)	543-0268-2-**	3	13	8	4	11.4	8.3
DF3- 4EP-2A(**)	543-0269-5-**	4	15	10	6	13.4	10.3
DF3- 5EP-2A(**)	543-0270-4-**	5	17	12	8	15.4	12.3
DF3- 6EP-2A(**)	543-0271-7-**	6	19	14	10	17.4	14.3
DF3- 7EP-2A(**)	543-0272-0-**	7	21	16	12	19.4	16.3
DF3- 8EP-2A(**)	543-0273-2-**	8	23	18	14	21.4	18.3
DF3- 9EP-2A(**)	543-0274-5-**	9	25	20	16	23.4	20.3
DF3-10EP-2A(**)	543-0275-8-**	10	27	22	18	25.4	22.3
DF3-11EP-2A(**)	543-0276-0-**	11	29	24	20	27.4	24.3
DF3-12EP-2A(**)	543-0277-3-**	12	31	26	22	29.4	26.3
DF3-13EP-2A(**)	543-0278-6-**	13	33	28	24	31.4	28.3
DF3-14EP-2A(**)	543-0279-9-**	14	35	30	26	33.4	30.3
DF3-15EP-2A(**)	543-0280-8-**	15	37	32	28	35.4	32.3

Note : Specific No."None" item is delivered per bag (100 pcs.). Please order products per bag unit.

◆Panel Cutouts

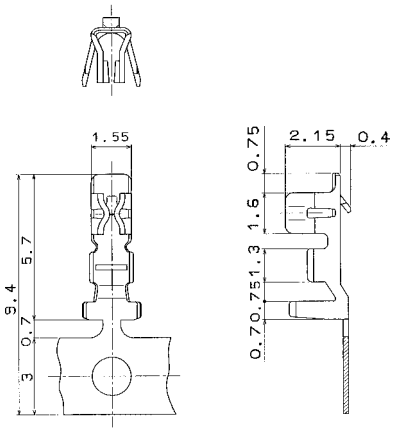




Note1: Applicable panel thickness is 1.6 to 1.0mm.(However,backlash will occur except for 1.6, 1.2mm thickness.)
Note2: Please use the non-radius surface at the hooking panel edge.

[Specific No.] –**, (**)
Blank : 100 pcs. per bag

■Crimping Contact for Socket



Part Number	CL No.	Type	Quantity	Finish
DF3-22SCF	543-0235-3	Reel contact	10000 pcs. per embossed tape bag	Tin plated
DF3-22SC	543-0236-6	Bulk contact	100 pcs. per embossed tape bag	
DF3-2428SCF	543-0001-2	Reel contact	10000 pcs. per embossed tape bag	
DF3-2428SC	543-0002-5	Bulk contact	100 pcs. per embossed tape bag	
DF3-2428SCFC	543-0046-0	Reel contact	10000 pcs. per embossed tape bag	Gold plated
DF3-248SCC	543-0047-3	Bulk contact	100 pcs. per embossed tape bag	

●Applicable Wire (Tin Plating Annealed Copper Wire)

Conductor Size (Wire Configuration)	Jacket Diameter
AWG 22 (17pcs./0.16mm)	ϕ1.2 to ϕ1.45mm
AWG 24 (11pcs./0.16mm)	ϕ0.75 to ϕ1.45mm
AWG 26 (7pcs./0.16mm)	
AWG 28 (7pcs./0.127mm)	

●Recommended Wire

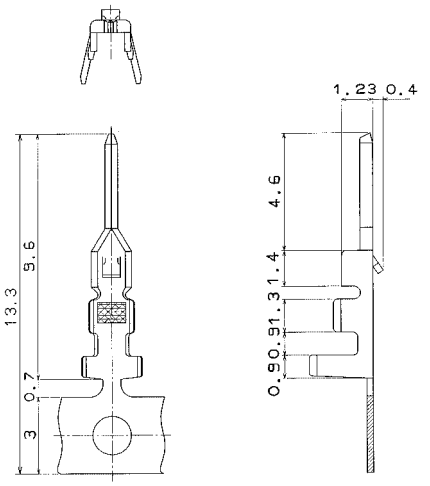
UL1061, UL1007 (Note 2.)

●Strip Length

1.8 to 2.3mm

Note1: If other wires are used instead of the applicable cable, please contact HRS company.
Note2: DF3-22SCF is applicable to UL1061.

■Crimping Contact for In-line Plug



Part Number	CL No.	Type	Quantity	Finish
DF3-EP2428PCF	543-0062-7	Reel contact	10000 pcs. per reel	Tin plated
DF3-EP2428PC	543-0063-0	Bulk contact	100 pcs. per pack	
DF3-EP2428PCFA	543-0149-3	Reel contact	10000 pcs. per reel	Gold plated
DF3-EP2428PCA	543-0150-2	Bulk contact	100 pcs. per pack	

●Applicable Wire (Tin Plating Annealed Copper Wire)

Conductor Size (Wire Configuration)	Jacket Diameter
AWG 24 (11pcs./0.16mm)	ϕ0.75 to ϕ1.45mm
AWG 26 (7pcs./0.16mm)	
AWG 28 (7pcs./0.127mm)	

●Recommended Wire

UL1061, UL1007

●Strip Length

1.9 to 2.5mm

Note1: If other wires are used instead of the applicable cable, please contact HRS company.

◆Applicable Crimping Tool

Type	Part Number	CL No.	Applicable Contact
Applicator	AP105-DF3-2428S	901-4503-3	DF3-2428SCF/SCFC
	AP105-DF3-22S	901-4549-4	DF3-22SCF
	AP105-DF3-EP2428P	901-4508-7	DF3-EP2428PCF/PCFA
Press Unit	CM-105	901-0005-4	————————
Hand Crimping Tool	DF3-TA2428HC	550-0164-5	DF3-2428SC/SCC
	DF3EP-TA2428HC	550-0184-2	DF3-EP2428PC/PCA
	DF3-TA22HC	550-0257-4	DF3-22SC
Extraction Tool	DF-C-PO (A)	550-0170-8	DF3-✻✻✻✻SCF
			DF3-EP✻✻✻✻PCF

Note : If any trouble has occurred due to tools other than designated tool, Hirose bears no respoisibility for any trouble.