

## DF1B Series



### ■ 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

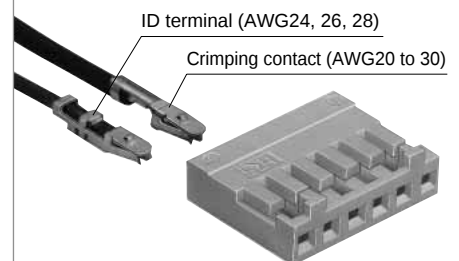


Figure 1

Potting status

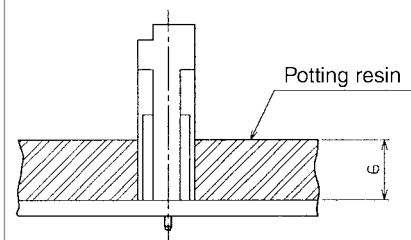


Figure 2

◆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<br>(Note1) | AWG 20 to 24 : 3A        | Operating Temperature Range | -35 to +85°C (Note2) |
|        |                           | AWG 26 : 2A              | Operating Moisture Range    | 40 to 80%            |
|        |                           | AWG 28 : 1A              | Storage Temperature Range   | -10 to +60°C (Note3) |
|        | Voltage rating            | AWG 30 : 0.5A<br>250V AC | Storage Moisture Range      | 40 to 70% (Note3)    |

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

### UL CSA Safety File No.

UL : E52653

CSA : LR95109

| 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. 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 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: 1000M ohms min. | 96 hours at temperature of 40±2°C and humidity of 90% to 95%                                     |
| 7. Temperature Cycle            | Contact resistance: 30m ohms max. Insulation resistance: 1000M ohms min. | (-55°C: 30 minutes → 5 to 35°C: 10 minutes<br>85°C: 30 minutes → 5 to 35°C: 10 minutes) 5 cycles |
| 8. Operating Life               | Contact resistance: 30m ohms max.                                        | Tin plating : 30 cycles<br>Gold plating : 50 cycles                                              |
| 9. Resistance to Soldering heat | No deformation of components affecting performance.                      | Flow: 250°C for 10 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.

Note 4: Information contained in this catalog represents general requirements for this Series. Contact us for the drawings and specifications for a specific part number shown.

## Material

| 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 | ———     |

## ■ Ordering Information

### ● Connector

**DF1B - \* S 2.5 RC**

①                      ②    ③       ④       ⑤

|                                                                                          |                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ① Series Name : DF 1B                                                                    | ③ Connector Type                                                                                                                                                                                                                                 | ④ Contact Pitch: 2.5mm                                                                                                                                                                                                      |
| ② Number of Contacts<br>Single Row : 2 to 16, 18, 20<br><br>Double Row : 4 to 30, 34, 40 | S : Single row socket<br>DS : Double row socket<br>P : Single row pin header<br>DP : Double row pin header<br>ES : Single row in-line socket<br>DES : Double row in-line socket<br>EP : Single row in-line plug<br>DEP : Double row in-line plug | ⑤ Contact Type<br>RC : ID/crimping socket (Note)<br>DSA : Straight through hole<br>DS : Right angle through hole<br>Note: The single row socket DF1B-*S-2.5R only adds "R" to the tail, which has the same meaning as "RC". |

### ● Socket ID Contact

**DF1B - R 24 F A**

①                      ②    ③       ④

|                                                                   |                                                         |
|-------------------------------------------------------------------|---------------------------------------------------------|
| ① 1. Connection Type<br>R : ID                                    | ③ Packaging Type<br>Blank : Bag<br>F : Reel             |
| ② Applicable Cable Size<br>24 : AWG24<br>26 : AWG26<br>28 : AWG28 | ④ Plating Type<br>Blank : Tin plated<br>A : Gold plated |

### ● Plug ID Contact

**DF1B - 24 P R F**

①                      ②    ③       ④

|                                                                   |                                             |
|-------------------------------------------------------------------|---------------------------------------------|
| ① Applicable Cable Size<br>24 : AWG24<br>26 : AWG26<br>28 : AWG28 | ③ Connection Type<br>R : ID                 |
| ② Connector Type<br>P : Plug                                      | ④ Packaging Type<br>Blank : Bag<br>F : Reel |

### ● Crimping Contact

**DF1B - 2428 SCF A**

①                      ②       ③

|                                                                                                                              |                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ① Applicable Cable Size<br>2022 : AWG20 to 22<br>2428 : AWG24 to 28<br>28 : AWG30                                            | ③ Plating Type<br>Blank : Tin plating<br>A : Gold plated<br>B : Gold plated (Note)<br>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. |
| ② Packaging Type<br>SCF : Socket Contact/Reel<br>SC : Socket Contact/Bag<br>PCF : Plug Contact/Reel<br>PC : Plug Contact/Bag |                                                                                                                                                                                                                                   |

## Single Row Socket



Photo: Contact Inserted



Unit: mm

| Part Number   | CL No.     | Number of Contacts | A    | B    | RoHS | Part Number   | CL No.     | Number 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 |      |               |            |                    |      |      |      |

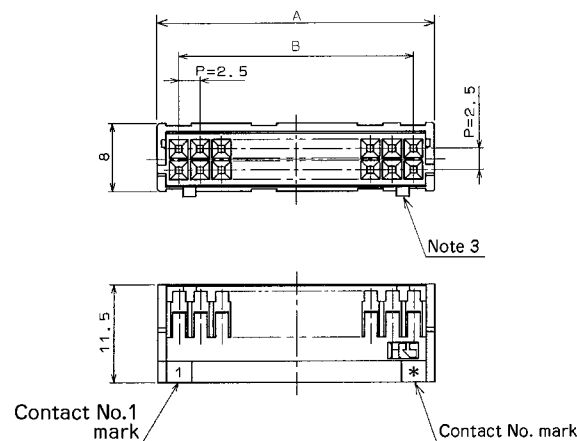
Note1: The quantity at the specific No."None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

Note2: 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 7 contacts connectors have the area at both ends.

## Double Row Socket



Photo: Contact Inserted.



Unit: mm

| Part Number     | CL No.     | Number of Contacts | A    | B    | RoHS | Part Number     | CL No.     | Number 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 |      |                 |            |                    |      |      |      |

Note1: The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.) If needed, please order the product per bag.

Note2: 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:φ1.1<sup>+0.1</sup><sub>0</sub>



Unit: mm

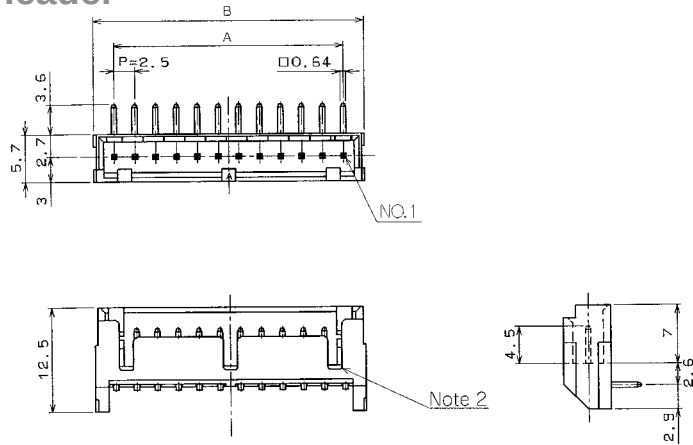
| Tin plated       |            | Gold plated         |               |                    |      |      |      |
|------------------|------------|---------------------|---------------|--------------------|------|------|------|
| Part Number      | CL No.     | Part Number         | CL No.        | Number of Contacts | A    | B    | RoHS |
| 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 | —————               | —————         | —————              | —    | —    |      |
| 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 | —————               | —————         | —————              | —    | —    |      |
| 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 7 contact connectors have two concave portions at both ends.

## Single Row Right Angle Pin Header



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



Unit: mm

| Tin plated      |              | Gold plated        |               |                    |      |      |      |
|-----------------|--------------|--------------------|---------------|--------------------|------|------|------|
| Part Number     | CL No.       | Part Number        | CL No.        | Number of Contacts | A    | B    | RoHS |
| DF1BZ- 2P-2.5DS | CL541-2034-0 | DF1B- 2P-2.5DS(01) | 541-0225-7-01 | 2                  | 2.5  | 7.5  | YES  |
| DF1BZ- 3P-2.5DS | CL541-2035-2 | DF1B- 3P-2.5DS(01) | 541-0226-0-01 | 3                  | 5.0  | 10.0 |      |
| DF1BZ- 4P-2.5DS | CL541-2036-5 | DF1B- 4P-2.5DS(01) | 541-0227-2-01 | 4                  | 7.5  | 12.5 |      |
| DF1BZ- 5P-2.5DS | CL541-2037-8 | DF1B- 5P-2.5DS(01) | 541-0228-5-01 | 5                  | 10.0 | 15.0 |      |
| DF1BZ- 6P-2.5DS | CL541-2038-0 | DF1B- 6P-2.5DS(01) | 541-0229-8-01 | 6                  | 12.5 | 17.5 |      |
| DF1BZ- 7P-2.5DS | CL541-2039-3 | DF1B- 7P-2.5DS(01) | 541-0230-7-01 | 7                  | 15.0 | 20.0 |      |
| DF1BZ- 8P-2.5DS | CL541-2040-2 | DF1B- 8P-2.5DS(01) | 541-0231-0-01 | 8                  | 17.5 | 22.5 |      |
| DF1BZ- 9P-2.5DS | CL541-2041-5 | DF1B- 9P-2.5DS(01) | 541-0232-2-01 | 9                  | 20.0 | 25.0 |      |
| DF1BZ-10P-2.5DS | CL541-2042-8 | DF1B-10P-2.5DS(01) | 541-0233-5-01 | 10                 | 22.5 | 27.5 |      |
| DF1BZ-11P-2.5DS | CL541-2043-0 | —                  | —             | —                  | —    | —    |      |
| DF1BZ-12P-2.5DS | CL541-2044-3 | DF1B-12P-2.5DS(01) | 541-0235-0-01 | 12                 | 27.5 | 32.5 |      |
| DF1BZ-13P-2.5DS | CL541-2045-6 | —                  | —             | —                  | —    | —    |      |
| DF1BZ-14P-2.5DS | CL541-2046-9 | DF1B-14P-2.5DS(01) | 541-0237-6-01 | 14                 | 32.5 | 37.5 |      |
| DF1BZ-15P-2.5DS | CL541-2047-1 | DF1B-15P-2.5DS(01) | 541-0238-9-01 | 15                 | 35.0 | 40.0 |      |
| DF1BZ-16P-2.5DS | CL541-2048-4 | DF1B-16P-2.5DS(01) | 541-0239-1-01 | 16                 | 37.5 | 42.5 |      |
| DF1BZ-18P-2.5DS | CL541-2049-7 | DF1B-18P-2.5DS(01) | 541-0240-0-01 | 18                 | 42.5 | 47.5 |      |
| DF1BZ-20P-2.5DS | CL541-2050-6 | 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



Tube Size



Unit: mm

| Part Number          | CL No.         | Number 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                    |      |
| DF1BD- 6P-2.5DSA(**) | 541-0804-4-**- | 6                  | 12.5 | 17.5 | 27                    |      |
| DF1BD- 7P-2.5DSA(**) | 541-0805-7-**- | 7                  | 15   | 20   | 24                    |      |
| DF1BD- 8P-2.5DSA(**) | 541-0806-0-**- | 8                  | 17.5 | 22.5 | 21                    |      |
| DF1BD- 9P-2.5DSA(**) | 541-0807-2-**- | 9                  | 20   | 25   | 19                    |      |
| DF1BD-10P-2.5DSA(**) | 541-0808-5-**- | 10                 | 22.5 | 27.5 | 17                    |      |

- Board Positioning Boss Hole Diameter:φ1.1<sup>+0.1</sup><sub>-0</sub>
- Board Through-hole Diameter:φ1.1<sup>+0.1</sup><sub>-0</sub>

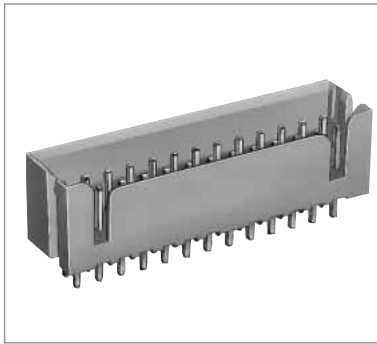
[Specific No.] -\* \*, (\* \*)  
(05): Tin plated  
(25) : Tin plated, tube packaging

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 7 contacts connectors have two concave portions at both ends.

Applicable Potting Thickness : 6mm



## Double Row Straight Pin Header



●Board Through-hole Diameter:  $\phi 1.1^{+0.1}_{-0}$



Unit: mm

| Tin plated        |            | Gold plated          |               |                    |      |      |      |
|-------------------|------------|----------------------|---------------|--------------------|------|------|------|
| Part Number       | CL No.     | Part Number          | CL No.        | Number of Contacts | A    | B    | RoHS |
| 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 |      |

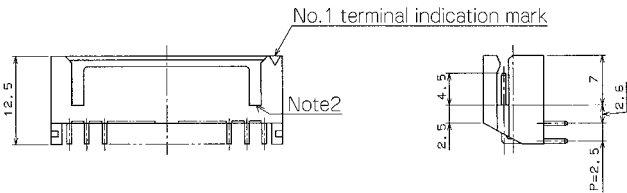
Note 1. The quantity at the specific No. "None" is delivered by the bag unit (100 pcs.). If needed, please order the product per bag.

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:φ1.1<sup>+0.1</sup><sub>0</sub>



Unit: mm

| Tin plated       |            | Gold plated         |               |                    |      |      |      |
|------------------|------------|---------------------|---------------|--------------------|------|------|------|
| Part Number      | CL No.     | Part Number         | CL No.        | Number of Contacts | A    | B    | RoHS |
| 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                 | 42.5 | 37.5 |      |
| 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 Number      | CL No.     | Number of Contacts | A    | B    | RoHS | Part Number      | CL No.     | Number 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 7 contact connectors contain the concave portion at both sides.

## Panel Cutouts



Unit: mm



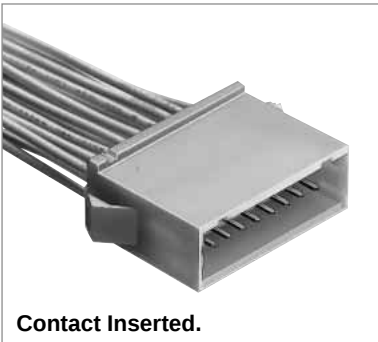
| Applicable Plug  | Number of Contacts | C                              |            |            | D    |
|------------------|--------------------|--------------------------------|------------|------------|------|
|                  |                    | Panel Board Thickness (Note 1) |            |            |      |
|                  |                    | 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)



Contact Inserted.



●Applicable Socket: DF1B-●DS-2.5RC

Unit: mm

| Part Number       | CL No.     | Number of Contacts | A    | B    | RoHS | Part Number       | CL No.     | Number 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   | Number 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)



●Applicable Socket: DF1B-※DEP-2.5RC

Unit: mm

| Part Number     | CL No.     | Number of Contacts | A    | B    | RoHS | Part Number     | CL No.     | Number 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

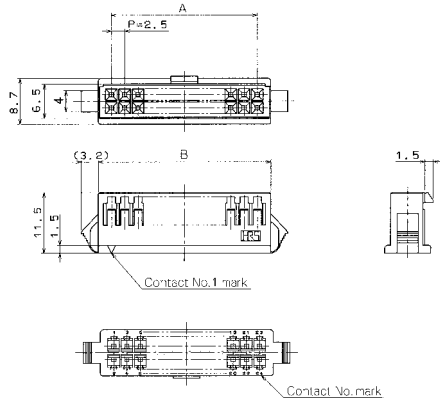
| Applicable Plug | Number of Contacts | C    | D    | E                              |            |            |
|-----------------|--------------------|------|------|--------------------------------|------------|------------|
|                 |                    |      |      | Panel Board Thickness (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)



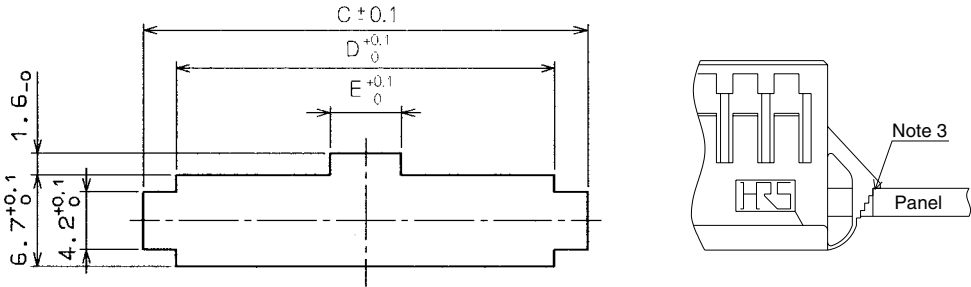
●Applicable Socket: DF1B-＊EP-2.5RC

Unit: mm

| Part Number      | CL No.     | Number of Contacts | A    | B    | RoHS | Part Number      | CL No.     | Number 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  | Number 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

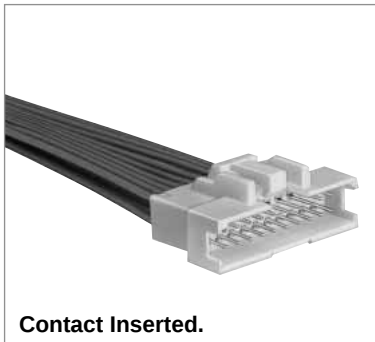


Unit: mm

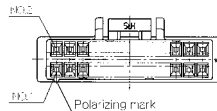
| Part Number     | CL No.     | Number of Contacts | A    | B    | RoHS | Part Number     | CL No.     | Number of Contacts | A    | B    | RoHS |
|-----------------|------------|--------------------|------|------|------|-----------------|------------|--------------------|------|------|------|
| DF1B- 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 Number      | CL No.     | Number of Contacts | A    | B    | RoHS | Part Number      | CL No.     | Number 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



| Part Number    | CL No.        | Applicable<br>Cable Indication | Applicable Cable |              |                   |                 | Packaging<br>Type | Quantity | Finish      | RoHS |
|----------------|---------------|--------------------------------|------------------|--------------|-------------------|-----------------|-------------------|----------|-------------|------|
|                |               |                                | AWG              | UL Style     | Wire Construction | Jacket Diameter |                   |          |             |      |
| DF1B-R24F      | 541-0217-9    | 24                             | AWG 24           | 1061         | 11 cores./0.16mm  | 0.9 to 1.39mm   | Reel              | 10000    | Tin plated  | Yes  |
| DF1B-R24       | 541-0220-3    |                                |                  |              |                   |                 | Bag               | 100      |             |      |
| DF1B-R26F      | 541-0218-1    | 26                             | AWG 26           | 1061<br>1007 | 7 cores./0.16mm   | 0.9 to 1.39mm   | Reel              | 10000    |             |      |
| DF1B-R26       | 541-0221-6    |                                |                  |              |                   |                 | Bag               | 100      |             |      |
| DF1B-R28F      | 541-0219-4    | 28                             | AWG 28           | 1061<br>1007 | 7 cores./0.127mm  | 0.9 to 1.39mm   | Reel              | 10000    |             |      |
| DF1B-R28       | 541-0222-9    |                                |                  |              |                   |                 | Bag               | 100      |             |      |
| DF1B-R24FA(06) | 541-0261-0-06 | 24                             | AWG 24           | 1061         | 11 cores./0.16mm  | 0.9 to 1.39mm   | Reel              | 10000    | Gold plated |      |
| DF1B-R24A(06)  | 541-0264-9-06 |                                |                  |              |                   |                 | Bag               | 100      |             |      |
| DF1B-R26FA(06) | 541-0262-3-06 | 26                             | AWG 26           | 1061<br>1007 | 7 cores./0.16mm   | 0.9 to 1.39mm   | Reel              | 10000    |             |      |
| DF1B-R26A(06)  | 541-0265-1-06 |                                |                  |              |                   |                 | Bag               | 100      |             |      |
| DF1B-R28FA(06) | 541-0263-6-06 | 28                             | AWG 28           | 1061<br>1007 | 7 cores./0.127mm  | 0.9 to 1.39mm   | Reel              | 10000    |             |      |
| DF1B-R28A(06)  | 541-0266-4-06 |                                |                  |              |                   |                 | Bag               | 100      |             |      |

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

Note 1.The applicable cable conductor is the tin plated annealing copper wire.

Note 2.If other cables are used instead of the applicable cable, cotact Hirose sales department.

## Crimping Contact for Socket



### ● Applicable Cable (Tin Plated Annealing Copper Wire)

| Conductor Size (Wire construction) |
|------------------------------------|
| AWG20 (21cores/0.18mm)             |
| AWG22 (17cores/0.16mm)             |
| AWG24 (11cores/0.16mm)             |
| AWG26 (7cores/0.16mm)              |
| AWG28 (7cores/0.127mm)             |
| AWG30 (7cores/0.1mm)               |

### ● Recommended Cable

UL1061, UL1007

### ● Strip Length

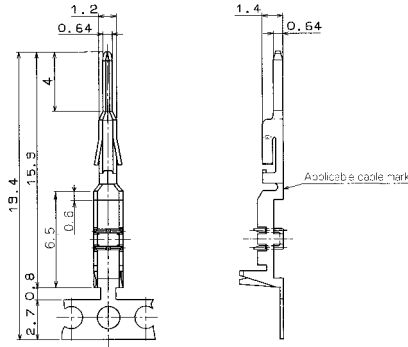
2.0 to 2.5mm

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

| Part Number   | CL No.     | Applicable<br>Cable Indication | Applicable Cable |                 | Packaging<br>Type | Quantity | Finish      | RoHS |
|---------------|------------|--------------------------------|------------------|-----------------|-------------------|----------|-------------|------|
|               |            |                                | AWG              | Jacket Diameter |                   |          |             |      |
| DF1B-2022SCF  | 541-0223-1 | 20                             | AWG 20 to        | 1.2 to 1.9mm    | Reel              | 10000    | Tin plated  | Yes  |
| DF1B-2022SC   | 541-0224-4 | 22                             | AWG 22           |                 | Bag               | 100      |             |      |
| DF1B-2428SCF  | 541-0678-1 | 24                             | AWG 24 to        | 0.9 to 1.5mm    | Reel              | 10000    |             |      |
| DF1B-2428SC   | 541-0679-4 | 28                             | AWG 28           |                 | Bag               | 100      |             |      |
| DF1B-30SCF    | 541-0682-9 | 30                             | AWG 30           | 0.6 to 1.2mm    | Reel              | 10000    |             |      |
| DF1B-30SC     | 541-0683-1 |                                |                  |                 | Bag               | 100      |             |      |
| DF1B-2022SCFA | 541-0662-1 | 20                             | AWG 20 to        | 1.2 to 1.9mm    | Reel              | 10000    | Gold plated |      |
| DF1B-2022SCA  | 541-0663-4 | 22                             | AWG 22           |                 | Bag               | 100      |             |      |
| DF1B-2428SCFA | 541-0680-3 | 24                             | AWG 24 to        | 0.9 to 1.5mm    | Reel              | 10000    |             |      |
| DF1B-2428SCA  | 541-0681-6 | 28                             | AWG 28           |                 | Bag               | 100      |             |      |
| DF1B-30SCFA   | 541-0684-4 | 30                             | AWG 30           | 0.6 to 1.2mm    | Reel              | 10000    |             |      |
| DF1B-30SCA    | 541-0685-7 |                                |                  |                 | Bag               | 100      |             |      |

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

## ID Contact for Plug



| Part Number | CL No.     | Applicable Cable Indication | Applicable Cable |              |                |                 | Packaging Type | Quantity | Finish     | RoHS |
|-------------|------------|-----------------------------|------------------|--------------|----------------|-----------------|----------------|----------|------------|------|
|             |            |                             | AWG              | UL Style     | Wire structure | Jacket Diameter |                |          |            |      |
| DF1B-24PRF  | 541-0666-2 | 24                          | AWG 24           | 1061         | 11 pcs./0.16mm | 0.9 to 1.39mm   | Reel           | 10000    | Tin plated | Yes  |
| DF1B-24PR   | 541-0667-5 |                             |                  |              |                |                 | Bag            | 100      |            |      |
| DF1B-26PRF  | 541-0668-8 | 26                          | AWG 26           | 1061<br>1007 | 7 pcs./0.16mm  | 0.9 to 1.39mm   | Reel           | 10000    |            |      |
| DF1B-26PR   | 541-0669-0 |                             |                  |              |                |                 | Bag            | 100      |            |      |
| DF1B-28PRF  | 541-0670-0 | 28                          | AWG 28           | 1061<br>1007 | 7 pcs./0.127mm | 0.9 to 1.39mm   | Reel           | 10000    |            |      |
| DF1B-28PR   | 541-0671-2 |                             |                  |              |                |                 | Bag            | 100      |            |      |

### ● ID Contact Extraction Tool DF-C-PO (C)

Note 1.The applicable cable conductor is the tin plated annealing copper wire.

Note 2.If other cables are used instead of the applicable cable, contact Hirose sales department.

## Crimping Contact for Plug



### ● Applicable Cable (Tin Plated Annealing Copper Wire)

| Conductor Size (Contact wire construction) |
|--------------------------------------------|
| AWG20 (21 pieces/0.18mm)                   |
| AWG22 (17 pieces/0.16mm)                   |
| AWG24 (11 pieces/0.16mm)                   |
| AWG26 (7 pieces/0.16mm)                    |
| AWG28 (7 pieces/0.127mm)                   |
| AWG30 (7 pieces/0.1mm)                     |

### ● Recommended Cable

UL1061, UL1007

### ● Strip Length

3.0 to 3.7mm

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

| Part Number    | CL No.     | Applicable<br>cable indicator | Applicable Cable |                 | Packaging<br>Type | Quantity | Treatment   | RoHS |
|----------------|------------|-------------------------------|------------------|-----------------|-------------------|----------|-------------|------|
|                |            |                               | AWG              | Jacket Diameter |                   |          |             |      |
| DF1B-2022PCF   | 541-0259-9 | 20                            | AWG 20 to        | 1.2 to 1.9mm    | Reel              | 10000    | Tin plated  | Yes  |
| DF1B-2022PC    | 541-0260-8 | 22                            | AWG 22           |                 | Bag               | 100      |             |      |
| DF1B-2428PCF   | 541-0664-7 | 24                            | AWG 24 to        | 0.9 to 1.5mm    | Reel              | 10000    |             |      |
| DF1B-2428PC    | 541-0665-0 | 28                            | AWG 28           |                 | Bag               | 100      |             |      |
| DF1B-30PCF     | 541-0686-0 | 30                            | AWG 30           | 0.6 to 1.2mm    | Reel              | 10000    |             |      |
| DF1B-30PC      | 541-0687-2 |                               |                  |                 | Bag               | 100      |             |      |
| DF1B-2022PCFB  | 541-0690-7 | 20                            | AWG 20 to        | 1.2 to 1.9mm    | Reel              | 10000    | Gold plated |      |
| DF1B-2022PCB   | 541-0691-0 | 22                            | AWG 22           |                 | Bag               | 100      |             |      |
| DF1-PD2428SCFB | 541-0660-6 | 24                            | AWG 24 to        | 0.9 to 1.5mm    | Reel              | 10000    |             |      |
| DF1-PD2428SCB  | 541-0661-9 | 28                            | AWG 28           |                 | Bag               | 100      |             |      |
| DF1B-30PCFB    | 541-0688-5 | 30                            | AWG 30           | 0.6 to 1.2mm    | Reel              | 10000    |             |      |
| DF1B-30PCB     | 541-0689-8 |                               |                  |                 | Bag               | 100      |             |      |

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

◆ Applicable Tool



| Connection Type | Type                 | Part Number      | CL No.     | Applicable Contacts             |
|-----------------|----------------------|------------------|------------|---------------------------------|
| ID              | Applicator           | AP105-DF1B-R     | 901-4507-4 | DF1B-R**F/FA06 **=24,26,28      |
|                 |                      | AP105-DF1B-PR    | 901-4536-2 | DF1B-**PRF**=24,26,28           |
|                 | Manual ID tool       | DF1B-T2428HR     | 550-0171-0 | DF1B-R**/A06**=24,26,28         |
|                 |                      | DF1B-T2428PHR    | 550-0221-7 | DF1B-**PR/PRB **=24,26,28       |
| Crimping        | Applicator           | AP105-DF1B-2022S | 901-4510-9 | DF1B-2022SCF/SCFA               |
|                 |                      | AP105-DF1B-2428S | 901-4518-0 | DF1B-2428SCF/SCFA               |
|                 |                      | AP105-DF1B-30S   | 901-4517-8 | DF1B-30SCF/SCFA                 |
|                 |                      | AP105-DF1B-2022P | 901-4509-0 | DF1B-2022PCF/PCFB               |
|                 |                      | AP105-DF1B-2428P | 901-4521-5 | DF1B-2428PCF,DF1-PD2428SCF/SCFB |
|                 |                      | AP105-DF1B-30P   | 901-4519-3 | DF1B-30PCF/PCFB                 |
|                 |                      | DF1B-TA2022SHC   | 550-0182-7 | DF1B-2022SC/SCA                 |
|                 | Manual crimping tool | DF1B-TA2428SHC   | 550-0209-1 | DF1B-2428SC/SCA                 |
|                 |                      | DF1B-TA30SHC     | 550-0211-3 | DF1B-30SC/SCA                   |
|                 |                      | DF1B-TA2022PHC   | 550-0183-0 | DF1B-2022PC/PCB                 |
|                 |                      | DF1B-TA2428PHC   | 550-0224-5 | DF1B-2428PC,DF1-PD2428SCB       |
|                 |                      | DF1B-TA30PHC     | 550-0210-0 | DF1B-30PC/PCB                   |
| Press Main Unit |                      | CM-105           | 901-0005-4 | _____                           |
| 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: If a trouble has occurred due to tools which are not designated by Hirose, Hirose won't guarantee any product

## ◆ Applicable Tool



## ◆ Precautions

|                                    |                                                                                                                                                                                                             |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Recommended Soldering Condition | Flow: 250°C for 10 seconds<br>Manual soldering: 300°C for 3 seconds                                                                                                                                         |
| 2. Cleaning Condition              | Refer to Nylon Connector Use Hand book.                                                                                                                                                                     |
| 3. Connection Condition            | Refer to Nylon 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                      | Refer to Nylon Connector Use Hand book.                                                                                                                                                                     |