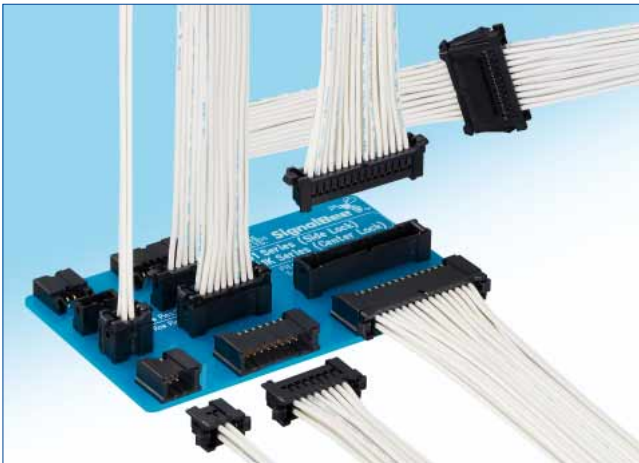
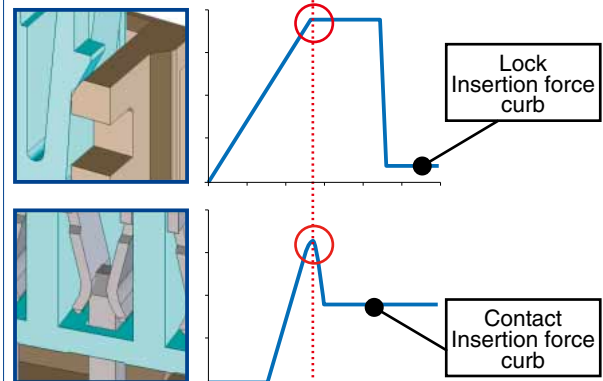


2mm Pitch, Positive Lock, Wire-to-Board Connector (UL, C-UL Listed)

DF51 Series



Secure Mating



Matches the peak of insertion force, provides clear click sound and tactile click

Fig.1

■ Features

1. Positive lock provides clear tactile click and secures reliable connection

The locking mechanism delivers a clear tactile click, which prevents incomplete mating. (Fig.1)

2. Wide variation

Each of Straight / Right angle / In-line configuration equipped with single row and dual row for flexible design. Gold and Tin plating options support various application needs.

3. Secure Side-locking design

Short depth straight type and low profile right angle type are well suited for compact / thin equipment. (Fig.3)

4. Prevents incorrect mating

Visually and mechanically polarized features prevent reverse mating and incorrect mating between different number of positions. (Fig.2)

5. Use common terminals and crimping tools with DF11 Series

Wide applicable cable range : 22 to 30 AWG.

6. Suitable for potting

Capable of being potted, up to 3mm.

7. UL, C-UL Certified

■ Applications

Office automation, Industrial machinery, Industrial robots, Amusement equipment, Medical equipment.

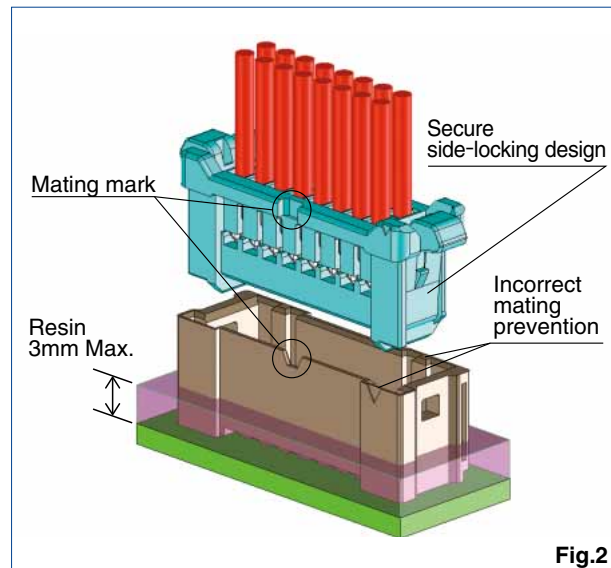


Fig.2

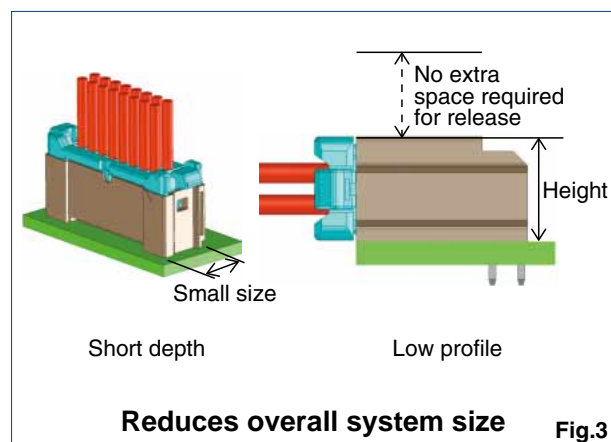


Fig.3

Product Specifications

| | | | | | | |
|---------|-------------------------|--------------|--------|--------|--------|--|
| Ratings | Current Rating (Note 1) | 22 to 24 AWG | 26 AWG | 28 AWG | 30 AWG | Operating temperature range -55 to +105°C (Note 2) |
| | | 2A | 1.5A | 1A | 0.5A | Operating humidity range 20 to 80% (Note 3) |
| | Voltage Rating | 250V AC / DC | | | | Storage temperature range -10 to +60°C (Note 4) |
| | | | | | | Storage humidity range 40 to 70% (Note 4) |

| | | | | | |
|----------------|----------------|-------------|--------------|--------|---|
| Ratings | Current Rating | 22 AWG | 24 to 28 AWG | 30 AWG | UL/C-UL File No. and Recognition No. CL, C-UL : E52653 |
| | | 2A | 1A | 0.5A | |
| Voltage Rating | | 30V AC / DC | | | |

| Item | Specifications | Conditions |
|---------------------------|--|--|
| 1. Insulation Resistance | No less than 1,000MΩ | Measured at DC 500V |
| 2. Withstand Voltage | No flashover or breakdown | AC 650V is applied for 1 minute. |
| 3. Contact Resistance | No more than 30mΩ | Measured at 1mA and no higher than 20mV |
| 4. Vibration Resistance | No electrical discontinuity of 1μs or greater | Frequency 10-55Hz, half amplitude 0.75mm, 10 times in each of the 3 directions |
| 5. Shock Resistance | No electrical discontinuity of 1μs or greater | Accelerated velocity : 490 m/s ² for 11ms, half-sine wave in 3 directions, 3 times for each direction |
| 6. Moisture-resistance | Contact resistance : no more than 30mΩ Insulation resistance : no less than 500MΩ | Temperature : 40±2°C ; humidity : 90 to 95%, left as it is for 96 hours |
| 7. Temperature cycles | Contact resistance : no more than 30mΩ Insulation resistance : no less than 1,000MΩ | -55°C : 30 minutes → 105°C : 30 minutes 5 cycles |
| 8. Durability | Contact resistance : no more than 30mΩ | Tin plated : 30 mating cycles, Gold plated : 50 mating cycles |
| 9. Solder heat resistance | The resin parts should withstand the temperature and resist melting. | Flow : 260°C, 5 sec Hand soldering : temperature of soldering iron at 270°C for 3 seconds |

Note 1 : Current rating of header is 2A.

Note 2 : Includes temperature rise caused by current flow.

Note 3 : Use without condensation on parts.

Note 4 : The storage condition refers to long-term storage of the product on the shelf before assembly. Please use the operating temperature for temporary storage such as pre-assembly and during shipping.

Materials / Finish

| Product | Part | Material | Finish | Specification |
|----------------------|-----------|------------------------|---------------------------|---------------|
| Header | Insulator | PBT (glass-reinforced) | Black | UL94V-0 |
| | Contact | Brass | Tin plated or Gold plated | — |
| Crimp socket | Insulator | PBT (glass-reinforced) | Black | UL94V-0 |
| Socket contact | Contact | Phosphor copper | Tin plated or Gold plated | — |
| In-line plug | Insulator | PBT (glass-reinforced) | Black | UL94V-0 |
| In-line plug contact | 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

DF51 # - * P - 2 DSA

① ② ③ ④ ⑤ ⑥

Crimp contact

DF11 - EP 2428 PCF A

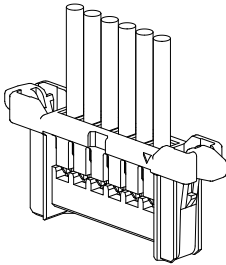
⑦ ⑧ ⑨ ⑩

| | |
|--|---|
| ① Series name : DF51 | ⑦ Contact Type EP : In-line plug |
| ② Form Type Blank : Guide-boss type A : Without guide-boss | ⑧ Applicable Conductor 22 : 22 AWG 2428 : 24 to 28 AWG 30 : 30 AWG |
| ③ Number of Contacts Single-row : 2 to 6 Double-row : 4 to 30 | ⑨ Packaging Style SCF : Socket contacts-Reel SC : Socket contacts-Pack PCF : In-line plug contacts-Reel PC : In-line plug contacts-Pack |
| ④ Connector Type P : Single-row pin header EP : In-line plug S : Single-row crimp socket DEP : Double-row in-line plug DP : Double-row pin header DS : Double-row crimp socket | ⑩ Plating Specifications Blank : Tin plated A : Gold plated |
| ⑤ Contact Pitch : 2mm | |
| ⑥ Type of Housing DSA : Straight header DS : Right angle header C : Crimp socket | |

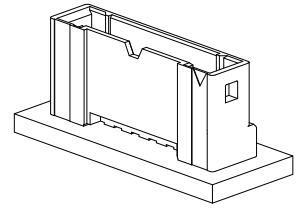
■ Diagram of Connector Mating Combinations

● Single-row

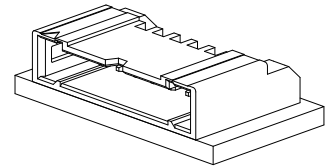
| Crimp socket | Socket contact |
|--------------|-------------------|
| DF51-*S-2C | DF11-22SC(F)(A) |
| | DF11-2428SC(F)(A) |
| | DF11-30SC(F)(A) |



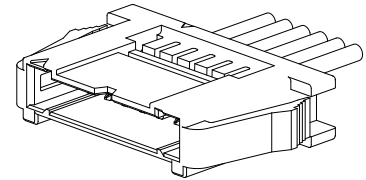
| |
|-----------------|
| Straight header |
| DF51A-*P-2DSA |



| |
|--------------------|
| Right angle header |
| DF51(A)-*P-2DS |

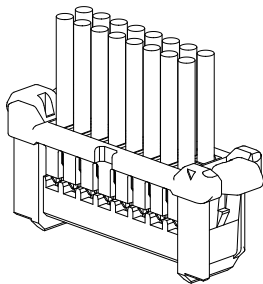


| | |
|--------------|----------------------|
| In-line plug | In-line plug contact |
| DF51-*EP-2C | DF11-EP2428PC(F)(A) |

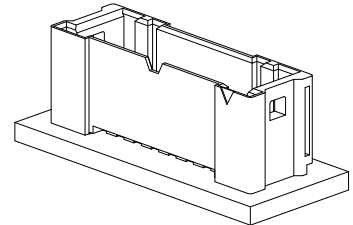


● Double-row

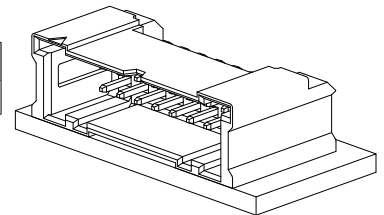
| Crimp socket | Socket contact |
|--------------|-------------------|
| DF51-*DS-2C | DF11-22SC(F)(A) |
| | DF11-2428SC(F)(A) |
| | DF11-30SC(F)(A) |



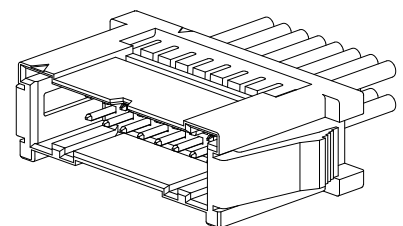
| |
|-----------------|
| Straight header |
| DF51A-*DP-2DSA |



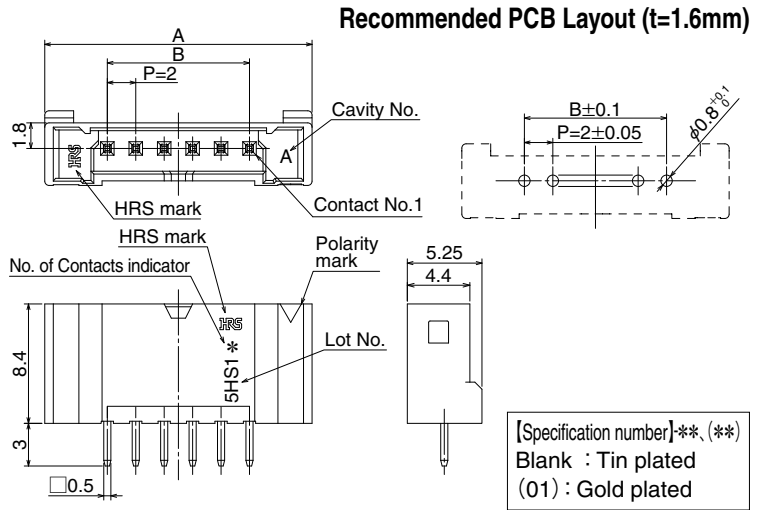
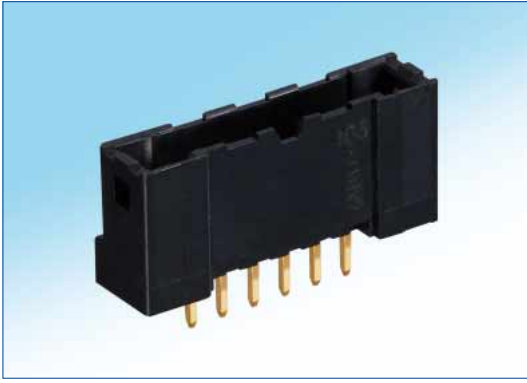
| |
|--------------------|
| Right angle header |
| DF51(A)-*DP-2DS |



| | |
|--------------|----------------------|
| In-line plug | In-line plug contact |
| DF51-*DEP-2C | DF11-EP2428PC(F)(A) |



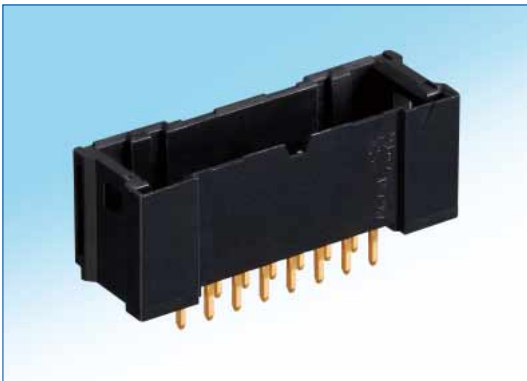
Single-row Straight Header



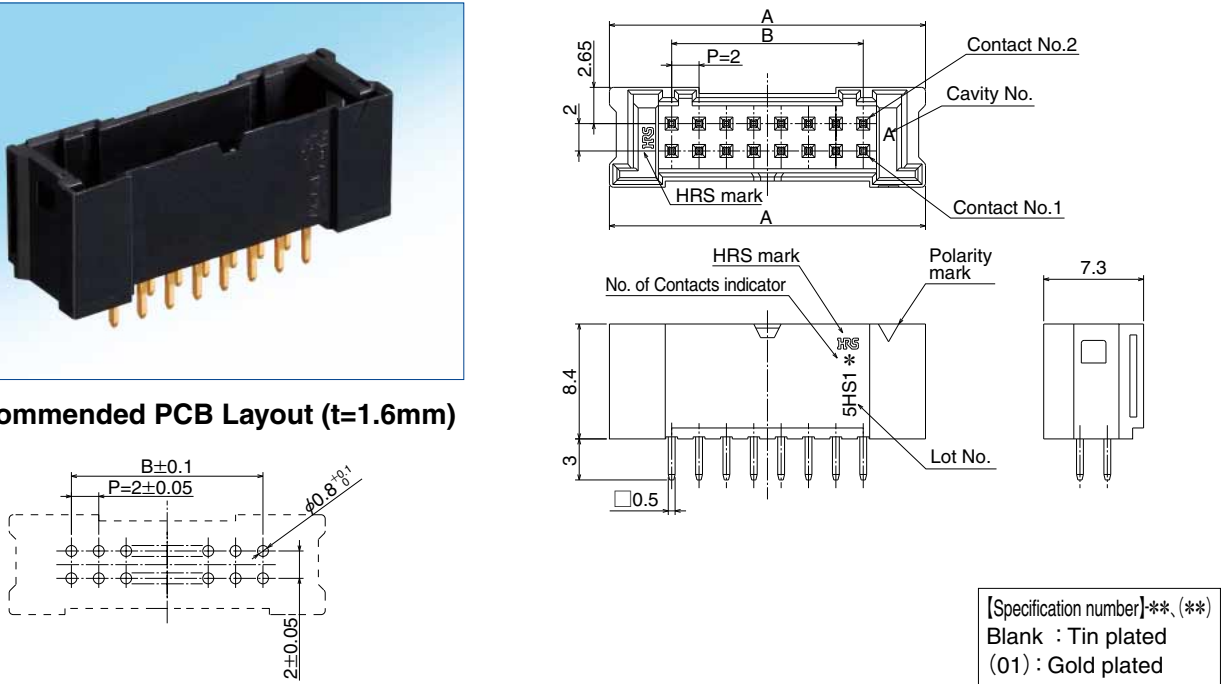
| Part No. | HRS No. | No. of Contacts | A | B |
|-------------------|---------------|-----------------|------|----|
| DF51A-2P-2DSA(**) | 543-5105-0 ** | 2 | 10.8 | 2 |
| DF51A-3P-2DSA(**) | 543-5106-0 ** | 3 | 12.8 | 4 |
| DF51A-4P-2DSA(**) | 543-5107-0 ** | 4 | 14.8 | 6 |
| DF51A-5P-2DSA(**) | 543-5108-0 ** | 5 | 16.8 | 8 |
| DF51A-6P-2DSA(**) | 543-5109-0 ** | 6 | 18.8 | 10 |

Note : Bag packaging (100pcs/pack). Order by number of packs.

Double-row Straight Header



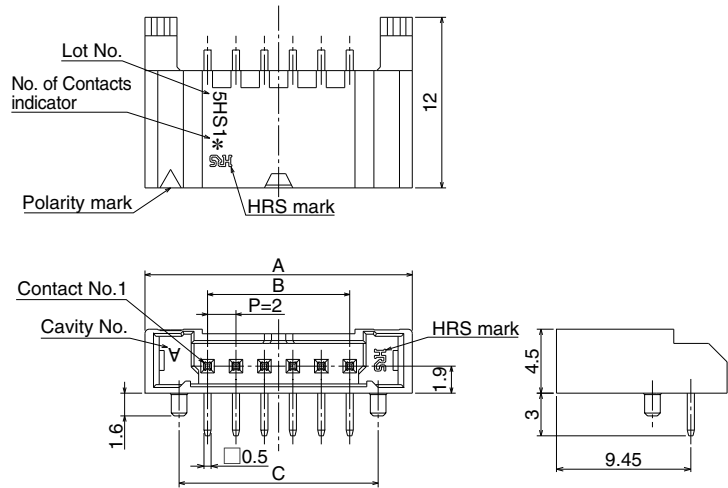
Recommended PCB Layout (t=1.6mm)



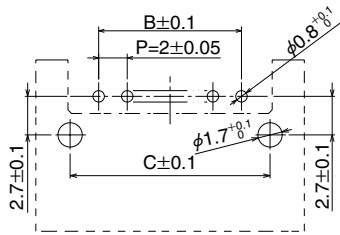
| Part No. | HRS No. | No. of Contacts | A | B | Part No. | HRS No. | No. of Contacts | A | B |
|---------------------|---------------|-----------------|------|----|---------------------|---------------|-----------------|------|----|
| DF51A-4DP-2DSA(**) | 543-5015-0 ** | 4 | 11.1 | 2 | DF51A-18DP-2DSA(**) | 543-5050-0 ** | 18 | 25.1 | 16 |
| DF51A-6DP-2DSA(**) | 543-5044-0 ** | 6 | 13.1 | 4 | DF51A-20DP-2DSA(**) | 543-5051-0 ** | 20 | 27.1 | 18 |
| DF51A-8DP-2DSA(**) | 543-5045-0 ** | 8 | 15.1 | 6 | DF51A-22DP-2DSA(**) | 543-5052-0 ** | 22 | 29.1 | 20 |
| DF51A-10DP-2DSA(**) | 543-5046-0 ** | 10 | 17.1 | 8 | DF51A-24DP-2DSA(**) | 543-5053-0 ** | 24 | 31.1 | 22 |
| DF51A-12DP-2DSA(**) | 543-5047-0 ** | 12 | 19.1 | 10 | DF51A-26DP-2DSA(**) | 543-5054-0 ** | 26 | 33.1 | 24 |
| DF51A-14DP-2DSA(**) | 543-5048-0 ** | 14 | 21.1 | 12 | DF51A-28DP-2DSA(**) | 543-5055-0 ** | 28 | 35.1 | 26 |
| DF51A-16DP-2DSA(**) | 543-5049-0 ** | 16 | 23.1 | 14 | DF51A-30DP-2DSA(**) | 543-5056-0 ** | 30 | 37.1 | 28 |

Note : Bag packaging (100pcs/pack). Order by number of packs.

Single-row Right angle Header



Recommended PCB Layout (t=1.6mm)



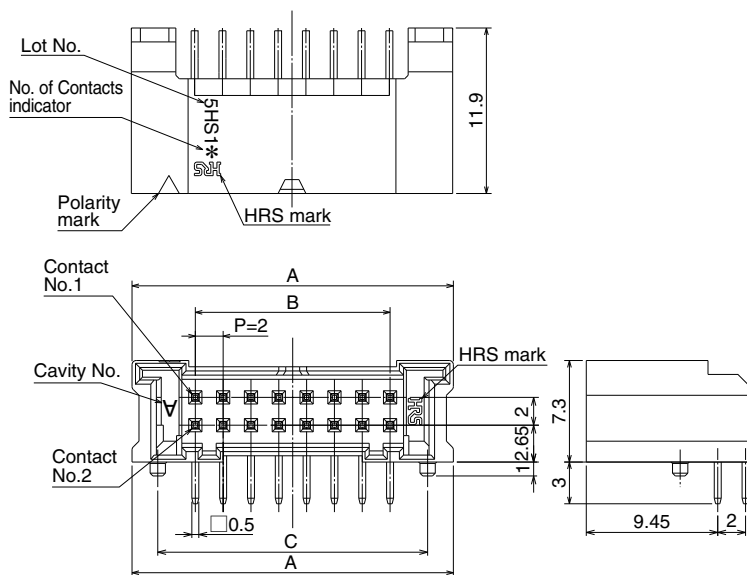
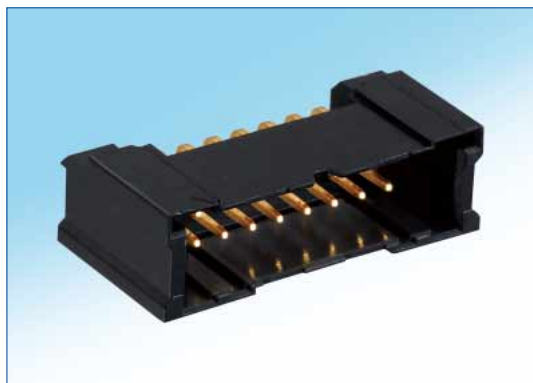
※Above drawing is guide-boss type.

【Specification number】-**, (**)
 (20) : Tin plated, tray packaging
 (50) : Gold plated, tray packaging

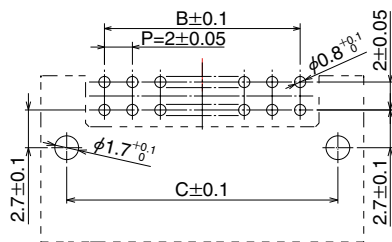
| Part No. | HRS No. | Guide-boss | No. of Contacts | A | B | C | Quantity per package |
|------------------|---------------|--------------|-----------------|------|----|---|----------------------|
| DF51-2P-2DS(**) | 543-5110-0 ** | With boss | 2 | 10.8 | 2 | 6 | 243 |
| DF51-3P-2DS(**) | 543-5111-0 ** | With boss | 3 | 12.8 | 4 | 8 | 207 |
| DF51A-4P-2DS(**) | 543-5117-0 ** | Without boss | 4 | 14.8 | 6 | — | 171 |
| DF51A-5P-2DS(**) | 543-5118-0 ** | Without boss | 5 | 16.8 | 8 | — | 153 |
| DF51A-6P-2DS(**) | 543-5119-0 ** | Without boss | 6 | 18.8 | 10 | — | 135 |

Note : Please place orders in full lot quantities.

Double-row Right angle Header



Recommended PCB Layout (t=1.6mm)



※Above drawing is guide-boss type.

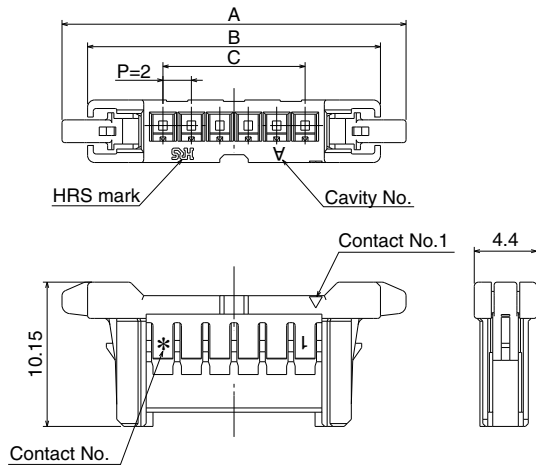
[Specification number]**、(**)
 (20) : Tin plated, tray packaging
 (50) : Gold plated, tray packaging

| Part No. | HRS No. | Guide-boss | No. of Contacts | A | B | C | Quantity per package |
|--------------------|---------------|--------------|-----------------|------|----|-----|----------------------|
| DF51-4DP-2DS(**) | 543-5016-7 ** | With boss | 4 | 11.1 | 2 | 7.4 | 234 |
| DF51-6DP-2DS(**) | 543-5017-0 ** | With boss | 6 | 13.1 | 4 | 9.4 | 198 |
| DF51A-8DP-2DS(**) | 543-5059-0 ** | Without boss | 8 | 15.1 | 6 | — | 171 |
| DF51A-10DP-2DS(**) | 543-5060-0 ** | Without boss | 10 | 17.1 | 8 | — | 153 |
| DF51A-12DP-2DS(**) | 543-5061-0 ** | Without boss | 12 | 19.1 | 10 | — | 135 |
| DF51A-14DP-2DS(**) | 543-5062-0 ** | Without boss | 14 | 21.1 | 12 | — | 126 |
| DF51A-16DP-2DS(**) | 543-5063-0 ** | Without boss | 16 | 23.1 | 14 | — | 108 |
| DF51A-18DP-2DS(**) | 543-5064-0 ** | Without boss | 18 | 25.1 | 16 | — | 99 |
| DF51A-20DP-2DS(**) | 543-5065-0 ** | Without boss | 20 | 27.1 | 18 | — | 90 |
| DF51A-22DP-2DS(**) | 543-5066-0 ** | Without boss | 22 | 29.1 | 20 | — | 90 |
| DF51A-24DP-2DS(**) | 543-5067-0 ** | Without boss | 24 | 31.1 | 22 | — | 81 |
| DF51A-26DP-2DS(**) | 543-5068-0 ** | Without boss | 26 | 33.1 | 24 | — | 72 |
| DF51A-28DP-2DS(**) | 543-5069-0 ** | Without boss | 28 | 35.1 | 26 | — | 72 |
| DF51A-30DP-2DS(**) | 543-5070-0 ** | Without boss | 30 | 37.1 | 28 | — | 72 |

Note : Please place orders in full lot quantities.

■Crimp Socket

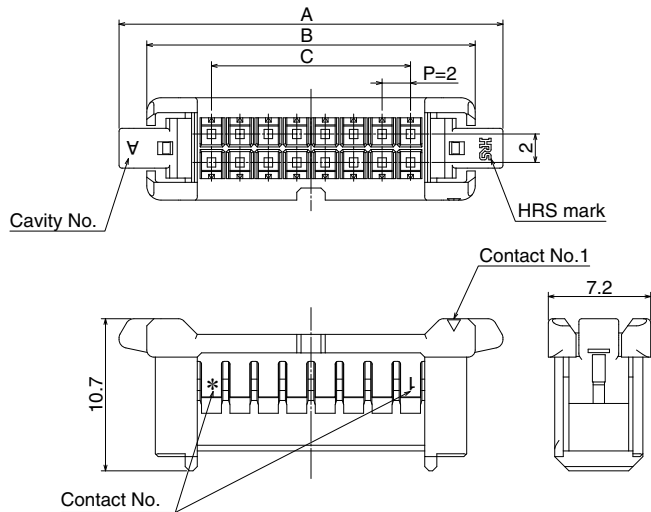
[Single-row]



| Part No. | HRS No. | No. of Contacts | A | B | C |
|------------|------------|-----------------|------|------|----|
| DF51-2S-2C | 543-5120-0 | 2 | 16.2 | 12.6 | 2 |
| DF51-3S-2C | 543-5121-0 | 3 | 18.2 | 14.6 | 4 |
| DF51-4S-2C | 543-5122-0 | 4 | 20.2 | 16.6 | 6 |
| DF51-5S-2C | 543-5123-0 | 5 | 22.2 | 18.6 | 8 |
| DF51-6S-2C | 543-5124-0 | 6 | 24.2 | 20.6 | 10 |

Note : Bag packaging (100pcs/pack). Order by number of packs.

[Double-row]

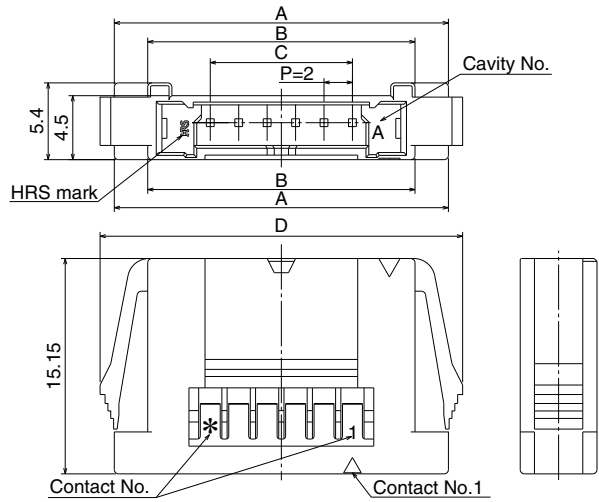


| Part No. | HRS No. | No. of Contacts | A | B | C |
|--------------|------------|-----------------|----|------|----|
| DF51-4DS-2C | 543-5030-8 | 4 | 15 | 11.1 | 2 |
| DF51-6DS-2C | 543-5031-0 | 6 | 17 | 13.1 | 4 |
| DF51-8DS-2C | 543-5032-3 | 8 | 19 | 15.1 | 6 |
| DF51-10DS-2C | 543-5033-6 | 10 | 21 | 17.1 | 8 |
| DF51-12DS-2C | 543-5034-9 | 12 | 23 | 19.1 | 10 |
| DF51-14DS-2C | 543-5035-1 | 14 | 25 | 21.1 | 12 |
| DF51-16DS-2C | 543-5036-4 | 16 | 27 | 23.1 | 14 |
| DF51-18DS-2C | 543-5037-7 | 18 | 29 | 25.1 | 16 |
| DF51-20DS-2C | 543-5038-0 | 20 | 31 | 27.1 | 18 |
| DF51-22DS-2C | 543-5039-2 | 22 | 33 | 29.1 | 20 |
| DF51-24DS-2C | 543-5040-1 | 24 | 35 | 31.1 | 22 |
| DF51-26DS-2C | 543-5041-4 | 26 | 37 | 33.1 | 24 |
| DF51-28DS-2C | 543-5042-7 | 28 | 39 | 35.1 | 26 |
| DF51-30DS-2C | 543-5043-0 | 30 | 41 | 37.1 | 28 |

Note : Bag packaging (100pcs/pack). Order by number of packs.

In-line Plug

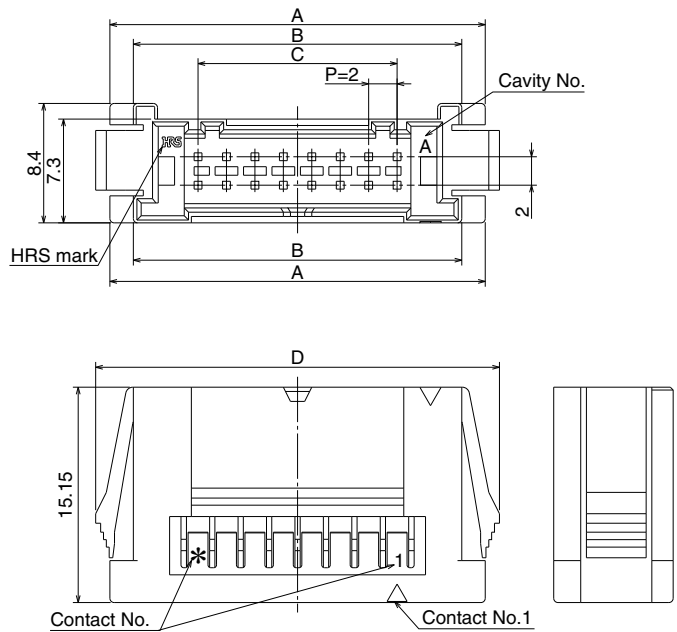
[Single-row]



| Part No. | HRS No. | No. of Contacts | A | B | C | D |
|-------------|------------|-----------------|------|------|----|------|
| DF51-2EP-2C | 543-5125-0 | 2 | 15.5 | 10.8 | 2 | 17.5 |
| DF51-3EP-2C | 543-5126-0 | 3 | 17.5 | 12.8 | 4 | 19.5 |
| DF51-4EP-2C | 543-5127-0 | 4 | 19.5 | 14.8 | 6 | 21.5 |
| DF51-5EP-2C | 543-5128-0 | 5 | 21.5 | 16.8 | 8 | 23.5 |
| DF51-6EP-2C | 543-5129-0 | 6 | 23.5 | 18.8 | 10 | 25.5 |

Note : Bag packaging (100pcs/pack). Order by number of packs.

[Double-row]

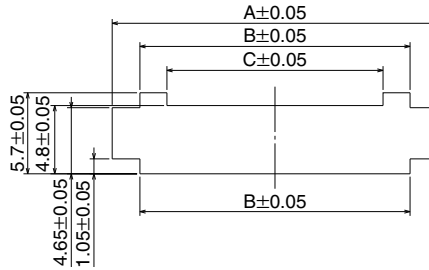


| Part No. | HRS No. | No. of Contacts | A | B | C | D |
|---------------|------------|-----------------|------|------|----|------|
| DF51-4DEP-2C | 543-5071-0 | 4 | 14.4 | 11.1 | 2 | 16.4 |
| DF51-6DEP-2C | 543-5072-0 | 6 | 16.4 | 13.1 | 4 | 18.4 |
| DF51-8DEP-2C | 543-5073-0 | 8 | 18.4 | 15.1 | 6 | 20.4 |
| DF51-10DEP-2C | 543-5074-0 | 10 | 20.4 | 17.1 | 8 | 22.4 |
| DF51-12DEP-2C | 543-5075-0 | 12 | 22.4 | 19.1 | 10 | 24.4 |
| DF51-14DEP-2C | 543-5076-0 | 14 | 24.4 | 21.1 | 12 | 26.4 |
| DF51-16DEP-2C | 543-5077-0 | 16 | 26.4 | 23.1 | 14 | 28.4 |
| DF51-18DEP-2C | 543-5078-0 | 18 | 28.4 | 25.1 | 16 | 30.4 |
| DF51-20DEP-2C | 543-5079-0 | 20 | 30.4 | 27.1 | 18 | 32.4 |
| DF51-22DEP-2C | 543-5080-0 | 22 | 32.4 | 29.1 | 20 | 34.4 |
| DF51-24DEP-2C | 543-5081-0 | 24 | 34.4 | 31.1 | 22 | 36.4 |
| DF51-26DEP-2C | 543-5082-0 | 26 | 36.4 | 33.1 | 24 | 38.4 |
| DF51-28DEP-2C | 543-5083-0 | 28 | 38.4 | 35.1 | 26 | 40.4 |
| DF51-30DEP-2C | 543-5084-0 | 30 | 40.4 | 37.1 | 28 | 42.4 |

Note : Bag packaging (100pcs/pack). Order by number of packs.

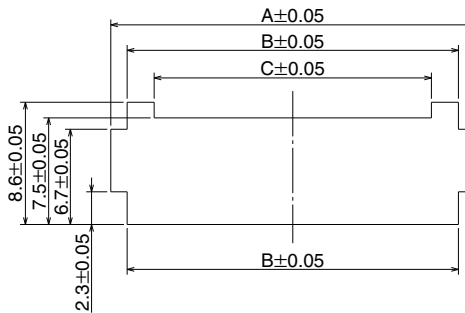
In-line Plug Panel Cutouts

[Single-row]



| Part No. | HRS No. | No. of Contacts | A | | | | B | C |
|-------------|------------|-----------------|--------------------------------|------------|------------|------------|----|------|
| | | | Panel board thickness (Note 1) | | | | | |
| | | | 0.5 to 0.8 | 0.9 to 1.3 | 1.4 to 1.8 | 1.9 to 2.3 | | |
| DF51-2EP-2C | 543-5125-0 | 2 | 14.9 | 15.2 | 15.6 | 16 | 11 | 7.2 |
| DF51-3EP-2C | 543-5126-0 | 3 | 16.9 | 17.2 | 17.6 | 18 | 13 | 9.2 |
| DF51-4EP-2C | 543-5127-0 | 4 | 18.9 | 19.2 | 19.6 | 20 | 15 | 11.2 |
| DF51-5EP-2C | 543-5128-0 | 5 | 20.9 | 21.2 | 21.6 | 22 | 17 | 13.2 |
| DF51-6EP-2C | 543-5129-0 | 6 | 22.9 | 23.2 | 23.6 | 24 | 19 | 15.2 |

[Double-row]

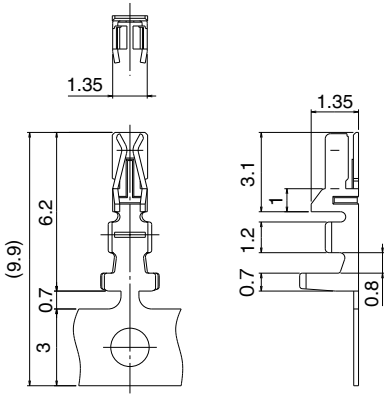


| Part No. | HRS No. | No. of Contacts | A | | | | B | C |
|---------------|------------|-----------------|--------------------------------|------------|------------|------------|------|------|
| | | | Panel board thickness (Note 1) | | | | | |
| | | | 0.5 to 0.8 | 0.9 to 1.3 | 1.4 to 1.8 | 1.9 to 2.3 | | |
| DF51-4DEP-2C | 543-5071-0 | 4 | 13.6 | 14.1 | 14.5 | 14.9 | 11.3 | 7.5 |
| DF51-6DEP-2C | 543-5072-0 | 6 | 15.6 | 16.1 | 16.5 | 16.9 | 13.3 | 9.5 |
| DF51-8DEP-2C | 543-5073-0 | 8 | 17.6 | 18.1 | 18.5 | 18.9 | 15.3 | 11.5 |
| DF51-10DEP-2C | 543-5074-0 | 10 | 19.6 | 20.1 | 20.5 | 20.9 | 17.3 | 13.5 |
| DF51-12DEP-2C | 543-5075-0 | 12 | 21.6 | 22.1 | 22.5 | 22.9 | 19.3 | 15.5 |
| DF51-14DEP-2C | 543-5076-0 | 14 | 23.6 | 24.1 | 24.5 | 24.9 | 21.3 | 17.5 |
| DF51-16DEP-2C | 543-5077-0 | 16 | 25.6 | 26.1 | 26.5 | 26.9 | 23.3 | 19.5 |
| DF51-18DEP-2C | 543-5078-0 | 18 | 27.6 | 28.1 | 28.5 | 28.9 | 25.3 | 21.5 |
| DF51-20DEP-2C | 543-5079-0 | 20 | 29.6 | 30.1 | 30.5 | 30.9 | 27.3 | 23.5 |
| DF51-22DEP-2C | 543-5080-0 | 22 | 31.6 | 32.1 | 32.5 | 32.9 | 29.3 | 25.5 |
| DF51-24DEP-2C | 543-5081-0 | 24 | 33.6 | 34.1 | 34.5 | 34.9 | 31.3 | 27.5 |
| DF51-26DEP-2C | 543-5082-0 | 26 | 35.6 | 36.1 | 36.5 | 36.9 | 33.3 | 29.5 |
| DF51-28DEP-2C | 543-5083-0 | 28 | 37.6 | 38.1 | 38.5 | 38.9 | 35.3 | 31.5 |
| DF51-30DEP-2C | 543-5084-0 | 30 | 39.6 | 40.1 | 40.5 | 40.9 | 37.3 | 33.5 |

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

Note 2 : At the panel tab portion, use the surface that will not be rounded.

Socket Contact



| Part No. | HRS No. | Packaging | Finish | |
|-------------------|---------------|-------------|------------|-------------|
| DF11-22SCF | 543-0601-0 | 10,000/reel | Tin plated | |
| DF11-22SC | 543-0602-2 | 100/pack | | |
| DF11-2428SCF | 543-0500-2 | 10,000/reel | | |
| DF11-2428SC | 543-0501-5 | 100/pack | | |
| DF11A-2428SCF | 543-0634-9 | 10,000/reel | | |
| DF11A-2428SC | 543-0635-1 | 100/pack | | |
| DF11-30SCF | 543-0605-0 | 10,000/reel | | |
| DF11-30SC | 543-0606-3 | 100/pack | | |
| DF11-22SCFA(04) | 543-0603-5 04 | 10,000/reel | | Gold plated |
| DF11-22SCA | 543-0604-8 | 100/pack | | |
| DF11-2428SCFA(04) | 543-0550-0 04 | 10,000/reel | | |
| DF11-2428SCA | 543-0551-3 | 100/pack | | |
| DF11-30SCFA(04) | 543-0607-6 04 | 10,000/reel | | |
| DF11-30SCA | 543-0608-9 | 100/pack | | |

Note : DF11A-2428SCF/SC is of tin plated low insertion/extraction type.

Applicable Wire (Tinned, Annealed Copper Wire)

| Wire size (Stranded wire conductor) | Jacket diameter |
|-------------------------------------|-----------------------------|
| 22 AWG (17/0.16) | ϕ 1.2 to ϕ 1.45mm |
| 24 AWG (11/0.16) | ϕ 0.9 to ϕ 1.45mm |
| 26 AWG (7/0.16) | |
| 28 AWG (7/0.127) | |
| 30 AWG (7/0.1) | ϕ 0.75 to ϕ 1.2mm |

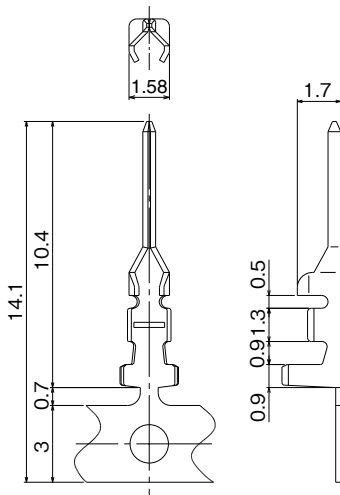
Recommended wire
UL1061, UL1007 (Note 2)

Strip length
1.7 to 2.3mm

Note 1 : When using other than the applicable wire, contact your nearest Hirose representative.

Note 2 : DF11-22SCF/SC/SCFA/SCA is for UL1061.

In-line Plug Contact



| Part No. | HRS No. | Packaging | Finish |
|-----------------|------------|-------------|-------------|
| DF11-EP2428PCF | 543-0615-4 | 10,000/reel | Tin plated |
| DF11-EP2428PC | 543-0616-7 | 100/pack | |
| DF11-EP2428PCFA | 543-0617-0 | 10,000/reel | Gold plated |
| DF11-EP2428PCA | 543-0618-2 | 100/pack | |

Applicable Wire (Tinned, Annealed Copper Wire)

| Wire size (Stranded wire conductor) | Jacket diameter |
|-------------------------------------|-----------------------------|
| 24 AWG (11/0.16) | ϕ 0.9 to ϕ 1.45mm |
| 26 AWG (7/0.16) | |
| 28 AWG (7/0.127) | |

Recommended wire
UL1061, UL1007

Strip length
1.9 to 2.3mm

Note : When using other than the applicable wire, contact your nearest Hirose representative.

◆Applicable Crimping Tool

| Type | Part No. | HRS No. | Wire Type | Applicable Contacts |
|-------------------------|--------------------|------------|------------------------------------|--|
| Applicator | AP105-DF11-22S | 901-4529-7 | UL1061 (Note 3, 5) | DF11-22SCF/SCFA(04) |
| | AP105-DF11-2428S | 901-4511-1 | UL1007 (Note 3) UL1061 (Note 3) | DF11-2428SCF/SCFA(04) DF11A-2428SCF |
| | AP105-DF11-30S | 901-4532-1 | UL1007 (Note 3) UL1061 (Note 3) | DF11-30SCF/SCFA(04) |
| | AP105-DF11-EP2428P | 901-4528-4 | UL1007 (Note 3) UL1061 (Note 3) | DF11-EP2428PCF/PCFA |
| Press Unit | CM-105C | 901-0001-0 | ————— | |
| Hand Tool | DF11-TA22HC | 550-0228-6 | UL1061 (Note 4, 5) | DF11-22SC/SCA |
| | DF11-TA2428HC | 550-0197-4 | UL1007 (Note 4) UL1061 (Note 4) | DF11-2428SC/SCA DF11A-2428SC |
| | DF11-TA30HC | 550-0230-8 | UL1007 (Note 4) UL1061 (Note 4) | DF11-30SC/SCA |
| | DF11EP-TA2428HC | 550-0227-3 | UL1007 (Note 4) UL1061 (Note 4) | DF11-EP2428PC/PCA |
| Contact Extraction Tool | DF-C-PO(B) | 550-0179-2 | ————— | DF11-*****SCF DF11-EP*****PCF |

Note 1 : Please conduct crimping work according to the "Crimping work standards" and "Crimping condition table".

Note 2 : Any problems that occur from using tools other than those specified by Hirose, are not covered by warranty.

Note 3 : Applicator dies can be switched to crimp the other wire size and type. The additional dies are sold separately.

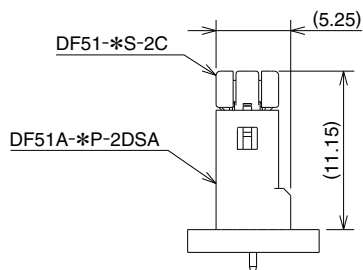
Note 4 : Hand tool dies cannot be switched.

Note 5 : The compatible wire is limited to UL1061, 22 AWG

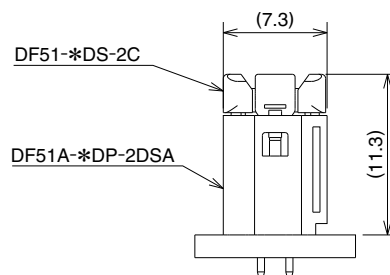
◆ Mated Dimensions

● Board-to-Wire Connection using the straight pin header

【Single-row】

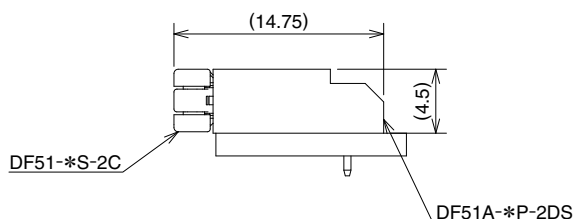


【Duble-row】

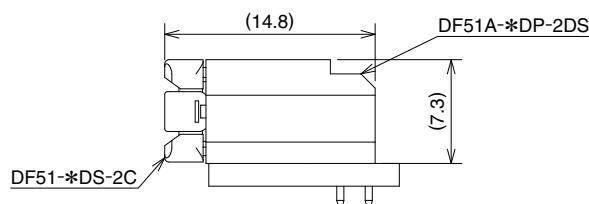


● Socket to Right Angle Header Connection

【Single-row】

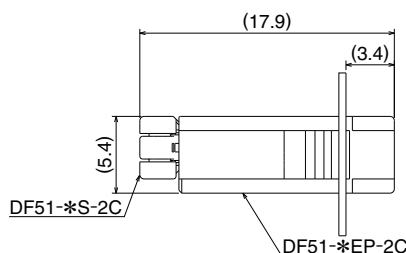


【Duble-row】

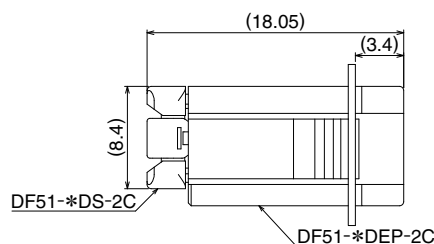


● Socket to In-line Plug Connection

【Single-row】



【Duble-row】



◆ Precautions for use

1. The connector could be damaged if it is pulled out forcibly. When it is hard to pull out, push it in slightly first and then depress the lock and un-mate. Please refer to "DF51 mating and unmating Procedure Document (ETAD-H0847-00)" for points in handling regarding mating operations.
2. When fitting a crimped contact into a socket, please refrain from oblique insertion for keeping performance reliability. Please refer to "Harness procedure manual (ETAD-H0923-00)" for points in harness operations.

◆ Operating environment

Please contact us if you are designing this connector into environmental conditions where high and low temperatures are repeated.



HIROSE ELECTRIC CO.,LTD.

2-6-3,Nakagawa Chuoh,Tsuzuki-Ku,Yokohama-Shi 224-8540,JAPAN
 TEL: +81-45-620-3526 Fax: +81-45-591-3726
<http://www.hirose.com>
<http://www.hirose-connectors.com>