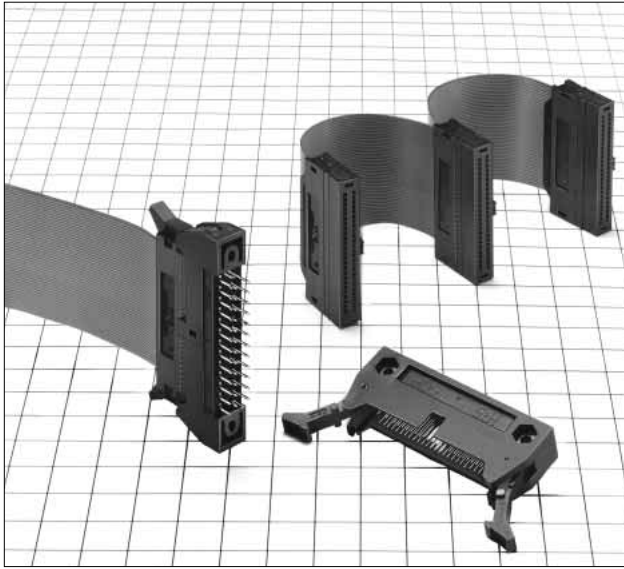


0.635mm Pitch ID Cable Connectors

HIF6H Series



■ Features

1. Batch Insulation Displacement of 0.635mm Pitch ID Cable Connector

The 0.635mm pitch cable can be insulated and displaced at a time. HIF6 series is displaced two sheets cable with one sheet cable.

2. Applicable Cable 30 AWG

The applicable cable is 30 AWG cable.

3. Achieve Bus-line Connection

This connector allows connection to No. 1 pin. By changing the cover, bus-line connection can be allowed.

4. Compatibility

This connector allows engagement with the HIF6A(B) series header. However, the lock header is used for the HIF6H series only.

Note : HIF6H series should be ordered together with the cable.

■ Product Specifications

| | | | |
|--------|---|--|--|
| Rating | Current rating : 0.5A Voltage rating : 125V AC | Operating Temperature Range : -55 to +85°C(Note 1) Operating Moisture Range : 40 to 80% | Storage Temperature Range : -10 to +60°C(Note 2) Storage Humidity Range : 40 to 70%(Note 2) |
|--------|---|--|--|

| Item | Specification | Condition |
|----------------------------------|---|--|
| 1. Insulation Resistance | 1000MΩ min. | 250V DC |
| 2. Withstanding voltage | No flashover or insulation breakdown. | 300V AC/1 minute |
| 3. Contact Resistance | 30mΩ max. | 0.1A |
| 4. 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. |
| 5. Humidity (Steady state) | Insulation resistance : 1000MΩ min. | 96 hours at temperature of 40°C and humidity of 90% to 95% |
| 6. Temperature Cycle | No damage, cracks, or parts looseness. | (-65°C : 30 minutes -> 15 to 35°C : 5 minutes max. 125°C : 30 minutes-> 15 to 35°C : 5 minutes max.) 5 cycles |
| 7. Durability (Mating/un-mating) | Contact resistance : 30mΩ max. | 500 cycles |
| 8. Resistance to Soldering heat | No deformation of components affecting performance. | Solder Bath : 260°C for 10 seconds |
| | | Manual soldering : 360°C for 5 seconds |

Note 1 : Includes temperature rise caused by current flow.

Note 2 : The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non conducting condition of installed connectors in storage, shipment or during transportation.

■ Materials / Finish

| Part | Material | Finish | Remarks |
|--------------------|--------------|-----------------------|---------|
| Insulator | PBT | Black | UL94V-0 |
| Socket Contact | Copper alloy | Selective gold plated | — |
| Pin header contact | Brass | | |

■ 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.

●Pin Header

HIF6H - * P A - 1.27 DSA

① ② ③ ④ ⑤ ⑥

| | | |
|---|--------------------|--|
| ① | Series Name | : HIF 6H |
| ② | Number of contacts | : 34, 40, 50, 60, 80, 100 |
| ③ | P | : Pin header |
| ④ | A | : Selective gold plating |
| ⑤ | Contact Pitch | : 1.27mm |
| ⑥ | Contact style | : DS : Right angle type DSA : Straight type |

●Socket

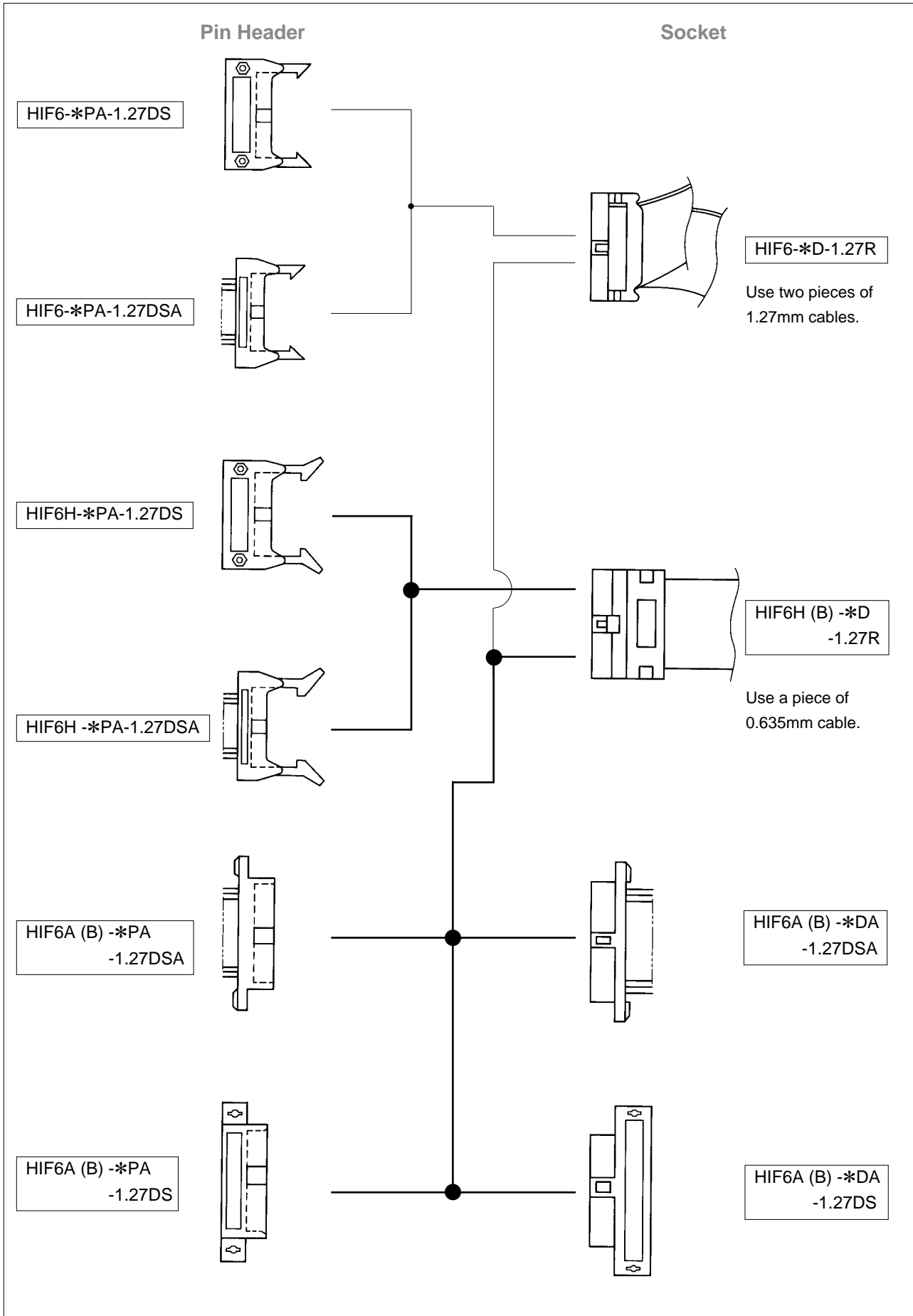
HIF6H - * D - 1.27 R

① ② ③ ④ ⑤

| | | |
|---|--------------------|---|
| ① | Series Name | : HIF6H : Standard type HIF6HB : Bus connection type |
| ② | Number of contacts | : 34, 40, 50, 60, 80, 100 |
| ③ | D | : Socket |
| ④ | Contact Pitch | : 1.27mm |
| ⑤ | R | : ID type |

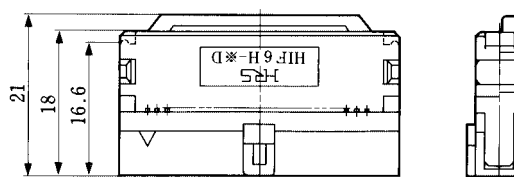
* If needed, please order HIF6H series connectors with cable attached.
Designate the connection circuit and cable length.

◆Function Block Chart



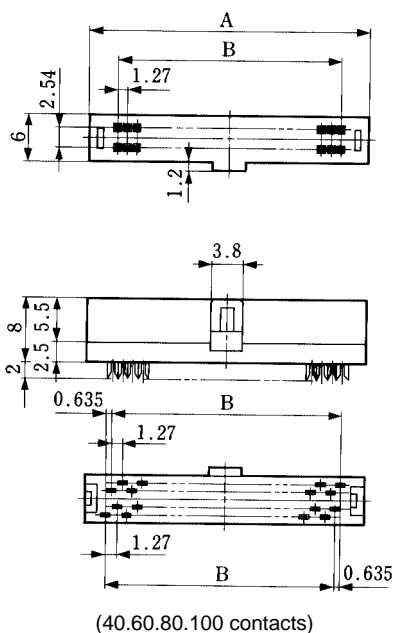
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Socket



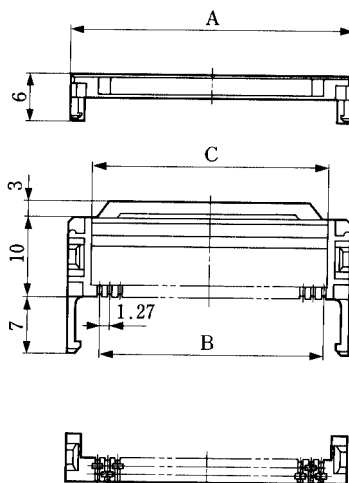
Combination Pattern

Body



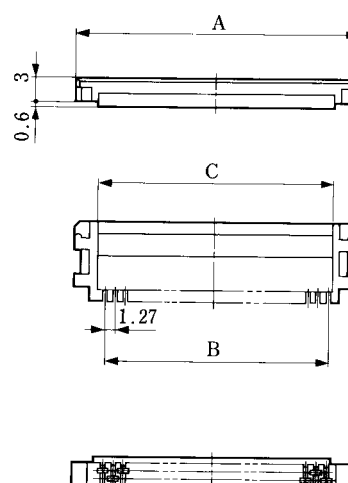
(40.60.80.100 contacts)

Cover B

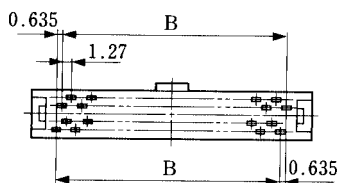


(40.60.80.100 contacts)

Cover A



(40.60.80.100 contacts)



(34.50 contacts)



(34.50 contacts)



(34.50contacts)

Unit : mm

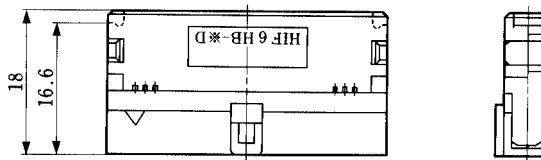
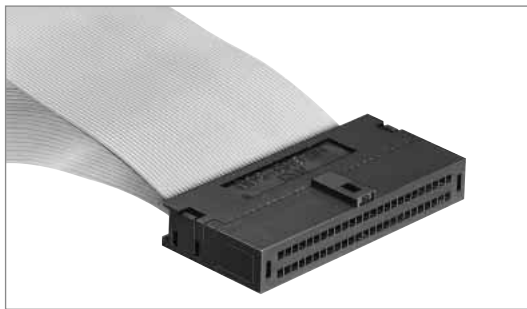
| Part No. | No. of Contacts | A | B | C | RoHS |
|----------------------|-----------------|-------|-------|-------|------|
| HIF6H- 34D-1.27R(20) | 34 | 27.44 | 20.32 | 21.84 | YES |
| HIF6H- 40D-1.27R(20) | 40 | 31.25 | 24.13 | 25.65 | |
| HIF6H- 50D-1.27R(20) | 50 | 37.60 | 30.48 | 32.00 | |
| HIF6H- 60D-1.27R(20) | 60 | 43.95 | 36.83 | 38.35 | |
| HIF6H- 80D-1.27R(20) | 80 | 56.65 | 49.53 | 51.05 | |
| HIF6H-100D-1.27R(20) | 100 | 69.35 | 62.23 | 63.75 | |

* If needed, please order HIF6H series connectors with cable attached.

Designate the connection circuit and cable length on catalog pages B94 and B95.

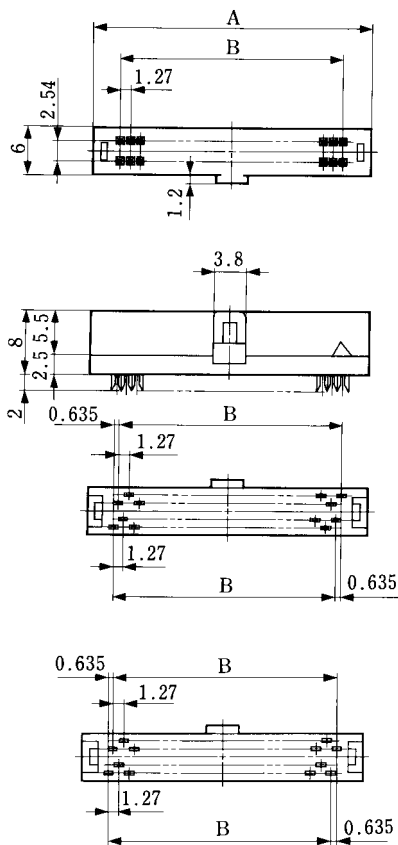
Please note that even when socket units are purchased, wiring will not be possible other than at Hirose Electric.

■ Socket for bus-line connection



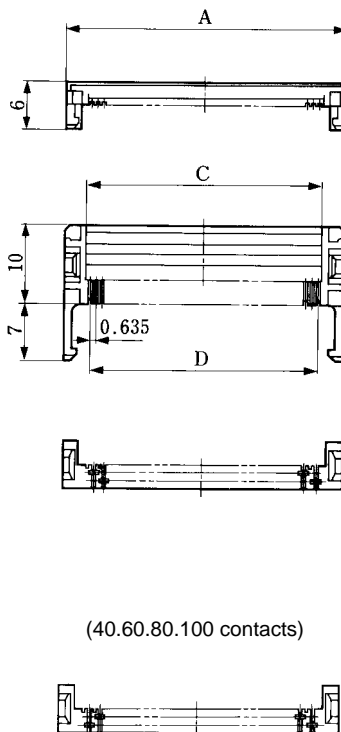
Combination Pattern

Body



(34.50 contacts)

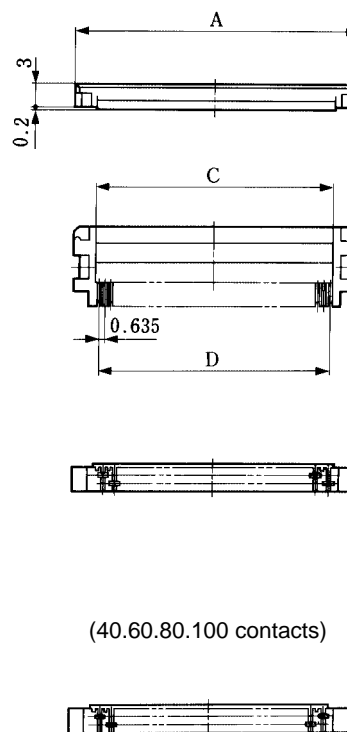
Cover B



(40.60.80.100 contacts)

(34.50 contacts)

Cover A



(40.60.80.100 contacts)

(34.50contacts)

Unit : mm

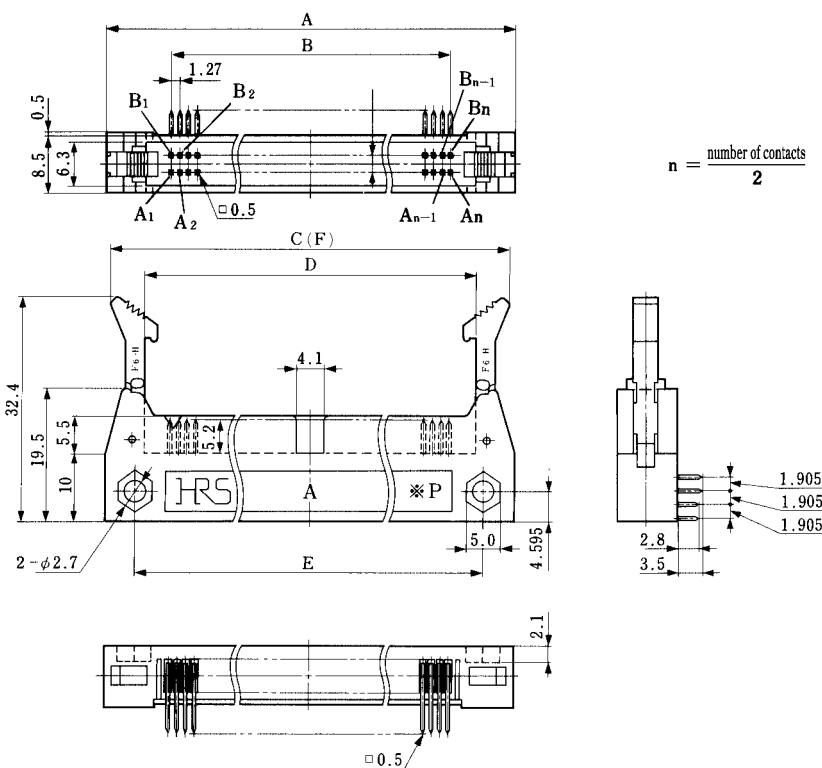
| Part No. | No. of Contacts | A | B | C | D | RoHS |
|-----------------------|-----------------|-------|-------|-------|--------|------|
| HIF6HB- 34D-1.27R(20) | 34 | 27.44 | 20.32 | 21.84 | 20.955 | YES |
| HIF6HB- 40D-1.27R(20) | 40 | 31.25 | 24.13 | 25.65 | 24.765 | |
| HIF6HB- 50D-1.27R(20) | 50 | 37.60 | 30.48 | 32.00 | 31.115 | |
| HIF6HB- 60D-1.27R(20) | 60 | 43.95 | 36.83 | 38.35 | 37.465 | |
| HIF6HB- 80D-1.27R(20) | 80 | 56.65 | 49.53 | 51.05 | 50.165 | |
| HIF6HB-100D-1.27R(20) | 100 | 69.35 | 62.23 | 63.75 | 62.865 | |

* Please order HIF6H series connectors with cable attached.

Designate the connection circuit and cable length on pages B94 and B95.

Please note that even when socket units are purchased, wiring will not be possible other than at Hirose Electric.

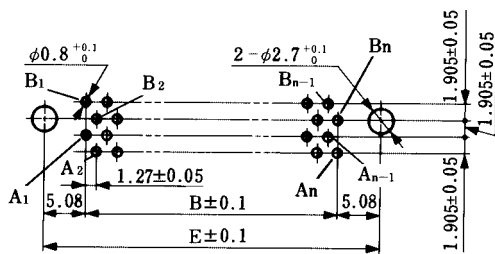
Right Angle Pin Header



PCB mounting pattern

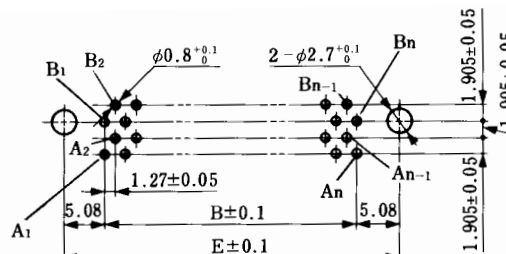
● indicates mark positions.

Mating Side



(40.60.80.100 contacts)

Mating Side

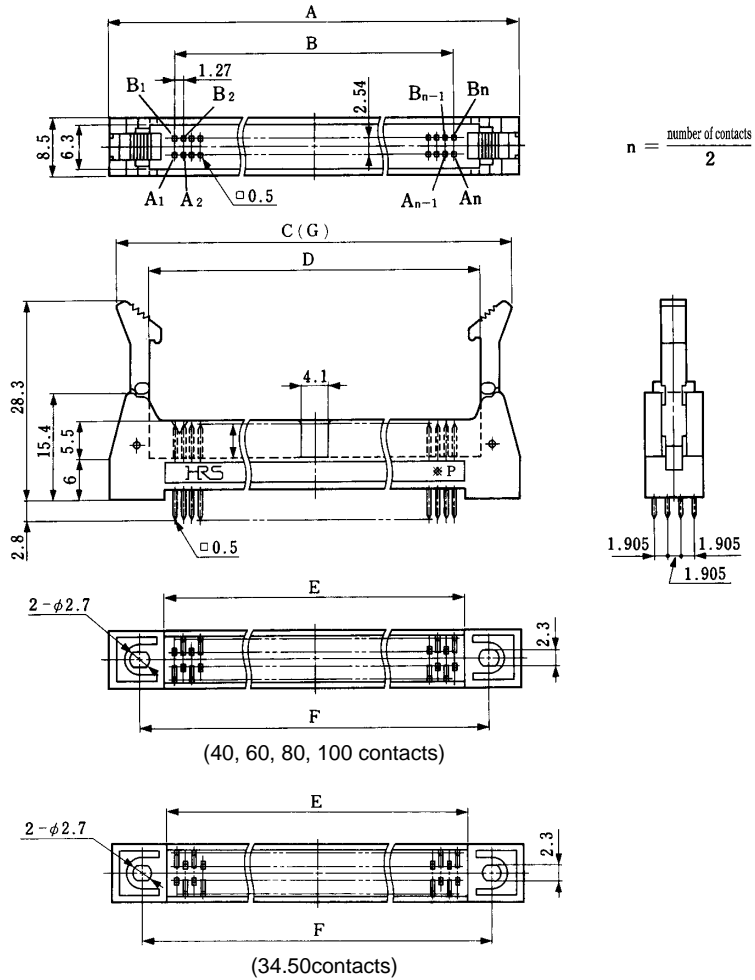


(34.50 contacts)

Unit : mm

| Part No. | HRS No. | No. of Contacts | A | B | C | D | E | F | RoHS |
|------------------------|---------------|-----------------|-------|-------|-------|-------|-------|--------|------|
| HIF6H- 34PA-1.27DS(71) | 630-0166-4 71 | 34 | 39.84 | 20.32 | 38.24 | 27.64 | 30.48 | 59.64 | YES |
| HIF6H- 40PA-1.27DS(71) | 630-0161-0 71 | 40 | 43.65 | 24.13 | 42.05 | 31.45 | 34.29 | 63.45 | |
| HIF6H- 50PA-1.27DS(71) | 630-0162-3 71 | 50 | 50.00 | 30.48 | 48.00 | 37.80 | 40.64 | 69.80 | |
| HIF6H- 60PA-1.27DS(71) | 630-0163-6 71 | 60 | 56.35 | 36.83 | 54.75 | 44.15 | 46.99 | 76.15 | |
| HIF6H- 80PA-1.27DS(71) | 630-0164-9 71 | 80 | 69.05 | 49.53 | 67.45 | 56.85 | 59.69 | 88.85 | |
| HIF6H-100PA-1.27DS(71) | 630-0165-1 71 | 100 | 81.75 | 62.23 | 80.15 | 69.55 | 72.39 | 101.55 | |

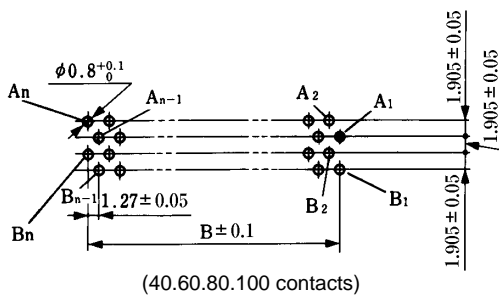
■ Straight Pin Header



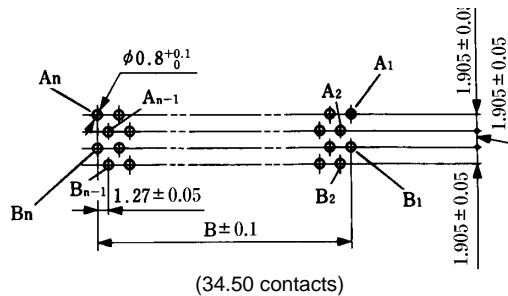
◆ PCB mounting pattern

● indicates mark positions.

Guide Key Side



Guide Key Side

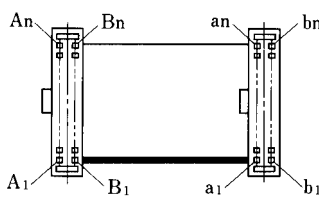
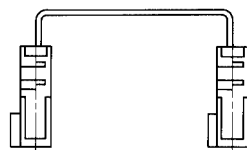
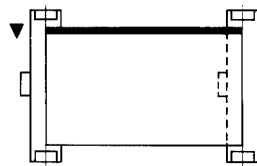


Unit : mm

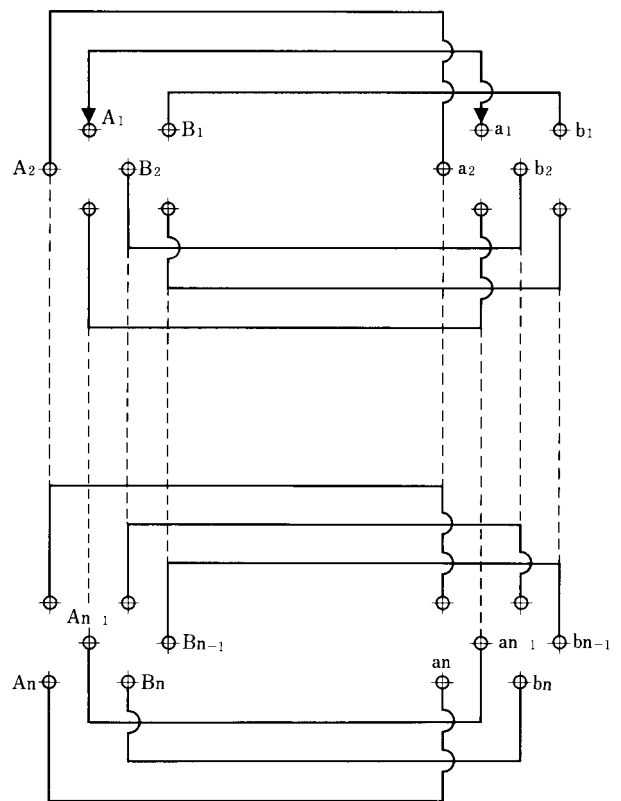
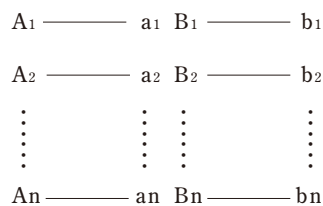
| Part No. | HRS No. | No. of Contacts | A | B | C | D | E | F | G | RoHS |
|-------------------------|---------------|-----------------|-------|-------|-------|-------|-------|-------|--------|------|
| HIF6H- 34PA-1.27DSA(71) | 630-0176-8 71 | 34 | 39.84 | 20.32 | 38.24 | 27.64 | 23.84 | 30.48 | 59.64 | YES |
| HIF6H- 40PA-1.27DSA(71) | 630-0171-4 71 | 40 | 43.65 | 24.13 | 42.05 | 31.45 | 27.65 | 34.29 | 63.45 | |
| HIF6H- 50PA-1.27DSA(71) | 630-0172-7 71 | 50 | 50.00 | 30.48 | 48.00 | 37.80 | 34.00 | 40.64 | 68.80 | |
| HIF6H- 60PA-1.27DSA(71) | 630-0173-0 71 | 60 | 56.35 | 36.83 | 54.75 | 44.15 | 40.35 | 46.99 | 76.15 | |
| HIF6H- 80PA-1.27DSA(71) | 630-0174-2 71 | 80 | 69.05 | 49.53 | 67.45 | 56.85 | 53.05 | 59.69 | 88.85 | |
| HIF6H-100PA-1.27DSA(71) | 630-0175-5 71 | 100 | 81.75 | 62.23 | 80.15 | 69.55 | 65.75 | 72.39 | 101.55 | |

◆ Connection Circuit Diagram 40, 60, 80 and 100 contacts

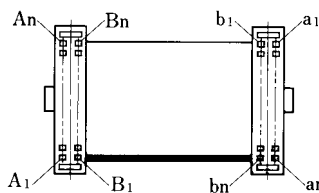
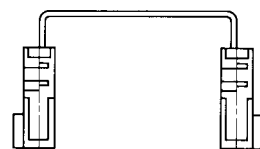
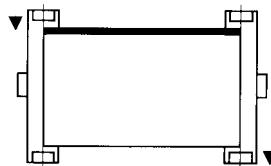
Type AA



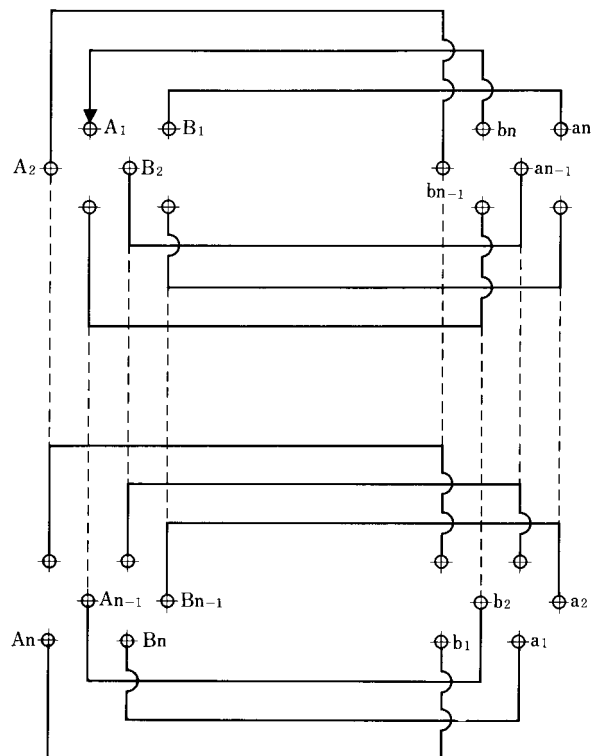
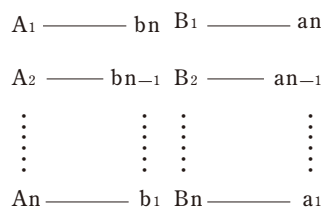
Cable connection



Type AB

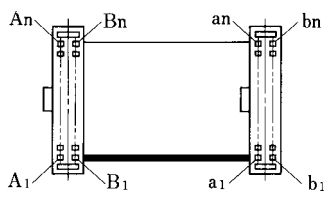
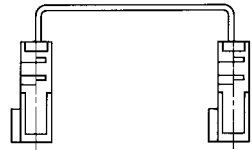
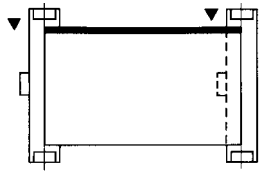


Cable connection



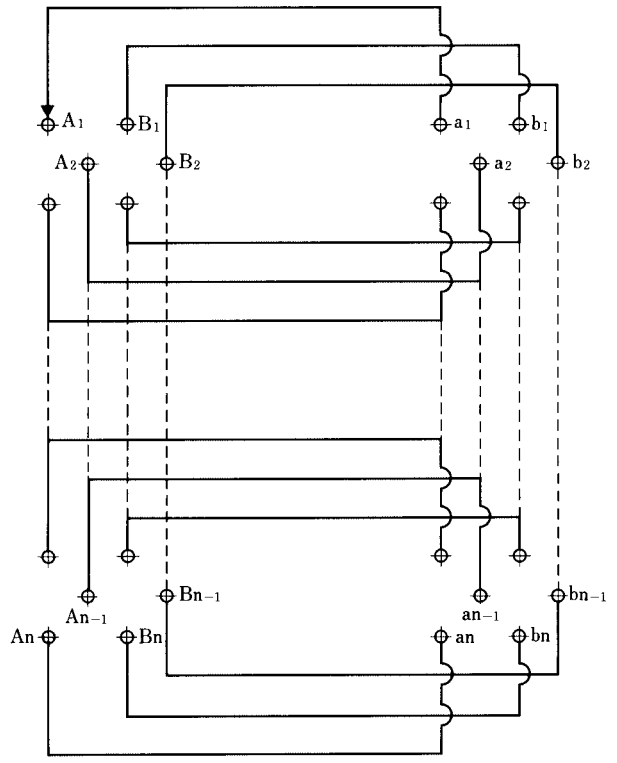
◆ Connection Circuit Diagram 34, 50 contacts

Type AA

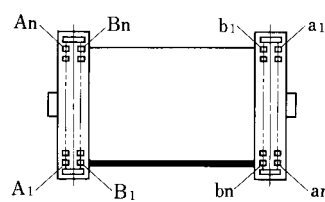
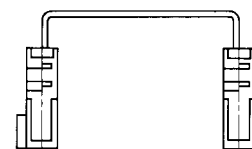
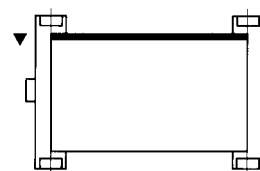


Cable connection

| | |
|-----------------------------------|-----------------------------------|
| A ₁ ——— a ₁ | B ₁ ——— b ₁ |
| A ₂ ——— a ₂ | B ₂ ——— b ₂ |
| ⋮ | ⋮ |
| A _n ——— a _n | B _n ——— b _n |

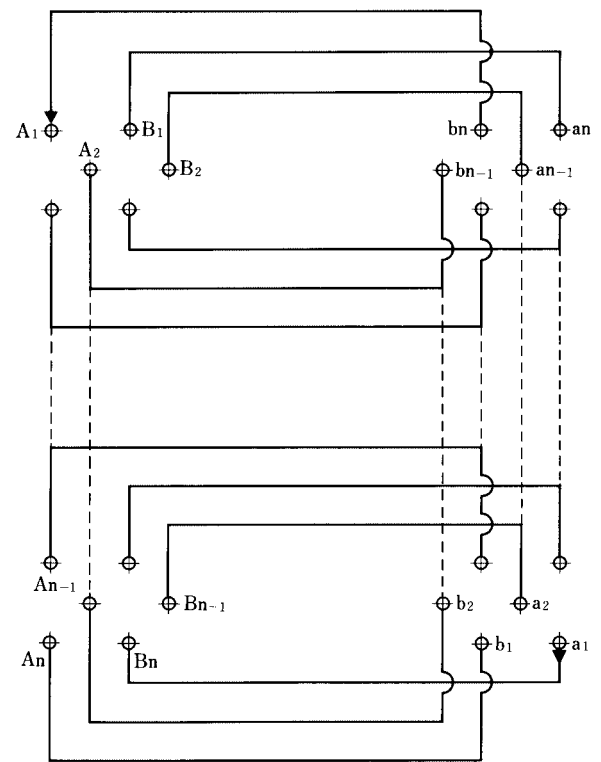


Type AB



Cable connection

| | |
|-------------------------------------|-------------------------------------|
| A ₁ ——— b _n | B ₁ ——— a _n |
| A ₂ ——— b _{n-1} | B ₂ ——— a _{n-1} |
| ⋮ | ⋮ |
| A _n ——— b ₁ | B _n ——— a ₁ |



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