

### ■ Features

#### 1. New Insulation Displacement and Crimping Ideas

This connector is a new type to insert the ID contacts in the case. Using this method, the following merits can be gained.

- ① By using the ID contact and crimping contact together, different current capacity cables can be mixed in one case.
- ② After connection, the contact can be replaced in excellent maintainability.
- ③ Because the insulation displacement area is protected by the case, high reliability can be assured.
- ④ Since the insulation displacement process can be performed only by replacing the applicator of the existing crimping machine, no expensive machine for insulation displacement is required.

#### 2. Potting Header Available

The high profile header is also available, corresponding to the board potting process (sealed with resin) as waterproof measures.

#### 3. Broad Variations

The single row and double row contacts are aligned for "Board to Cable" and "In-line" series, respectively, while standard tin and gold plating products are available.

(Refer to the applicable combination pattern on next page.)

### ■ Applications

Business equipment, particularly including the copy machine and printer

Cables with different current capacities can be mixed in one case



Fig.1

Potting status

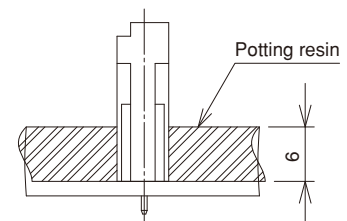
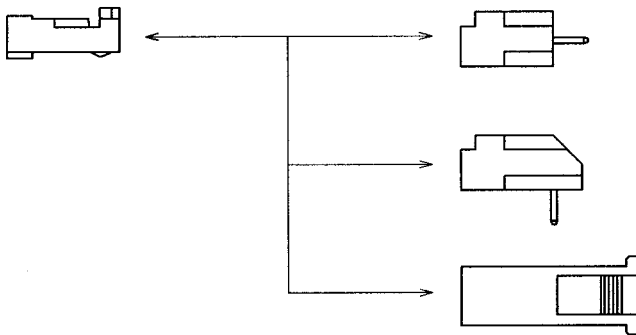


Fig.2

## ◆ Applicable Combination

### ● Single Row Type

Socket (Cable Side)  
DF1B-\*S-2.5R



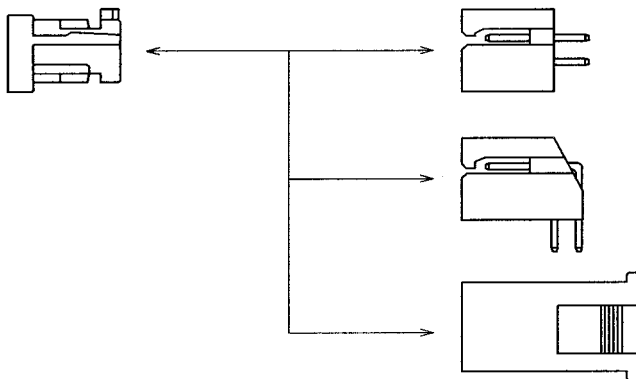
Straight Through hole Type  
Pin header  
DF1B(Z)-\*P-2.5DSA

Right angle Through hole Type  
Pin header  
DF1B(Z)-\*P-2.5DS

Panel Mount Type  
In-line plug (Cable side)  
DF1BA-\*EP-2.5RC

### ● Double Row Type

Socket (Cable Side)  
DF1B-\*DS-2.5RC



Straight Through hole Type  
Pin header  
DF1B(Z)-\*DP-2.5DSA

Right angle Through hole Type  
Pin header  
DF1B(Z)-\*DP-2.5DS

Panel Mount Type  
In-line plug (Cable side)  
DF1BA-\*DEP-2.5RC

### In-line Connection Product (Cable to Cable Connection) : Full Lock Type

### ● Single Row Type

Socket (Cable Side)  
DF1B-\*ES-2.5RC



In-line plug (Cable side)  
DF1B-\*EP-2.5RC

### ● Double Row Type

Socket (Cable Side)  
DF1B-\*DES-2.5RC



In-line plug (Cable side)  
DF1B-\*DEP-2.5RC

## Product Specifications

Rating	Current rating (Note1)	Cable Size	20 to 24AWG : 3A	Operating Temperature Range	-35 to +85°C (Note2)
			26AWG : 2A	Operating Humidity Range	40 to 80%
Voltage rating			28AWG : 1A	Storage Temperature Range	-10 to +60°C (Note3)
			30AWG : 0.5A	Storage Humidity Range	40 to 70% (Note3)
			250V AC/DC		

UL-CSA Safety Standard Standardized Value			
Rating	Current rating (Note1)	Cable Size	20 to 22AWG : 3A
			24 to 28AWG : 1A
Voltage rating			30AWG : 0.5A
			30V AC

### UL CSA Safety File No.

UL : E52653

CSA : LR95109

Item	Specification	Condition
1. Insulation Resistance	1000MΩ Min	500V DC
2. Withstanding voltage	No flashover or insulation breakdown.	650V AC/1 minute
3. Contact Resistance	30mΩ Max	100mA
4. Insertor/Extraction Force	MIN0.44N (45gf), MAX4.4N(450gf)	Measure at the square steel pin of 0.635±0.002mm
5. 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.
6. Humidity (Steady state)	Contact resistance : 30mΩ max. Insulation resistance : 1000MΩ min.	96 hours at temperature of 40±2°C and humidity of 90% to 95%
7. Temperature Cycle	Contact resistance : 30mΩ max. Insulation resistance : 1000MΩ min.	(-55°C : 30 minutes → 5 to 35°C : 10 minutes 85°C : 30 minutes → 5 to 35°C : 10 minutes) 5 cycles
8. Operating Life	Contact resistance : 30mΩ max.	Tin plating : 30 cycles Gold plating : 50 cycles
9. Resistance to Soldering heat	No deformation of components affecting performance.	Flow : 260°C for 5 seconds Manual soldering : 300°C for 3 seconds

Note 1 : Current rating of header is 3A.

Note 2 : Includes temperature rise caused by current flow.

Note 3 : 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.

## Materials / Finish

Product	Part	Material	Finish	Remarks
Socket	Insulator	Polyamide	White	UL94V-0
ID Contact for Socket	Contact	Phosphor copper	Tin plated or gold plated	———
Crimping Contact for Socket	Contact	Phosphor copper	Tin plated or gold plated	———
Pin Header	Insulator	Polyamide	White	UL94V-0
	Contact	Brass	Tin plated or gold plated	———
In-line Plug	Insulator	Polyamide	White	UL94V-0
ID Contact for In-line Plug	Contact	Phosphor copper	Tin plated or gold plated	———
Crimping Contact for In-line Plug	Contact	Phosphor copper	Tin plated or gold plated	———

## Product Number Structure

Refer to the chart below when determining the product specifications from the product number.  
Please select from the product numbers listed in this catalog when placing orders.

### Connector

**DF1B**          **-**   **\***   **S**   **2.5**   **RC**  
①   ②   ③   ④   ⑤   ⑥

<b>① Series Name</b> : DF 1B  <b>② Style Symbol</b> Blank : Standard type A : In-line Plug (Simple Lock type) D : Pin header (Potting type) Z : Pin header (Standard type, Tin plated)	<b>④ Connector Type</b> S : Single row socket DS : Double row socket P : Single row pin header DP : Double row pin header ES : Single row in-line socket DES : Double row in-line socket EP : Single row in-line plug DEP : Double row in-line plug	<b>⑤ Contact Pitch</b> : 2.5mm  <b>⑥ Contact Type</b> RC : ID/crimping socket (Note) DSA : Straight through hole DS : Right angle through hole  Note : The single row socket DF1B-*S-2.5R only adds "R" to the tail, which has the same meaning as "RC".
<b>③ Number of Contacts</b> Single Row : 2 to 16, 18, 20 Double Row : 4 to 30, 34, 40		

### Socket ID Contact

**DF1B**   **-**   **R**   **24**   **F**   **A**  
①   ②   ③   ④

<b>① 1. Connection Type</b> R : ID	<b>③ Packaging Type</b> Blank : Bag F : Reel
<b>② Applicable Cable Size</b> 24 : 24AWG 26 : 26AWG 28 : 28AWG	<b>④ Plating Type</b> Blank : Tin plated A : Gold plated

### Plug ID Contact

**DF1B**   **-**   **24**   **P**   **R**   **F**  
①   ②   ③   ④

<b>① Applicable Cable Size</b> 24 : 24AWG 26 : 26AWG 28 : 28AWG	<b>③ Connection Type</b> R : ID
<b>② Connector Type</b> P : Plug	<b>④ Packaging Type</b> Blank : Bag F : Reel

### Crimping Contact

**DF1B**   **-**   **2428**   **SCF**   **A**  
①   ②   ③

<b>① Applicable Cable Size</b> 2022 : 20 to 22AWG 2428 : 24 to 28AWG 30 : 30AWG	<b>③ Plating Type</b> Blank : Tin plated A : Gold plated B : Gold plated (Note)
<b>② Packaging Type</b> SCF : Socket Contact/Reel SC : Socket Contact/Bag PCF : Plug Contact/Reel PC : Plug Contact/Bag	Note: In case of the socket contact, "A" is attached to the tail of the product name. In case of the plug contact, "B" is attached thereto.

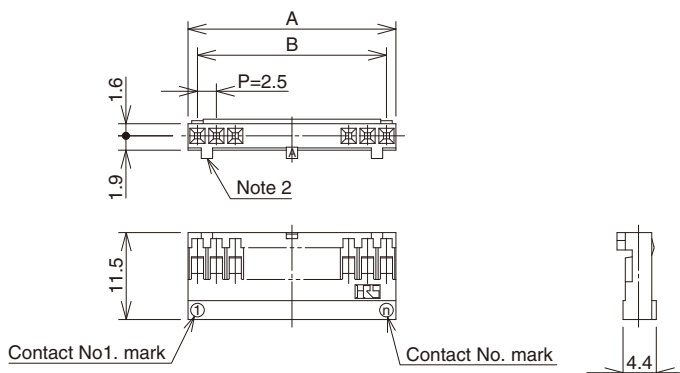
Note : Product Numbers of Gold plated Plug Contact for 24 to 28 AWG cable are DF1-PD2428SCFB(Reel) and DF1-PD2428SCB(Bag).

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## Single Row Socket



Photo: Contact Inserted



Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	RoHS	Part No.	HRS No.	No. of Contacts	A	B	RoHS	
DF1B- 2S-2.5R	541-0200-6	2	5	2.5	Yes	DF1B-11S-2.5R	541-0209-0	11	27.5	25	Yes	
DF1B- 3S-2.5R	541-0201-9	3	7.5	5		DF1B-12S-2.5R	541-0210-0	12	30	27.5		
DF1B- 4S-2.5R	541-0202-1	4	10	7.5		DF1B-13S-2.5R	541-0211-2	13	32.5	30		
DF1B- 5S-2.5R	541-0203-4	5	12.5	10		DF1B-14S-2.5R	541-0212-5	14	35	32.5		
DF1B- 6S-2.5R	541-0204-7	6	15	12.5		DF1B-15S-2.5R	541-0213-8	15	37.5	35		
DF1B- 7S-2.5R	541-0205-0	7	17.5	15		DF1B-16S-2.5R	541-0214-0	16	40	37.5		
DF1B- 8S-2.5R	541-0206-2	8	20	17.5		DF1B-18S-2.5R	541-0215-3	18	45	42.5		
DF1B- 9S-2.5R	541-0207-5	9	22.5	20		DF1B-20S-2.5R	541-0216-6	20	50	47.5		
DF1B-10S-2.5R	541-0208-8	10	25	22.5								

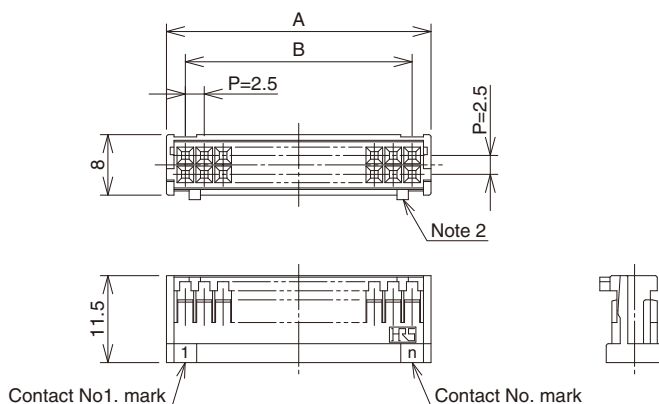
Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

Note 2 : The 2 contact connector contains the convex portion to prevent mis-insertion in the center at one point, which is different from the above figure. The 3 to 6 contacts connectors have the area at both ends.

## Double Row Socket



Photo: Contact Inserted.



Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	RoHS	Part No.	HRS No.	No. of Contacts	A	B	RoHS	
DF1B- 4DS-2.5RC	541-0648-0	4	7.5	2.5	Yes	DF1B-22DS-2.5RC	541-0606-0	22	30	25	Yes	
DF1B- 6DS-2.5RC	541-0649-3	6	10	5		DF1B-24DS-2.5RC	541-0607-3	24	32.5	27.5		
DF1B- 8DS-2.5RC	541-0650-2	8	12.5	7.5		DF1B-26DS-2.5RC	541-0608-6	26	35	30		
DF1B-10DS-2.5RC	541-0600-4	10	15	10		DF1B-28DS-2.5RC	541-0609-9	28	37.5	32.5		
DF1B-12DS-2.5RC	541-0601-7	12	17.5	12.5		DF1B-30DS-2.5RC	541-0610-8	30	40	35		
DF1B-14DS-2.5RC	541-0602-0	14	20	15		DF1B-34DS-2.5RC	541-0612-3	34	45	40		
DF1B-16DS-2.5RC	541-0603-2	16	22.5	17.5		DF1B-36DS-2.5RC	541-0613-6	36	47.5	42.5		
DF1B-18DS-2.5RC	541-0604-5	18	25	20		DF1B-40DS-2.5RC	541-0615-1	40	52.5	47.5		
DF1B-20DS-2.5RC	541-0605-8	20	27.5	22.5								

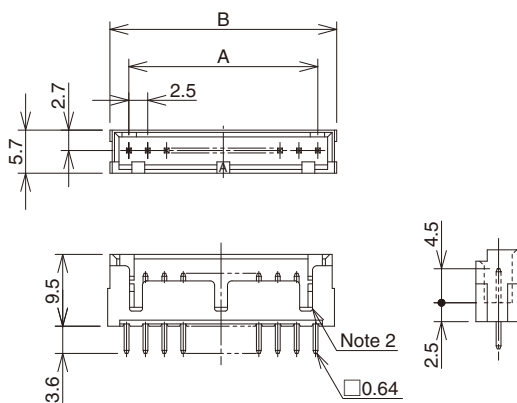
Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.) If needed, please order the product per bag.

Note 2 : The 4 contact connector contains the convex portion to prevent miss-insertion in the center at one point, which is different from the above figure.

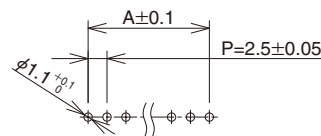
## Single Row Straight Pin Header



● Board Through-hole Diameter :  $\phi 1.1^{+0.1}$



● Recommended PCB Layout (t=1.6±0.1mm)



Unit : mm

Tin plated		Gold plated		No. of Contacts	A	B	RoHS
Part No.	HRS No.	Part No.	HRS No.				
DF1BZ- 2P-2.5DSA	541-2000-8	DF1B- 2P-2.5DSA(01)	541-0225-7 01	2	2.5	7.5	Yes
DF1BZ- 3P-2.5DSA	541-2001-0	DF1B- 3P-2.5DSA(01)	541-0226-0 01	3	5.0	10.0	
DF1BZ- 4P-2.5DSA	541-2002-3	DF1B- 4P-2.5DSA(01)	541-0227-2 01	4	7.5	12.5	
DF1BZ- 5P-2.5DSA	541-2003-6	DF1B- 5P-2.5DSA(01)	541-0228-5 01	5	10.0	15.0	
DF1BZ- 6P-2.5DSA	541-2004-9	DF1B- 6P-2.5DSA(01)	541-0229-8 01	6	12.5	17.5	
DF1BZ- 7P-2.5DSA	541-2005-1	DF1B- 7P-2.5DSA(01)	541-0230-7 01	7	15.0	20.0	
DF1BZ- 8P-2.5DSA	541-2006-4	DF1B- 8P-2.5DSA(01)	541-0231-0 01	8	17.5	22.5	
DF1BZ- 9P-2.5DSA	541-2007-7	DF1B- 9P-2.5DSA(01)	541-0232-2 01	9	20.0	25.0	
DF1BZ-10P-2.5DSA	541-2008-0	DF1B-10P-2.5DSA(01)	541-0233-5 01	10	22.5	27.5	
DF1BZ-11P-2.5DSA	541-2009-2	—————	—————	11	25.0	30.0	
DF1BZ-12P-2.5DSA	541-2010-1	DF1B-12P-2.5DSA(01)	541-0235-0 01	12	27.5	32.5	
DF1BZ-13P-2.5DSA	541-2011-4	—————	—————	13	30.0	35.0	
DF1BZ-14P-2.5DSA	541-2012-7	DF1B-14P-2.5DSA(01)	541-0237-6 01	14	32.5	37.5	
DF1BZ-15P-2.5DSA	541-2013-0	DF1B-15P-2.5DSA(01)	541-0238-9 01	15	35.0	40.0	
DF1BZ-16P-2.5DSA	541-2014-2	DF1B-16P-2.5DSA(01)	541-0239-1 01	16	37.5	42.5	
DF1BZ-18P-2.5DSA	541-2015-5	DF1B-18P-2.5DSA(01)	541-0240-0 01	18	42.5	47.5	
DF1BZ-20P-2.5DSA	541-2016-8	DF1B-20P-2.5DSA(01)	541-0241-3 01	20	47.5	52.5	

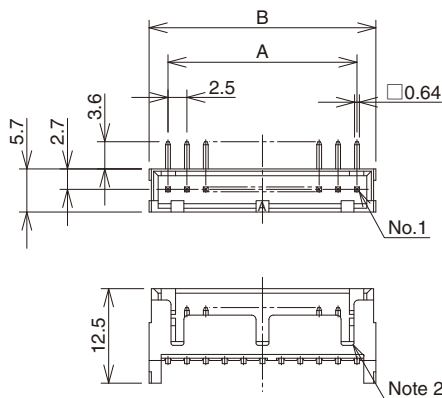
Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.) If needed, please order the product per bag.

Note 2 : The 2 and 3 contact connector contains the concave portion to prevent miss-insertion in the center at one point, which is different from the above figure. In addition, the 4 to 6 contact connectors have two concave portions at both ends.

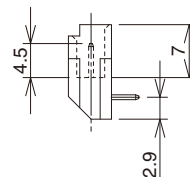
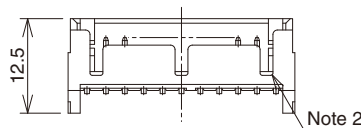
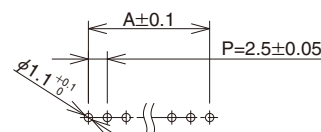
## Single Row Right Angle Pin Header



● Board Through-hole Diameter :  $\phi 1.1^{+0.1}_0$



● Recommended PCB Layout (t=1.6±0.1mm)



Unit : mm

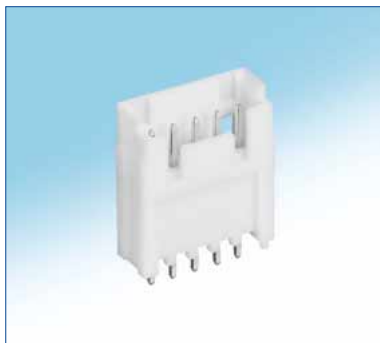
Tin plated		Gold plated		No. of Contacts	A	B	RoHS
Part No.	HRS No.	Part No.	HRS No.				
DF1BZ- 2P-2.5DS	541-2034-0	DF1B- 2P-2.5DS(01)	541-0225-7 01	2	2.5	7.5	Yes
DF1BZ- 3P-2.5DS	541-2035-2	DF1B- 3P-2.5DS(01)	541-0226-0 01	3	5.0	10.0	
DF1BZ- 4P-2.5DS	541-2036-5	DF1B- 4P-2.5DS(01)	541-0227-2 01	4	7.5	12.5	
DF1BZ- 5P-2.5DS	541-2037-8	DF1B- 5P-2.5DS(01)	541-0228-5 01	5	10.0	15.0	
DF1BZ- 6P-2.5DS	541-2038-0	DF1B- 6P-2.5DS(01)	541-0229-8 01	6	12.5	17.5	
DF1BZ- 7P-2.5DS	541-2039-3	DF1B- 7P-2.5DS(01)	541-0230-7 01	7	15.0	20.0	
DF1BZ- 8P-2.5DS	541-2040-2	DF1B- 8P-2.5DS(01)	541-0231-0 01	8	17.5	22.5	
DF1BZ- 9P-2.5DS	541-2041-5	—————	—————	9	20.0	25.0	
DF1BZ-10P-2.5DS	541-2042-8	DF1B-10P-2.5DS(01)	541-0233-5 01	10	22.5	27.5	
DF1BZ-11P-2.5DS	541-2043-0	—————	—————	11	25.0	30.0	
DF1BZ-12P-2.5DS	541-2044-3	DF1B-12P-2.5DS(01)	541-0235-0 01	12	27.5	32.5	
DF1BZ-13P-2.5DS	541-2045-6	—————	—————	13	30.0	35.0	
DF1BZ-14P-2.5DS	541-2046-9	DF1B-14P-2.5DS(01)	541-0237-6 01	14	32.5	37.5	
DF1BZ-15P-2.5DS	541-2047-1	DF1B-15P-2.5DS(01)	541-0238-9 01	15	35.0	40.0	
DF1BZ-16P-2.5DS	541-2048-4	DF1B-16P-2.5DS(01)	541-0239-1 01	16	37.5	42.5	
DF1BZ-18P-2.5DS	541-2049-7	DF1B-18P-2.5DS(01)	541-0240-0 01	18	42.5	47.5	
DF1BZ-20P-2.5DS	541-2050-6	DF1B-20P-2.5DS(01)	541-0241-3 01	20	47.5	52.5	

Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

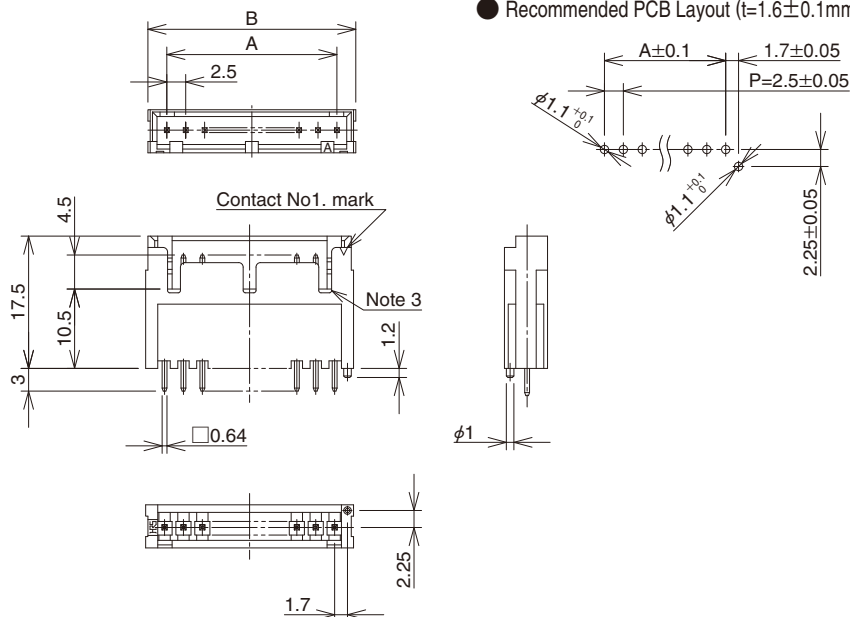
Note 2 : The 4 and 6 contact connector contains the concave portion to prevent miss-insertion in the center at one point, which is different from the above figure.



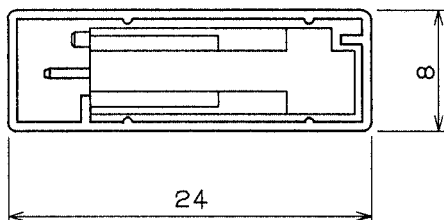
## Single Row Straight Pin Header for Potting



● Recommended PCB Layout (t=1.6±0.1mm)



### Tube Size



Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	Tube Package Quantity	RoHS
DF1BD- 2P-2.5DSA(**)	541-0800-3 **	2	2.5	7.5	64pieces	Yes
DF1BD- 3P-2.5DSA(**)	541-0801-6 **	3	5	10	48	
DF1BD- 4P-2.5DSA(**)	541-0802-9 **	4	7.5	12.5	38	
DF1BD- 5P-2.5DSA(**)	541-0803-1 **	5	10	15	32	

- Board Positioning Boss Hole Diameter :  $\phi 1.1^{+0.1}_0$
- Board Through-hole Diameter :  $\phi 1.1^{+0.1}_0$

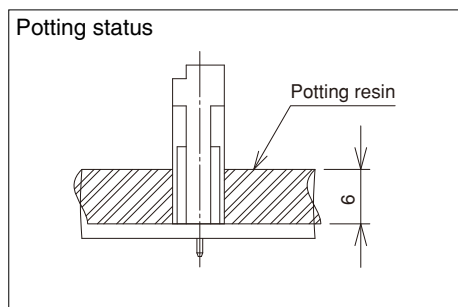
[Specific No.] -\*\* \*, (\*\* \*)  
 (05) : Tin plated  
 (25) : Tin plated, tube packaging

Note 1 : A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the product per pack.

Note 2 : Please order the tube packaging products, multiplying the packaging quantity (pieces).

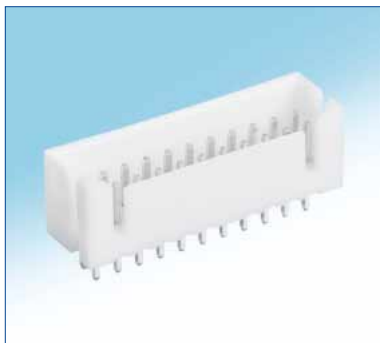
Note 3 : The 2 and 3 contact connector contains the concave portion to prevent miss-insertion in the center at one point, which is different from the above figure. In addition, the 4 to 6 contacts connectors have two concave portions at both ends.

### Applicable Potting Thickness : 6mm

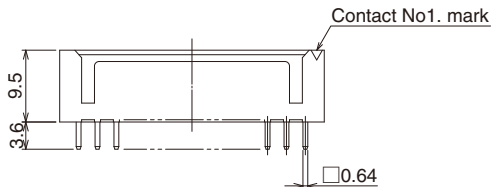
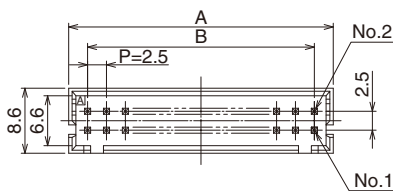




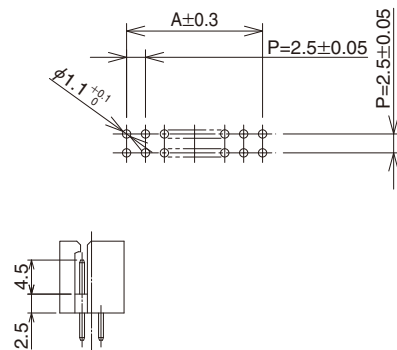
## Double Row Straight Pin Header



● Board Through-hole Diameter :  $\phi 1.1^{+0.1}$



● Recommended PCB Layout (t=1.6±0.1mm)



Unit : mm

Tin plated		Gold plated		No. of Contacts	A	B	RoHS
Part No.	HRS No.	Part No.	HRS No.				
DF1BZ- 4DP-2.5DSA	541-2017-0	DF1B- 4DP-2.5DSA(01)	541-0651-5 01	4	7.5	2.5	Yes
DF1BZ- 6DP-2.5DSA	541-2018-3	DF1B- 6DP-2.5DSA(01)	541-0652-8 01	6	10.0	5.0	
DF1BZ- 8DP-2.5DSA	541-2019-6	DF1B- 8DP-2.5DSA(01)	541-0653-0 01	8	12.5	7.5	
DF1BZ-10DP-2.5DSA	541-2020-5	DF1B-10DP-2.5DSA(01)	541-0616-4 01	10	15.0	10.0	
DF1BZ-12DP-2.5DSA	541-2021-8	DF1B-12DP-2.5DSA(01)	541-0617-7 01	12	17.5	12.5	
DF1BZ-14DP-2.5DSA	541-2022-0	DF1B-14DP-2.5DSA(01)	541-0618-0 01	14	20.0	15.0	
DF1BZ-16DP-2.5DSA	541-2023-3	DF1B-16DP-2.5DSA(01)	541-0619-2 01	16	22.5	17.5	
DF1BZ-18DP-2.5DSA	541-2024-6	DF1B-18DP-2.5DSA(01)	541-0620-1 01	18	25.0	20.0	
DF1BZ-20DP-2.5DSA	541-2025-9	DF1B-20DP-2.5DSA(01)	541-0621-4 01	20	27.5	22.5	
DF1BZ-22DP-2.5DSA	541-2026-1	DF1B-22DP-2.5DSA(01)	541-0622-7 01	22	30.0	25.0	
DF1BZ-24DP-2.5DSA	541-2027-4	DF1B-24DP-2.5DSA(01)	541-0623-0 01	24	32.5	27.5	
DF1BZ-26DP-2.5DSA	541-2028-7	DF1B-26DP-2.5DSA(01)	541-0624-2 01	26	35.0	30.0	
DF1BZ-28DP-2.5DSA	541-2029-0	DF1B-28DP-2.5DSA(01)	541-0625-5 01	28	37.5	32.5	
DF1BZ-30DP-2.5DSA	541-2030-9	DF1B-30DP-2.5DSA(01)	541-0626-8 01	30	40.0	35.0	
DF1BZ-34DP-2.5DSA	541-2031-1	DF1B-34DP-2.5DSA(01)	541-0628-3 01	34	45.0	40.0	
DF1BZ-36DP-2.5DSA	541-2032-4	DF1B-36DP-2.5DSA(01)	541-0629-6 01	36	47.5	42.5	
DF1BZ-40DP-2.5DSA	541-2033-7	DF1B-40DP-2.5DSA(01)	541-0631-8 01	40	52.5	47.5	

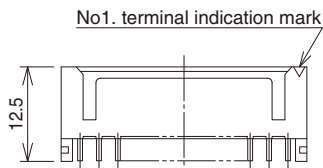
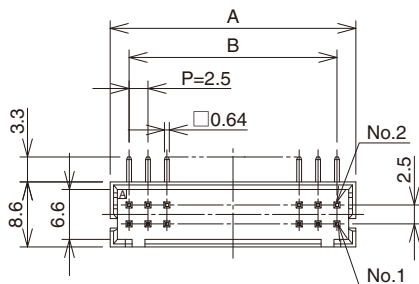
Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

Note 2 : The 4 and 6 contact connector contains the concave portion to prevent miss-insertion in the center area at one point, which is different from the above figure.

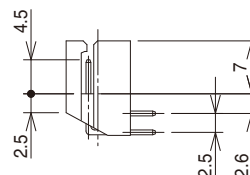
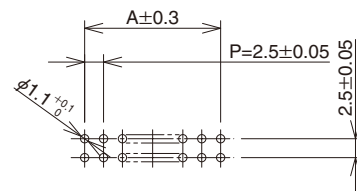
## Double Row Right Angle Pin Header



● Board Through-hole Diameter :  $\phi 1.1^{+0.1}$



● Recommended PCB Layout (t=1.6±0.1mm)



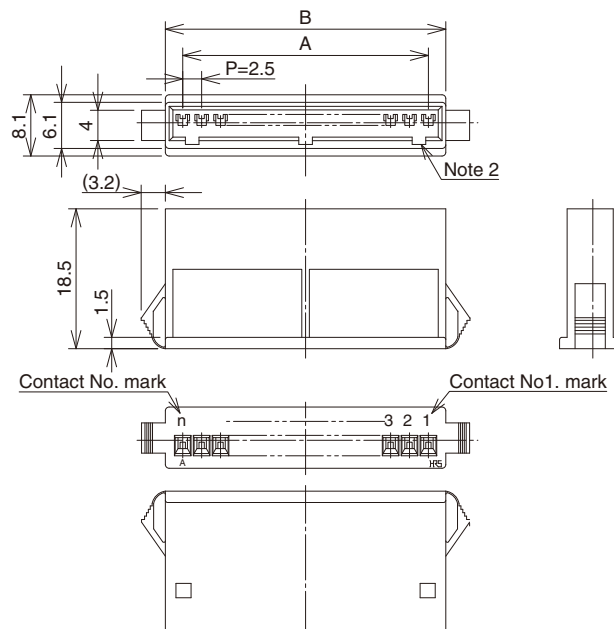
Unit : mm

Tin plated		Gold plated		No. of Contacts	A	B	RoHS
Part No.	HRS No.	Part No.	HRS No.				
DF1BZ- 4DP-2.5DS	541-2051-9	DF1B- 4DP-2.5DS(01)	541-0654-3 01	4	7.5	2.5	Yes
DF1BZ- 6DP-2.5DS	541-2052-1	DF1B- 6DP-2.5DS(01)	541-0655-6 01	6	10.0	5.0	
DF1BZ- 8DP-2.5DS	541-2053-4	DF1B- 8DP-2.5DS(01)	541-0656-9 01	8	12.5	7.5	
DF1BZ-10DP-2.5DS	541-2054-7	DF1B-10DP-2.5DS(01)	541-0632-0 01	10	15.0	10.0	
DF1BZ-12DP-2.5DS	541-2055-0	DF1B-12DP-2.5DS(01)	541-0633-3 01	12	17.5	12.5	
DF1BZ-14DP-2.5DS	541-2056-2	DF1B-14DP-2.5DS(01)	541-0634-6 01	14	20.0	15.0	
DF1BZ-16DP-2.5DS	541-2057-5	DF1B-16DP-2.5DS(01)	541-0635-9 01	16	22.5	17.5	
DF1BZ-18DP-2.5DS	541-2058-8	DF1B-18DP-2.5DS(01)	541-0636-1 01	18	25.0	20.0	
DF1BZ-20DP-2.5DS	541-2059-0	DF1B-20DP-2.5DS(01)	541-0637-4 01	20	27.5	22.5	
DF1BZ-22DP-2.5DS	541-2060-0	DF1B-22DP-2.5DS(01)	541-0638-7 01	22	30.0	25.0	
DF1BZ-24DP-2.5DS	541-2061-2	DF1B-24DP-2.5DS(01)	541-0639-0 01	24	32.5	27.5	
DF1BZ-26DP-2.5DS	541-2062-5	DF1B-26DP-2.5DS(01)	541-0640-9 01	26	35.0	30.0	
DF1BZ-28DP-2.5DS	541-2063-8	DF1B-28DP-2.5DS(01)	541-0641-1 01	28	37.5	32.5	
DF1BZ-30DP-2.5DS	541-2064-0	DF1B-30DP-2.5DS(01)	541-0642-4 01	30	40.0	35.0	
DF1BZ-34DP-2.5DS	541-2065-3	DF1B-34DP-2.5DS(01)	541-0644-0 01	34	45.0	40.0	
DF1BZ-36DP-2.5DS	541-2066-6	DF1B-36DP-2.5DS(01)	541-0645-2 01	36	47.5	42.5	
DF1BZ-40DP-2.5DS	541-2067-9	DF1B-40DP-2.5DS(01)	541-0647-8 01	40	52.5	47.5	

Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

Note 2 : The 4 and 6 contact connector contains the concave portion to prevent miss-insertion in the center area at one point, which is different from the above figure.

## Single Row In-line Plug (Simple Lock Type)



●Applicable Socket : DF1B-\*S-2.5R

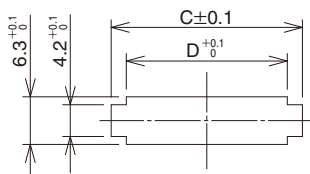
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	RoHS	Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1BA- 2EP-2.5RC	541-0700-9	2	2.5	7.1	Yes	DF1BA- 8EP-2.5RC	541-0706-5	8	17.5	22.1	Yes
DF1BA- 3EP-2.5RC	541-0701-1	3	5	9.6		DF1BA- 9EP-2.5RC	541-0707-8	9	20	24.6	
DF1BA- 4EP-2.5RC	541-0702-4	4	7.5	12.1		DF1BA-10EP-2.5RC	541-0708-0	10	22.5	27.1	
DF1BA- 5EP-2.5RC	541-0703-7	5	10	14.6		DF1BA-12EP-2.5RC	541-0710-2	12	27.5	32.1	
DF1BA- 6EP-2.5RC	541-0704-0	6	12.5	17.1							
DF1BA- 7EP-2.5RC	541-0705-2	7	15	19.6							

Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

Note 2 : The 2 contacts connector contains the concave portion to prevent miss-insertion in the center area at one point, which is different from the above figure. In addition, the 3 to 6 contact connectors contain the concave portion at both sides.

## Panel Cutouts



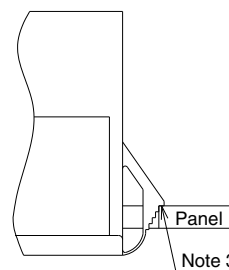
Unit : mm

Applicable Plug	No. of Contacts	C			D
		Panel Board Thickness (Note 1)			
		0.5 to 1.2	1.3 to 1.6	1.7 to 2.0	
DF1BA- 2EP-2.5RC	2	11.2	11.9	12.6	7.3
DF1BA- 3EP-2.5RC	3	13.7	14.4	15.1	9.8
DF1BA- 4EP-2.5RC	4	16.2	16.9	17.6	12.3
DF1BA- 5EP-2.5RC	5	18.7	19.4	20.1	14.8
DF1BA- 6EP-2.5RC	6	21.2	21.9	22.6	17.3
DF1BA- 7EP-2.5RC	7	23.7	24.4	25.1	19.8
DF1BA- 8EP-2.5RC	8	26.2	26.9	27.6	22.3
DF1BA- 9EP-2.5RC	9	28.7	29.4	30.1	24.8
DF1BA-10EP-2.5RC	10	31.2	31.9	32.6	27.3
DF1BA-12EP-2.5RC	12	36.2	36.9	37.6	32.3

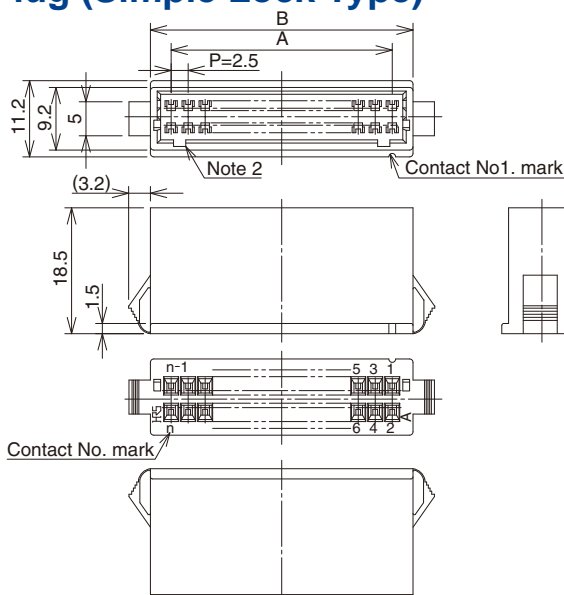
Note 1 : The installation hole size C according to panel board thickness.

Note 2 : Fabricate installation holes so that no burr can occur.

Note 3 : At the panel tab portion, use the surface that will not be rounded.



## Double Row In-line Plug (Simple Lock Type)



● Applicable Socket : DF1B-\*DS-2.5RC

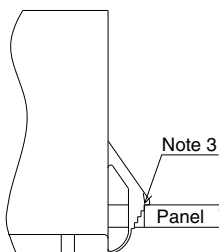
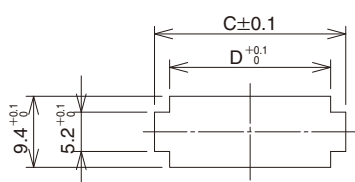
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	RoHS	Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1BA- 4DEP-2.5RC	541-0719-7	4	2.5	8.6	Yes	DF1BA-20DEP-2.5RC	541-0727-5	20	22.5	28.6	Yes
DF1BA- 6DEP-2.5RC	541-0720-6	6	5	11.1		DF1BA-22DEP-2.5RC	541-0728-8	22	25	31.1	
DF1BA- 8DEP-2.5RC	541-0721-9	8	7.5	13.6		DF1BA-24DEP-2.5RC	541-0729-0	24	27.5	33.6	
DF1BA-10DEP-2.5RC	541-0722-1	10	10	16.1		DF1BA-26DEP-2.5RC	541-0730-0	26	30	36.1	
DF1BA-12DEP-2.5RC	541-0723-4	12	12.5	18.6		DF1BA-28DEP-2.5RC	541-0731-2	28	32.5	38.6	
DF1BA-14DEP-2.5RC	541-0724-7	14	15	21.1		DF1BA-30DEP-2.5RC	541-0732-5	30	35	41.1	
DF1BA-16DEP-2.5RC	541-0725-0	16	17.5	23.6		DF1BA-34DEP-2.5RC	541-0734-0	34	40	46.1	
DF1BA-18DEP-2.5RC	541-0726-2	18	20	26.1							

Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.  
 Note 2 : The 4 contacts connector contains the concave portion to prevent miss-insertion in the center at one point, which is different from the above figure.

## Panel Cutouts

Unit : mm



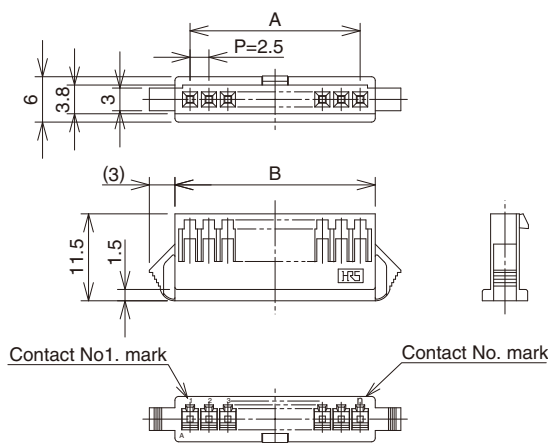
Applicable Plug	No. of Contacts	C			D
		Panel Board Thickness (Note 1)			
		0.5 to 1.2	1.3 to 1.6	1.7 to 2.0	
DF1BA- 4DEP-2.5RC	4	12.7	13.4	14.1	8.8
DF1BA- 6DEP-2.5RC	6	15.2	15.9	16.6	11.3
DF1BA- 8DEP-2.5RC	8	17.7	18.4	19.1	13.8
DF1BA-10DEP-2.5RC	10	20.2	20.9	21.6	16.3
DF1BA-12DEP-2.5RC	12	22.7	23.4	24.1	18.8
DF1BA-14DEP-2.5RC	14	25.2	25.9	26.6	21.3
DF1BA-16DEP-2.5RC	16	27.7	28.4	29.1	23.8
DF1BA-18DEP-2.5RC	18	30.2	30.9	31.6	26.3
DF1BA-20DEP-2.5RC	20	32.7	33.4	34.1	28.8
DF1BA-22DEP-2.5RC	22	35.2	35.9	36.6	31.3
DF1BA-24DEP-2.5RC	24	37.7	38.4	39.1	33.8
DF1BA-26DEP-2.5RC	26	40.2	40.9	41.6	36.3
DF1BA-28DEP-2.5RC	28	42.7	43.4	44.1	38.8
DF1BA-30DEP-2.5RC	30	45.2	45.9	46.6	41.3
DF1BA-34DEP-2.5RC	34	50.2	50.9	51.6	46.3

Note 1 : The installation hole size C according to panel board thickness.  
 Note 2 : Fabricate installation holes so that no burr can occur.  
 Note 3 : At the panel tab portion, use the surface that will not be rounded.

## Single Row In-line Socket (Full Lock Type)



Contact Inserted.



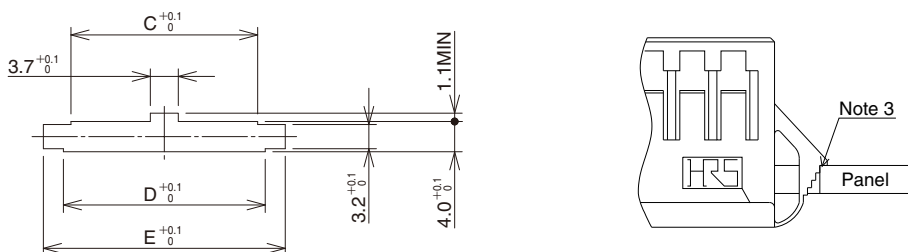
● Applicable Socket : DF1B-\*EP-2.5RC

Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	RoHS	Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1B- 2ES-2.5RC	541-0320-8	2	2.5	6.5	Yes	DF1B- 8ES-2.5RC	541-0326-4	8	17.5	21.5	Yes
DF1B- 3ES-2.5RC	541-0321-0	3	5	9		DF1B- 9ES-2.5RC	541-0327-7	9	20	24	
DF1B- 4ES-2.5RC	541-0322-3	4	7.5	11.5		DF1B-10ES-2.5RC	541-0328-0	10	22.5	26.5	
DF1B- 5ES-2.5RC	541-0323-6	5	10	14		DF1B-11ES-2.5RC	541-0329-2	11	25	29	
DF1B- 6ES-2.5RC	541-0324-9	6	12.5	16.5		DF1B-12ES-2.5RC	541-0330-1	12	27.5	31.5	
DF1B- 7ES-2.5RC	541-0325-1	7	15	19		DF1B-13ES-2.5RC	541-0331-4	13	30	34	

Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

## Panel Cutouts



Unit : mm

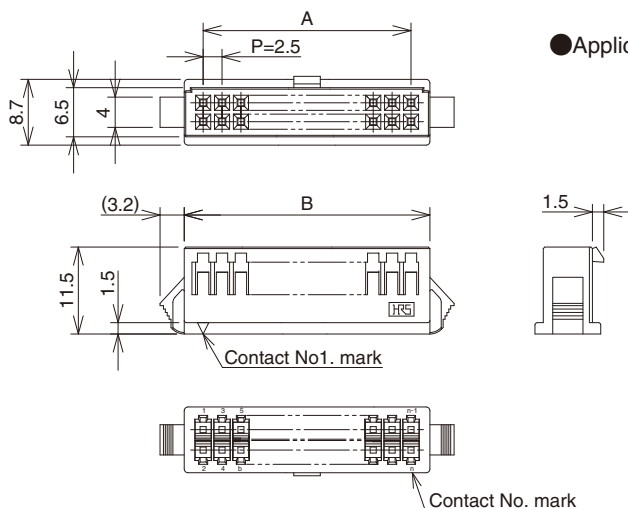
Applicable Plug	No. of Contacts	C	D	E		
				Panel Board Thickness (Note 1)		
				0.5 to 1.2	1.3 to 1.6	1.7 to 2.0
DF1B- 2ES-2.5RC	2	4.7	6.7	10.8	11.3	12
DF1B- 3ES-2.5RC	3	7.2	9.2	13.3	13.8	14.5
DF1B- 4ES-2.5RC	4	9.7	11.7	15.8	16.3	17
DF1B- 5ES-2.5RC	5	12.2	14.2	18.3	18.8	19.5
DF1B- 6ES-2.5RC	6	14.7	16.7	20.8	21.3	22
DF1B- 7ES-2.5RC	7	17.2	19.2	23.3	23.8	24.5
DF1B- 8ES-2.5RC	8	19.7	21.7	25.8	26.3	27
DF1B- 9ES-2.5RC	9	22.2	24.2	28.3	28.8	29.5
DF1B-10ES-2.5RC	10	24.7	26.7	30.8	31.3	32
DF1B-11ES-2.5RC	11	27.2	29.2	33.3	33.8	34.5
DF1B-12ES-2.5RC	12	29.7	31.7	35.8	36.3	37
DF1B-13ES-2.5RC	13	32.2	34.2	38.3	38.8	39.5

Note 1 : The installation hole size C will be changed according to panel board thickness.

Note 2 : Fabricate installation holes so that no burr can occur.

Note 3 : At the panel tab portion, use the surface that will not be rounded.

## Double Row In-line Socket (Full Lock Type)



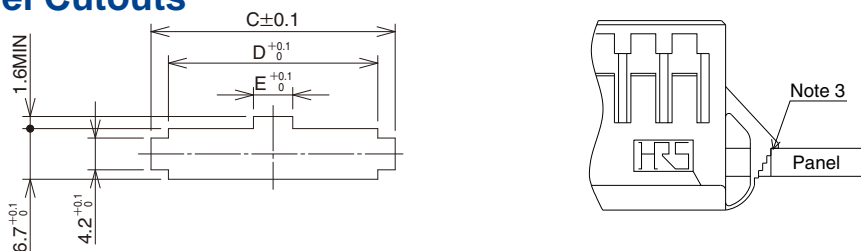
● Applicable Socket : DF1B-\*DEP-2.5RC

Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	RoHS	Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1B-10DES-2.5RC	541-0351-1	10	10	15	Yes	DF1B-24DES-2.5RC	541-0357-8	24	27.5	32.5	Yes
DF1B-12DES-2.5RC	541-0352-4	12	12.5	17.5		DF1B-26DES-2.5RC	541-0358-0	26	30	35	
DF1B-14DES-2.5RC	541-0353-7	14	15	20		DF1B-28DES-2.5RC	541-0359-3	28	32.5	37.5	
DF1B-16DES-2.5RC	541-0354-0	16	17.5	22.5		DF1B-30DES-2.5RC	541-0360-2	30	35	40	
DF1B-18DES-2.5RC	541-0346-1	18	20	25		DF1B-32DES-2.5RC	541-0361-5	32	37.5	42.5	
DF1B-20DES-2.5RC	541-0355-2	20	22.5	27.5		DF1B-34DES-2.5RC	541-0362-8	34	40	45	
DF1B-22DES-2.5RC	541-0356-5	22	25	30							

Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

## Panel Cutouts



Unit : mm

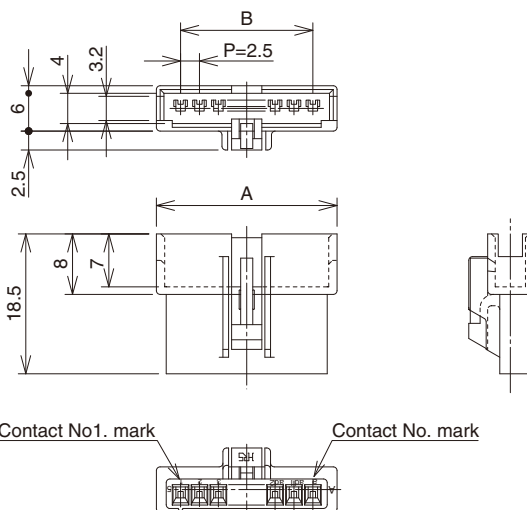
Applicable Plug	No. of Contacts	C			D	E
		Panel Board Thickness (Note 1)				
		0.5 to 1.2	1.3 to 1.6	1.7 to 2.0		
DF1B-10DES-2.5RC	10	19.1	19.8	20.5	15.2	3.7
DF1B-12DES-2.5RC	12	21.6	22.3	23	17.7	3.7
DF1B-14DES-2.5RC	14	24.1	24.8	25.5	20.2	3.7
DF1B-16DES-2.5RC	16	26.6	27.3	28	22.7	3.7
DF1B-18DES-2.5RC	18	29.1	29.8	30.5	25.2	3.7
DF1B-20DES-2.5RC	20	31.6	32.3	33	27.7	5.2
DF1B-22DES-2.5RC	22	34.1	34.8	35.5	30.2	5.2
DF1B-24DES-2.5RC	24	36.6	37.3	38	32.7	5.2
DF1B-26DES-2.5RC	26	39.1	39.8	40.5	35.2	5.2
DF1B-28DES-2.5RC	28	41.6	42.3	43	37.7	5.2
DF1B-30DES-2.5RC	30	44.1	44.8	45.5	40.2	5.2
DF1B-32DES-2.5RC	32	46.6	47.3	48	42.7	5.2
DF1B-34DES-2.5RC	34	49.1	49.8	50.5	45.2	5.2

Note 1 : The installation hole size C according to panel board thickness.

Note 2 : Fabricate installation holes so that no burr can occur.

Note 3 : At the panel tab portion, use the surface that will not be rounded.

## Single Row In-line Plug (Full Lock Type)



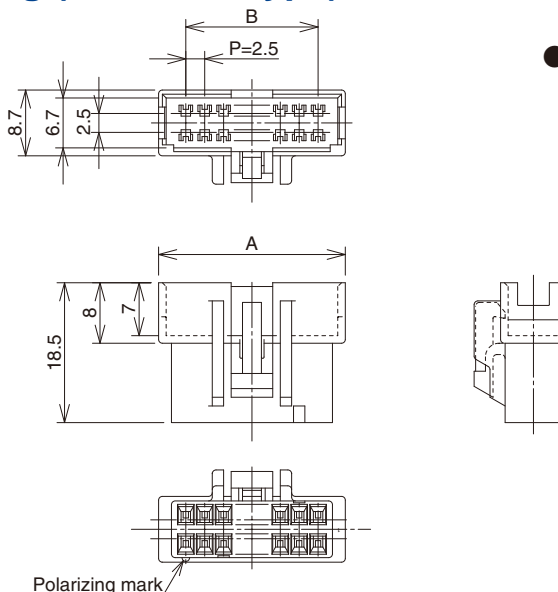
● Applicable Socket : DF1B-\*ES-2.5RC

Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	RoHS	Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1B- 2EP-2.5RC	541-0332-7	2	8.9	2.5	Yes	DF1B- 8EP-2.5RC	541-0338-3	8	23.9	17.5	Yes
DF1B- 3EP-2.5RC	541-0333-0	3	11.4	5		DF1B- 9EP-2.5RC	541-0339-6	9	26.4	20	
DF1B- 4EP-2.5RC	541-0334-2	4	13.9	7.5		DF1B-10EP-2.5RC	541-0340-5	10	28.9	22.5	
DF1B- 5EP-2.5RC	541-0335-5	5	16.4	10		DF1B-11EP-2.5RC	541-0341-8	11	31.4	25	
DF1B- 6EP-2.5RC	541-0336-8	6	18.9	12.5		DF1B-12EP-2.5RC	541-0342-0	12	33.9	27.5	
DF1B- 7EP-2.5RC	541-0337-0	7	21.4	15		DF1B-13EP-2.5RC	541-0343-3	13	36.4	30	

Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

## Double Row In-line Plug (Full Lock Type)



● Applicable Socket : DF1B-\*DES-2.5RC

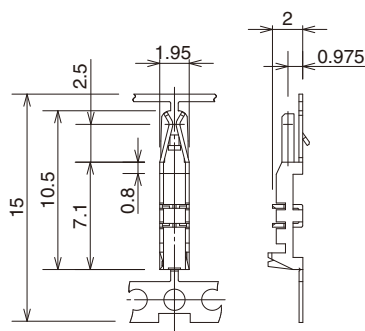
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	RoHS	Part No.	HRS No.	No. of Contacts	A	B	RoHS
DF1B-10DEP-2.5RC	541-0366-9	10	17.2	10	Yes	DF1B-24DEP-2.5RC	541-0372-1	24	34.7	27.5	Yes
DF1B-12DEP-2.5RC	541-0367-1	12	19.7	12.5		DF1B-26DEP-2.5RC	541-0373-4	26	37.2	30	
DF1B-14DEP-2.5RC	541-0368-4	14	22.2	15		DF1B-28DEP-2.5RC	541-0374-7	28	39.7	32.5	
DF1B-16DEP-2.5RC	541-0369-7	16	24.7	17.5		DF1B-30DEP-2.5RC	541-0375-0	30	42.2	35	
DF1B-18DEP-2.5RC	541-0350-9	18	27.2	20		DF1B-32DEP-2.5RC	541-0376-2	32	44.7	37.5	
DF1B-20DEP-2.5RC	541-0370-6	20	29.7	22.5		DF1B-34DEP-2.5RC	541-0377-5	34	47.2	40	
DF1B-22DEP-2.5RC	541-0371-9	22	32.2	25							

Note 1 : The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.



## ID Contact for Socket



### Reel Contact (10,000/reel) \*Applicable Tool : Applicator

Part No.	HRS No.	Finish	Applicable Cable(Tin Plated Annealing Copper Wire)				RoHS
			UL Style	AWG	Wire Construction	Sectional Area	
DF1B-R24F	541-0217-9 00	Tin plated	1061	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	0.9 to 1.39mm
DF1B-R24FA(06)	541-0261-0 06	Gold plated	1061	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	0.9 to 1.39mm
DF1B-R26F	541-0218-1 00	Tin plated	1061,1007	26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	0.9 to 1.39mm
DF1B-R26FA(06)	541-0262-3 06	Gold plated	1061,1007	26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	0.9 to 1.39mm
DF1B-R28F	541-0219-4 00	Tin plated	1061,1007	28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	0.9 to 1.39mm
DF1B-R28FA(06)	541-0263-6 06	Gold plated	1061,1007	28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	0.9 to 1.39mm

Note : If other cables are used instead of the applicable cable, contact Hirose sales department.

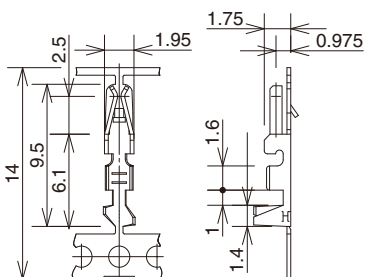
### Bulk Contact (100/pack) \*Applicable Tool : Manual ID tool

Part No.	HRS No.	Finish	Applicable Cable(Tin Plated Annealing Copper Wire)				RoHS
			UL Style	AWG	Wire Construction	Sectional Area	
DF1B-R24	541-0220-3 00	Tin plated	1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	1.39mm
DF1B-R24A(06)	541-0264-9 06	Gold plated	1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	1.39mm
DF1B-R26	541-0221-6 00	Tin plated	1007	26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	1.3mm
DF1B-R26A(06)	541-0265-1 06	Gold plated	1007	26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	1.3mm
DF1B-R28	541-0222-9 00	Tin plated	1007	28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	1.2mm
DF1B-R28A(06)	541-0266-4 06	Gold plated	1007	28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	1.2mm

Note : If Manual ID tool is used, the cables in the above table are only suitable.

### ID Contact Extraction Tool : DF-C-PO(A)

## Crimping Contact for Socket



### Reel Contact (10,000/reel) \*Applicable Tool : Applicator

Part No.	HRS No.	Finish	Applicable Cable(Tin Plated Annealing Copper Wire)				RoHS
			UL Style	AWG	Wire Construction	Sectional Area	
DF1B-2022SCF	541-0223-1 00	Tin plated	1061,1007	20 AWG	21cores./0.18mm	0.540mm <sup>2</sup>	1.2 to 1.9mm
				22 AWG	17cores./0.16mm	0.342mm <sup>2</sup>	
DF1B-2022SCFA	541-0662-1 00	Gold plated	1061,1007	20 AWG	21cores./0.18mm	0.540mm <sup>2</sup>	1.2 to 1.9mm
				22 AWG	17cores./0.16mm	0.342mm <sup>2</sup>	
DF1B-2428SCF	541-0678-1 00	Tin plated	1061,1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	0.9 to 1.5mm
				26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	
				28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	
DF1B-2428SCFA	541-0680-3 00	Gold plated	1061,1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	0.9 to 1.5mm
				26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	
				28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	
DF1B-30SCF	541-0682-9 00	Tin plated	1061,1007	30 AWG	7cores./0.1mm	0.055mm <sup>2</sup>	0.6 to 1.2mm
DF1B-30SCFA	541-0684-4 00	Gold plated	1061,1007	30 AWG	7cores./0.1mm	0.055mm <sup>2</sup>	0.6 to 1.2mm

Note : If other cables are used instead of the applicable cable, contact Hirose sales department.

### Bulk Contact (100/pack) \*Applicable Tool : Manual Crimping Tool

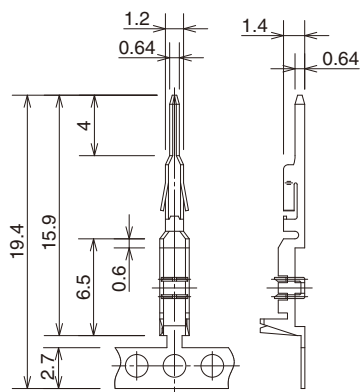
Part No.	HRS No.	Finish	Applicable Cable(Tin Plated Annealing Copper Wire)				RoHS
			UL Style	AWG	Wire Construction	Sectional Area	
DF1B-2022SC	541-0224-4 00	Tin plated	1007	20 AWG	21cores./0.18mm	0.540mm <sup>2</sup>	1.8mm
				22 AWG	17cores./0.16mm	0.342mm <sup>2</sup>	
DF1B-2022SCA	541-0663-4 00	Gold plated	1007	20 AWG	21cores./0.18mm	0.540mm <sup>2</sup>	1.8mm
				22 AWG	17cores./0.16mm	0.342mm <sup>2</sup>	
DF1B-2428SC	541-0679-4 00	Tin plated	1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	1.5mm
				26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	
				28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	
DF1B-2428SCA	541-0681-6 00	Gold plated	1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	1.5mm
				26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	
				28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	
DF1B-30SC	541-0683-1 00	Tin plated	1007	30 AWG	7cores./0.1mm	0.055mm <sup>2</sup>	1.1mm
DF1B-30SCA	541-0685-7 00	Gold plated	1007	30 AWG	7cores./0.1mm	0.055mm <sup>2</sup>	1.1mm

Note : If Manual crimping tool is used, the cables in the above table are only suitable.

### Crimping Contact Extraction Tool : DF-C-PO(B)

### Strip Length : 2.0 to 2.5mm

## ID Contact for Plug



● Crimping Contact  
Extraction Tool :  
DF-C-PO(C)

### ◆ Reel Contact (10,000/reel) ※ Applicable Tool : Applicator

Part No.	HRS No.	Finish	Applicable Cable(Tin Plated Annealing Copper Wire)					RoHS
			UL Style	AWG	Wire Construction	Sectional Area	Jacket Diameter	
DF1B-24PRF	541-0666-2 00	Tin plated	1061	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	0.9 to 1.39mm	Yes
DF1B-26PRF	541-0668-8 00	Tin plated	1061,1007	26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	0.9 to 1.39mm	
DF1B-28PRF	541-0670-0 00	Tin plated	1061,1007	28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	0.9 to 1.39mm	

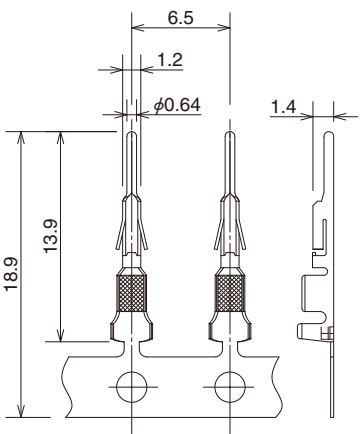
Note : If other cables are used instead of the applicable cable, contact Hirose sales department.

### ◆ Bulk Contact (100/pack) ※ Applicable Tool : Manual ID tool

Part No.	HRS No.	Finish	Applicable Cable(Tin Plated Annealing Copper Wire)					RoHS
			UL Style	AWG	Wire Construction	Sectional Area	Jacket Diameter	
DF1B-24PR	541-0667-5 00	Tin plated	1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	1.39mm	Yes
DF1B-26PR	541-0669-0 00	Tin plated	1007	26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	1.3mm	
DF1B-28PR	541-0671-2 00	Tin plated	1007	28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	1.2mm	

Note : If Manual ID tool is used, the cables in the above table are only suitable.

## Crimping Contact for Plug



● Crimping Contact  
Extraction Tool :  
DF-C-PO(C)

● Strip Length :  
3.0 to 3.7mm

### ◆ Reel Contact (10,000/reel) ※ Applicable Tool : Applicator

Part No.	HRS No.	Finish	Applicable Cable(Tin Plated Annealing Copper Wire)					RoHS
			UL Style	AWG	Wire Construction	Sectional Area	Jacket Diameter	
DF1B-2022PCF	541-0259-9 00	Tin plated	1061,1007	20 AWG 22 AWG	21cores./0.18mm 17cores./0.16mm	0.540mm <sup>2</sup> 0.342mm <sup>2</sup>	1.2 to 1.9mm	Yes
DF1B-2022PCFB	541-0690-7 00	Gold plated	1061,1007	20 AWG 22 AWG	21cores./0.18mm 17cores./0.16mm	0.540mm <sup>2</sup> 0.342mm <sup>2</sup>	1.2 to 1.9mm	
DF1B-2428PCF	541-0664-7 00	Tin plated	1061,1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	0.9 to 1.5mm	
				26 AWG 28 AWG	7cores./0.16mm 7cores./0.127mm	0.141mm <sup>2</sup> 0.089mm <sup>2</sup>		
DF1-PD2428SCFB	541-0660-6 00	Gold plated	1061,1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	0.9 to 1.5mm	
				26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>		
				28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>		
DF1B-30PCF	541-0686-0 00	Tin plated	1061,1007	30 AWG	7cores./0.1mm	0.055mm <sup>2</sup>	0.8 to 1.1mm	
DF1B-30PCFB	541-0688-5 00	Gold plated	1061,1007	30 AWG	7cores./0.1mm	0.055mm <sup>2</sup>	0.8 to 1.1mm	

Note : If other cables are used instead of the applicable cable, contact Hirose sales department.

### ◆ Bulk Contact (100/pack) ※ Applicable Tool : Manual Crimping Tool

Part No.	HRS No.	Finish	Applicable Cable(Tin Plated Annealing Copper Wire)					RoHS
			UL Style	AWG	Wire Construction	Sectional Area	Jacket Diameter	
DF1B-2022PC	541-0260-8 00	Tin plated	1061,1007	20 AWG	21cores./0.18mm	0.540mm <sup>2</sup>	1.8mm	Yes
				22 AWG	17cores./0.16mm	0.342mm <sup>2</sup>	1.6mm	
DF1B-2022PCB	541-0691-0 00	Gold plated	1061,1007	20 AWG	21cores./0.18mm	0.540mm <sup>2</sup>	1.8mm	
				22 AWG	17cores./0.16mm	0.342mm <sup>2</sup>	1.6mm	
DF1B-2428PC	541-0665-0 00	Tin plated	1061,1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	1.5mm	
				26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	1.3mm	
				28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	1.2mm	
DF1-PD2428SCB	541-0661-9 00	Gold plated	1061,1007	24 AWG	11cores./0.16mm	0.221mm <sup>2</sup>	1.5mm	
				26 AWG	7cores./0.16mm	0.141mm <sup>2</sup>	1.3mm	
				28 AWG	7cores./0.127mm	0.089mm <sup>2</sup>	1.2mm	
DF1B-30PC	541-0687-2 00	Tin plated	1061,1007	30 AWG	7cores./0.1mm	0.055mm <sup>2</sup>	1.1mm	
DF1B-30PCB	541-0689-8 00	Gold plated	1061,1007	30 AWG	7cores./0.1mm	0.055mm <sup>2</sup>	1.1mm	

Note : If Manual crimping tool is used, the cables in the above table are only suitable.

## ◆ Applicable Tool

Connection Type	Type	Part No.	HRS No.	Applicable Contacts
ID	Applicator	AP105-DF1B-R	901-4507-4	DF1B-R**F(A)(##) **=24,26,28 (##)=blank,(06)
		AP105-DF1B-PR	901-4536-2	DF1B-***PRF**=24,26,28
	Manual ID tool	DF1B-T2428HR	550-0171-0	DF1B-R**(A)(##) **=24,26,28 (##)=blank,(06)
		DF1B-T2428PHR	550-0221-7	DF1B-***PR/PRB **=24,26,28
Crimping	Applicator	AP105-DF1B-2022S	901-4510-9	DF1B-2022SCF(A)
		AP105-DF1B-2428S	901-4518-0	DF1B-2428SCF(A)
		AP105-DF1B-30S	901-4517-8	DF1B-30SCF(A)
		AP105-DF1B-2022P	901-4509-0	DF1B-2022PCF(B)
		AP105-DF1B-2428P	901-4521-5	DF1B-2428PCF,DF1-PD2428SCFB
		AP105-DF1B-30P	901-4519-3	DF1B-30PCF(B)
		DF1B-TA2022SHC	550-0182-7	DF1B-2022SC(A)
	Manual crimping tool	DF1B-TA2428SHC	550-0209-1	DF1B-2428SC(A)
		DF1B-TA30SHC	550-0211-3	DF1B-30SC(A)
		DF1B-TA2022PHC	550-0183-0	DF1B-2022PC(B)
		DF1B-TA2428PHC	550-0224-5	DF1B-2428PC,DF1-PD2428SCB
	DF1B-TA30PHC	550-0210-0	DF1B-30PC(B)	
Press Main Unit		CM-105C	901-0001-0	_____
Extraction Tool		DF-C-PO(A)	550-0170-8	DF1B-R**F
		DF-C-PO(B)	550-0179-2	DF1B-****SCF
		DF-C-PO(C)	550-0198-7	DF1B-****PC,DF1B-***PRF

Note 1 : Please conduct crimping work according to the "Crimp Quality Standards" (ETAD-H0909-00 or ETAD-H0913-00) and "Crimp Condition Table".

Note 2 : If a trouble has occurred due to tools which are not designated by Hirose, Hirose won't guarantee any product.

## ◆ Crimping

### ■ Items required prior to start crimping

The work-related documents shown below are required before starting the harness connections.

(The ● mark shows the document required.)

When the documents shown below are not available, ask our sales personnel to provide them.

Document Title	Description	Automatic Crimping Machine	Hand Crimping Tool	Remarks
(1) Main unit of crimping machine instruction manual	Explanation of main press machine unit	●	—	When purchasing main press machine unit, it is bundled.
(2) Applicator Spare Parts Identification	Explanation for Applicator installation	●	—	When purchasing Applicator, it is bundled.
(3) Crimp Conditions	Standard values of : Crimp height ; Tensile strength	●	—	
(4) Crimp Quality Standards	Various standards for crimping conditions	●	—	
(5) Operating Instructions for Hand Tool	Inspection items of : Crimp height ; Tensile strength ; and others	—	●	When purchasing Hand Tool, it is bundled.
(6) Harness Procedure Manual	Harness procedure	●	●	Ask our sales personal to provide them.

### ■ Tools

When crimping work is applied to our contacts, the tool designated by Hirose should be used.

Crimping work by using tools other than as designated must not be done because it may result in contact failure, disconnection of cable, etc.

\*The operating instructions manual is available for the crimping machine and the applicator. Be sure to carefully read the operating instructions manual before implementing the work.

### ■ Applicable electric wires

Check that the electric wire to be used is in the range of application.

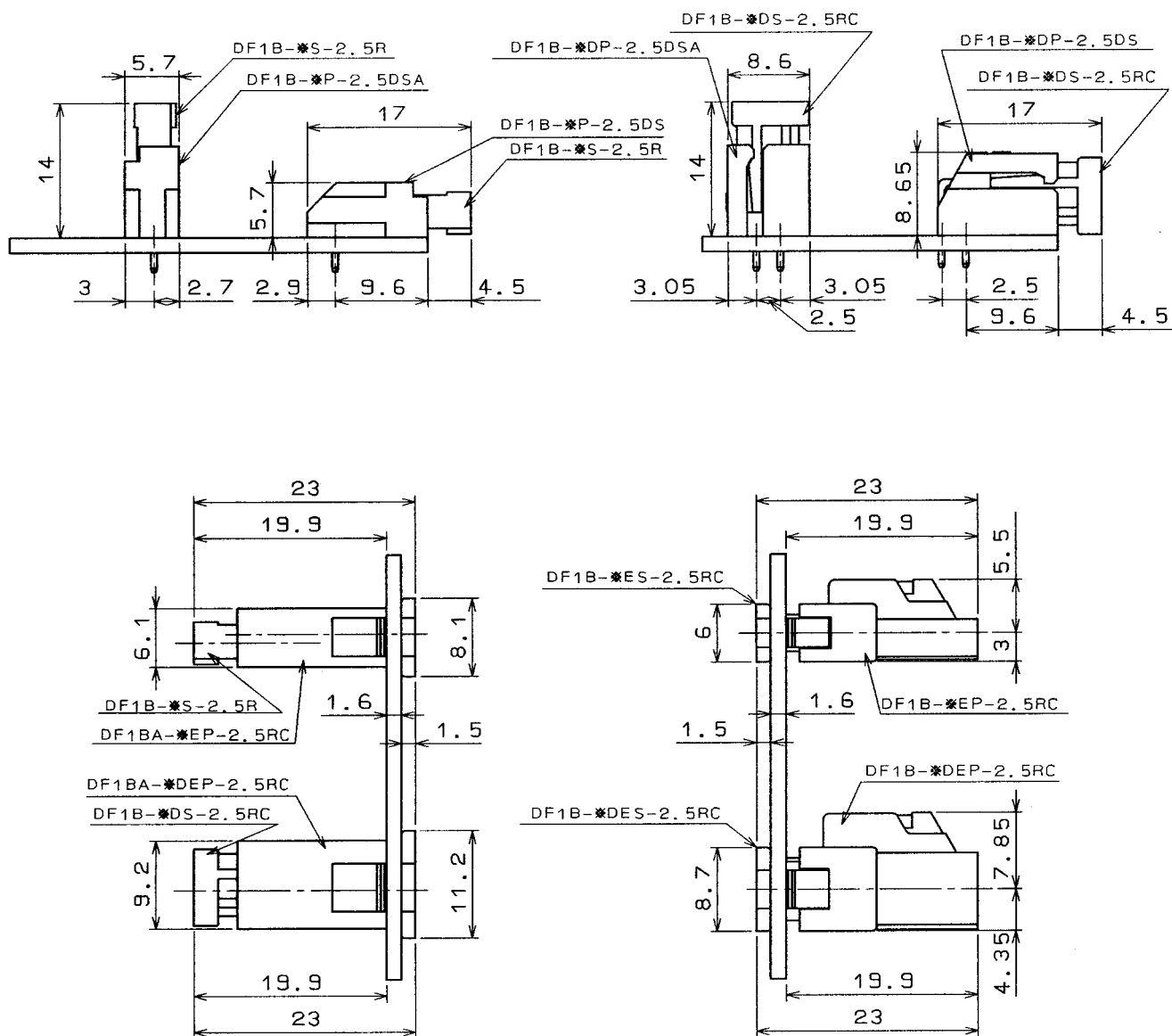
If you intend to use an electric wire other than the recommended one, ask our sales personnel.

#### [Precautions]

- Electric wires that are applicable for crimping connectors shall, principally, be the tin-plated stranded soft-copper wire.
- Crimping of electric wires wherein single wires, polyester yarns, etc., exist and crimping of tin-coated wires should be avoided.
- Avoid crimping two electric wires together.
- The setting values of crimp height (Note 1) may vary between tin-plated and gold-plated terminals even if the same electric wires are used.
- The setting values of crimp height (Note 1) may vary depending on the difference in the core wire configuration even if the computed cross-sectional area is the same.

Note 1 : The crimp height is an important item that determines crimping quality. We execute crimping tests for each electric wire to ensure the optimal value for the crimp height with high precision, thereby ensuring optimal setup values.

## ◆ Applicable Tool



## ◆ Precautions

1. Recommended Soldering Condition	Flow : 260°C for 5 seconds Manual soldering : 300°C for 3 seconds
2. Cleaning Condition	Refer to Wire to Board Connector Use Hand book.
3. Connection Condition	Refer to Wire to Board Connector Use Hand book.
4. Cautions	■The color phase of this product is slightly different from that of the formed product according to the manufacturing lot and future storage conditions, but the difference doesn't affect the performance.
5. Precaution	Please refer to the following documents. ■Crimp Quality Standards (ETAD-H0909-00, ETAD-H0913-00) ■User Guide for Wire-to-Board Connector