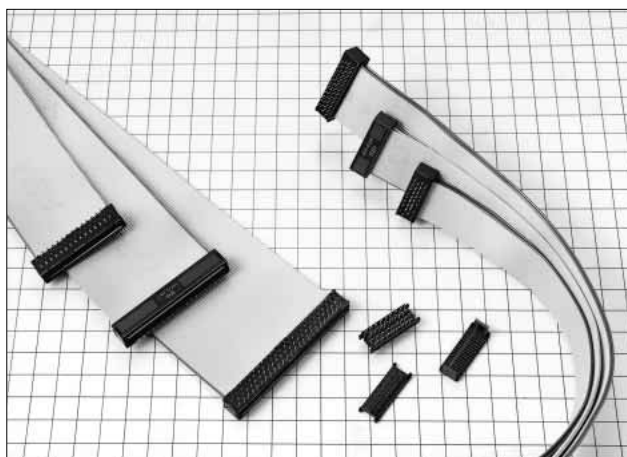


# 1.27mm Pitch Connector Directly Mounted on Board

## HIF12 Series



### ■Features

#### 1. Directly Mounted on Board

This connector, which is directly mounted on the board, can insulate and displace the 1.27mm pitch flat cable at a time.

#### 2. Broad Connection

Using the 1.27mm pitch flat cable, this connector can be combined with HIF2E, HIF3B, HIF5, and HIF6.

#### 3. Applicable Cable

The applicable cable is UL2651 AWG#28 flat cable (7 cores./0.127mm, jacket dia. :0.8 to 1.0mm).

### ■Applications

Computers, terminal equipment, various kinds of business machines.

### ■Product Specifications

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

| Item                            | Specification                                       | Condition                                                                                                |
|---------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 1. Insulation Resistance        | 1000M ohms min.                                     | 250V DC                                                                                                  |
| 2. Withstanding voltage         | No flashover or insulation breakdown.               | 300V AC/1 minute                                                                                         |
| 3. Contact Resistance           | 30m ohms 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: 1000M ohms min.              | 96 hours at temperature of 40°C and humidity of 90% to 95%                                               |
| 6. Temperature Cycle            | No damage, cracks, or parts looseness.              | (-55°C: 30 minutes →15 to 35°C: 5 minutes max.<br>85°C: 30 minutes →15 to 35°C: 5 minutes max.) 5 cycles |
| 7. Resistance to Soldering heat | No deformation of components affecting performance. | Solder Bath: 260°C for 10 seconds<br>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.

Note 3: 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

| Part      | Material         | Finish      | Remarks |
|-----------|------------------|-------------|---------|
| Insulator | PBT              | Black       | UL94V-0 |
| Contact   | Beryllium copper | Gold plated | ———     |

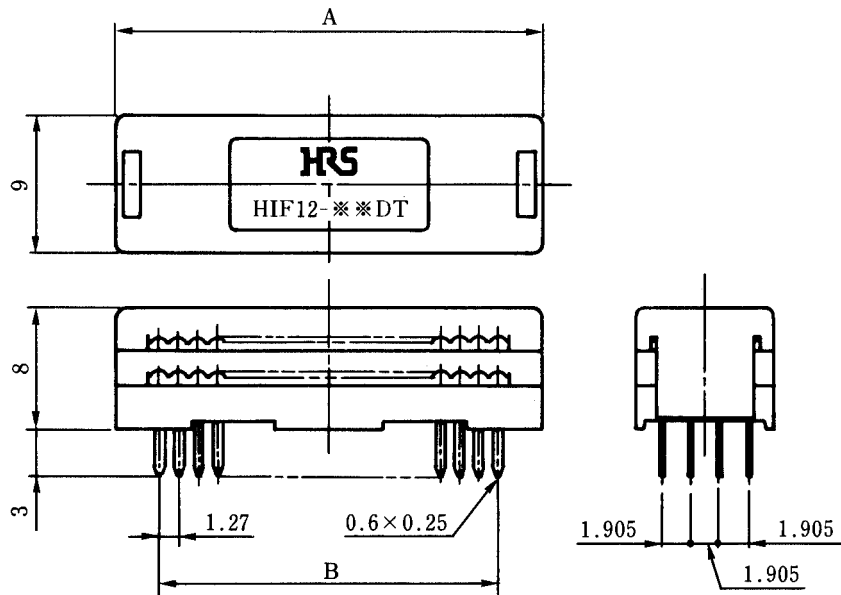
Ordering Information

HIF12 - \* DT - 1.27 R

①                      ②                      ③                      ④                      ⑤

|                      |                                   |
|----------------------|-----------------------------------|
| ① Series Name        | : HIF 12                          |
| ② Number of contacts | : 34, 40, 50, 52, 60, 68, 80, 100 |
| ③ Contact alignment  | : 4-row staggered                 |
| ④ Contact Pitch      | : 1.27mm                          |
| ⑤ R                  | : Ribbon-cable                    |

Combination Pattern

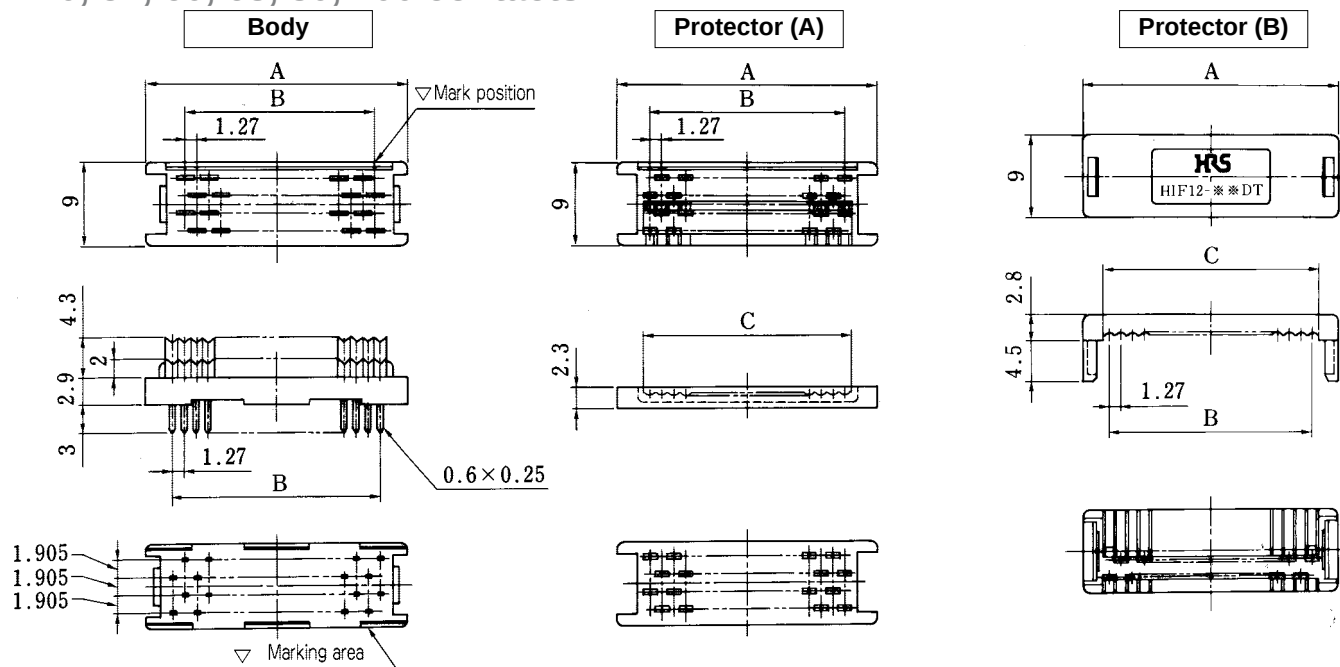


Unit: mm

| Number of Contacts | 34    | 40    | 50    | 52    | 60    | 68    | 80    | 100   |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| A                  | 26.06 | 29.87 | 36.22 | 37.49 | 42.57 | 47.65 | 55.27 | 67.97 |
| B                  | 20.32 | 24.13 | 30.48 | 31.75 | 36.83 | 41.91 | 49.53 | 62.23 |

## HIF12 Series 1.27mm Pitch Connector Directly Mounted on Board

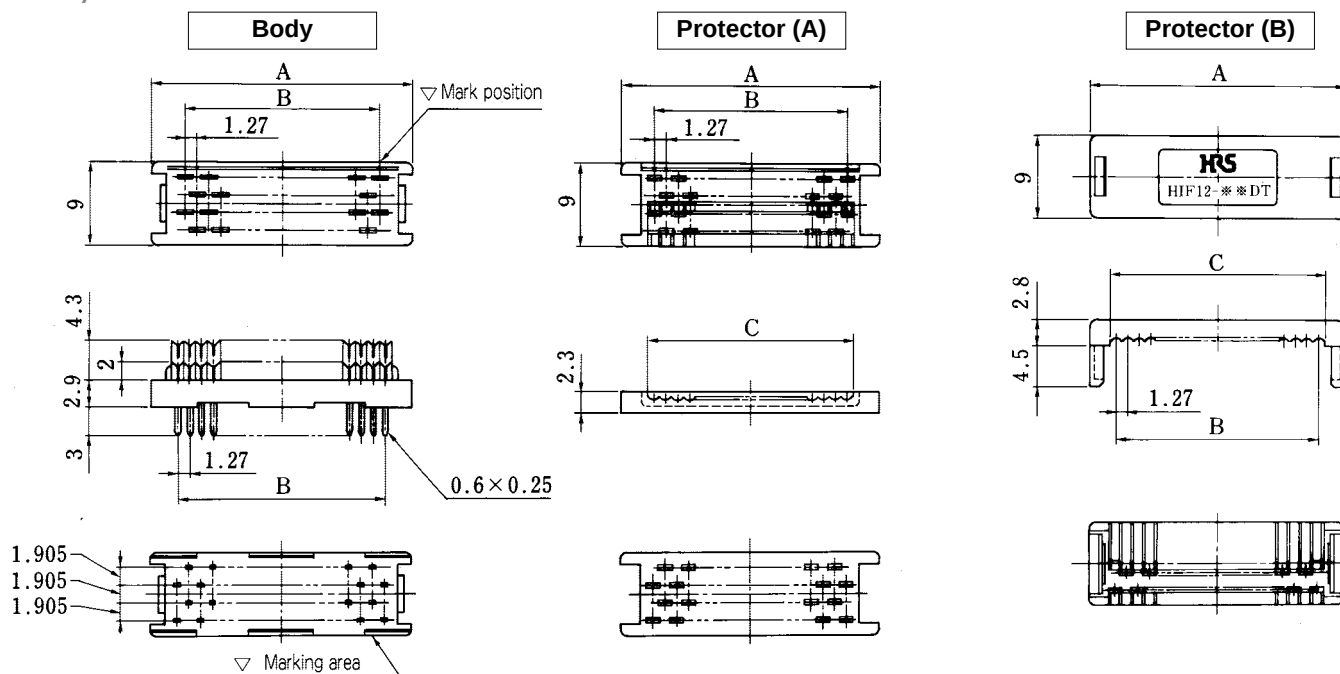
### 40, 52, 60, 68, 80, 100 contacts



Unit: mm

| Part Number           | CL No.        | Number of Contacts | A     | B     | C     | RoHS |
|-----------------------|---------------|--------------------|-------|-------|-------|------|
| HIF12- 40DT-1.27R(71) | 660-0005-7-71 | 40                 | 29.87 | 24.13 | 25.55 | YES  |
| HIF12- 52DT-1.27R(71) | 660-0007-2-71 | 52                 | 37.49 | 31.75 | 33.17 |      |
| HIF12- 60DT-1.27R(71) | 660-0008-5-71 | 60                 | 42.57 | 36.83 | 38.25 |      |
| HIF12- 68DT-1.27R(71) | 660-0009-8-71 | 68                 | 47.65 | 41.91 | 43.33 |      |
| HIF12- 80DT-1.27R(71) | 660-0010-7-71 | 80                 | 55.27 | 49.53 | 50.95 |      |
| HIF12-100DT-1.27R(71) | 660-0011-0-71 | 100                | 67.97 | 62.23 | 63.65 |      |

### 34, 50 contacts



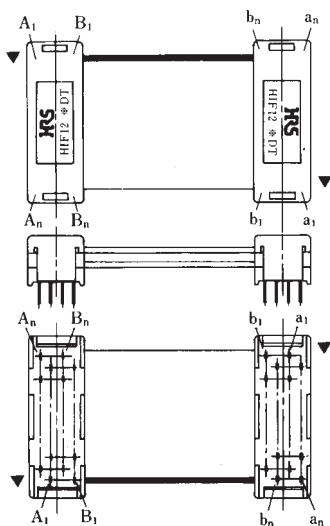
Unit: mm

| Part Number          | CL No.        | Number of Contacts | A     | B     | C     | RoHS |
|----------------------|---------------|--------------------|-------|-------|-------|------|
| HIF12-34DT-1.27R(71) | 660-0004-4-71 | 34                 | 26.06 | 20.32 | 21.74 | YES  |
| HIF12-50DT-1.27R(71) | 660-0006-0-71 | 50                 | 36.22 | 30.48 | 31.9  |      |

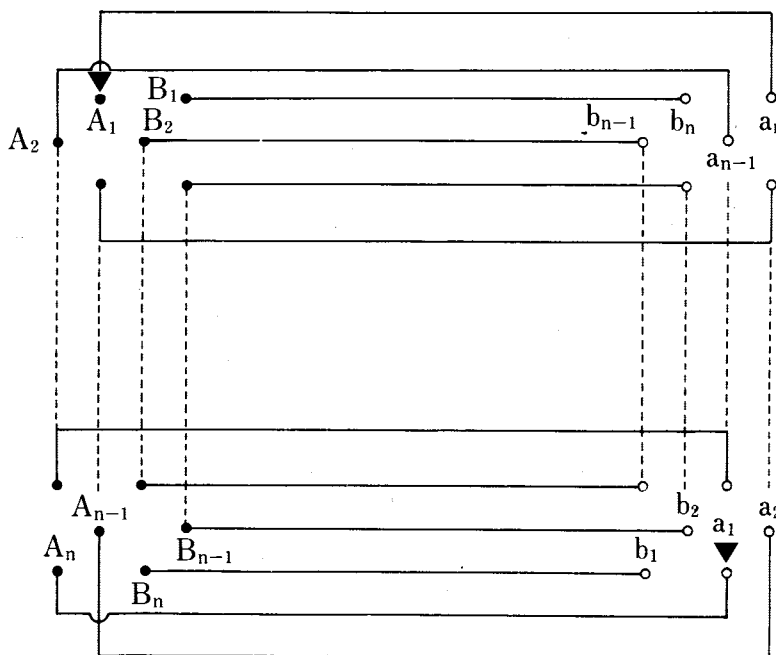
## ◆HIF12-HIF12 Connection Circuit Diagram 40, 52, 60, 68, 80, 100 contacts

### ●Type A, B

$$n = \frac{\text{number of contacts}}{2}$$



Note: In the connection circuit diagram as shown, don't connect to pin No. 2. For connection to pin No. 2, contact Hirose HIF Engineering Department.

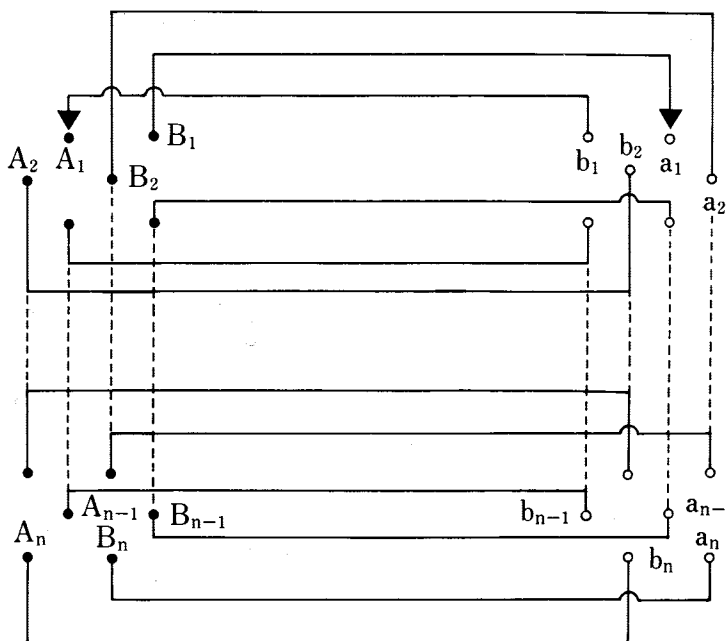
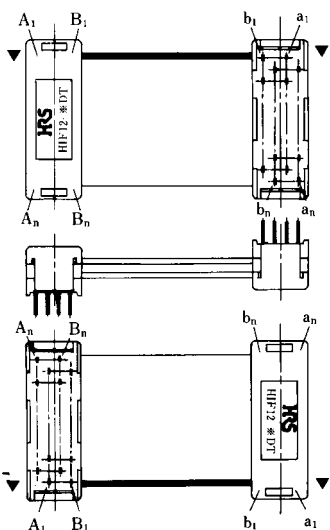


Cable 1 Connection

Cable 2 Connection

|    |      |    |      |
|----|------|----|------|
| A1 | an   | B1 | bn   |
| A2 | an-1 | B2 | bn-1 |
| ⋮  | ⋮    | ⋮  | ⋮    |
| An | a1   | Bn | b1   |

### ●Type A, A



Cable 1 Connection

Cable 2 Connection

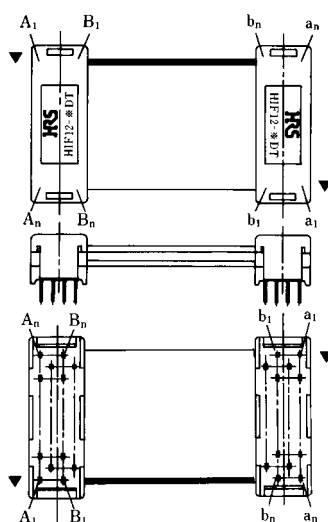
|    |    |    |    |
|----|----|----|----|
| A1 | b1 | B1 | a1 |
| A2 | b2 | B2 | a2 |
| ⋮  | ⋮  | ⋮  | ⋮  |
| An | bn | Bn | an |

# HIF12 Series 1.27mm Pitch Connector Directly Mounted on Board

## HIF12-HIF6 Connection Circuit Diagram 34, 50 contacts

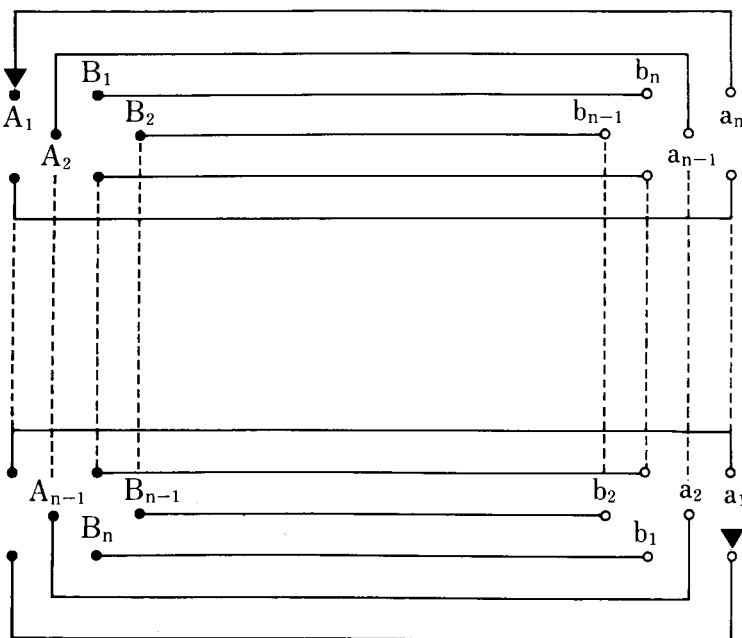
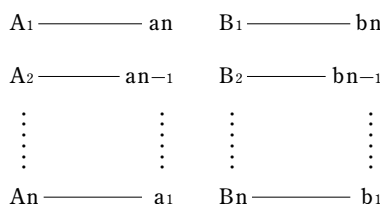
### Type A, B

$$n = \frac{\text{number of contacts}}{2}$$

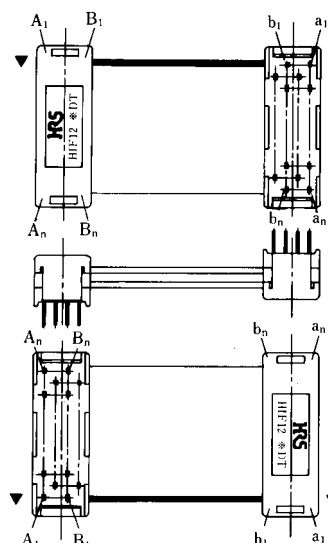


Cable 1 Connection

Cable 2 Connection

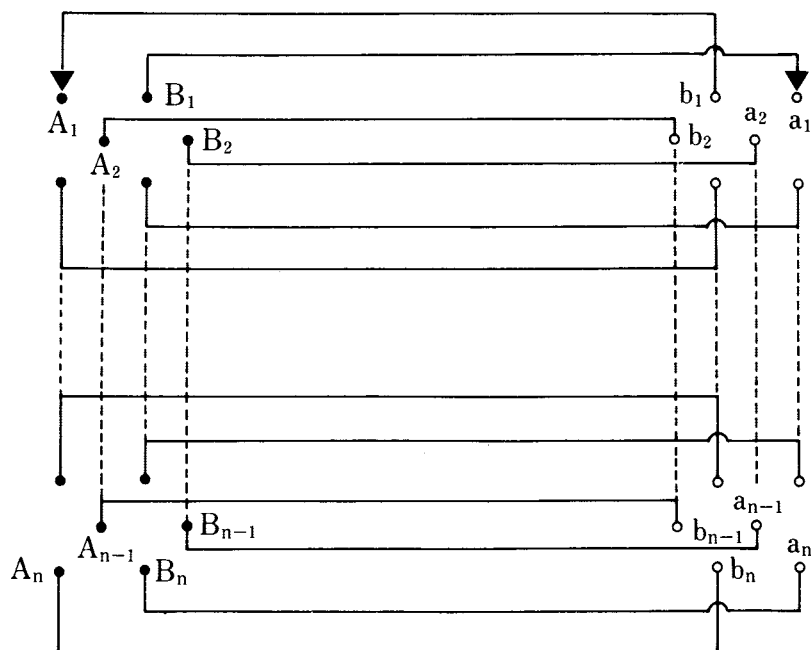
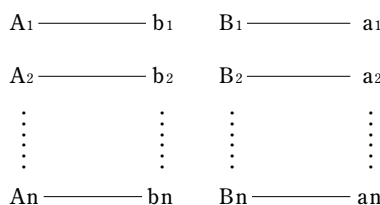


### Type A, A



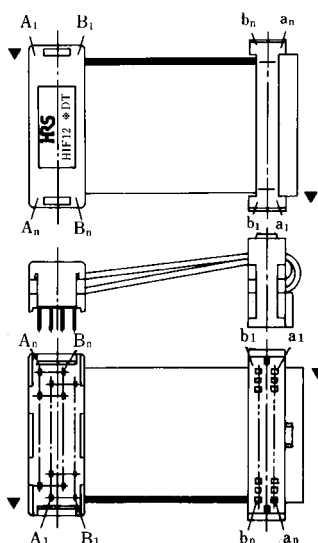
Cable 1 Connection

Cable 2 Connection



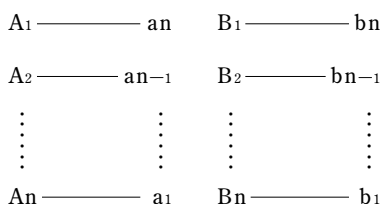
## ◆HIF12-HIF6 Connection Circuit Diagram 40, 52, 60, 68, 80, 100 contacts

### ●Type A, B



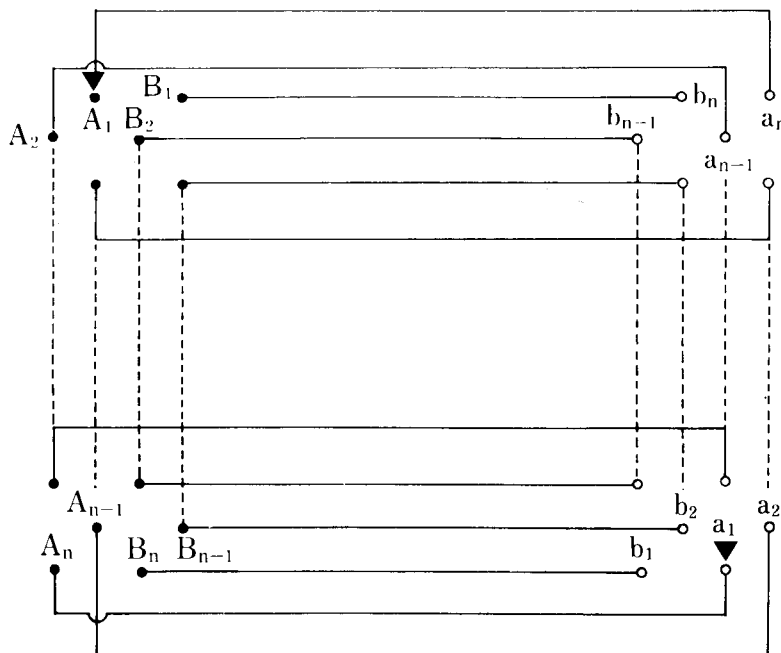
Cable 1 Connection

Cable 2 Connection

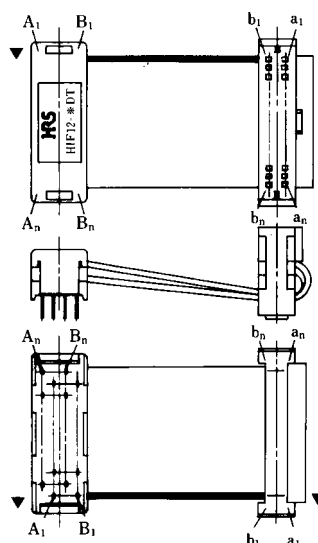


Note: In the connection circuit diagram as shown, don't connect to pin No. 2. For connection to pin No. 2, contact Hirose HIF Engineering Department.

$$n = \frac{\text{number of contacts}}{2}$$

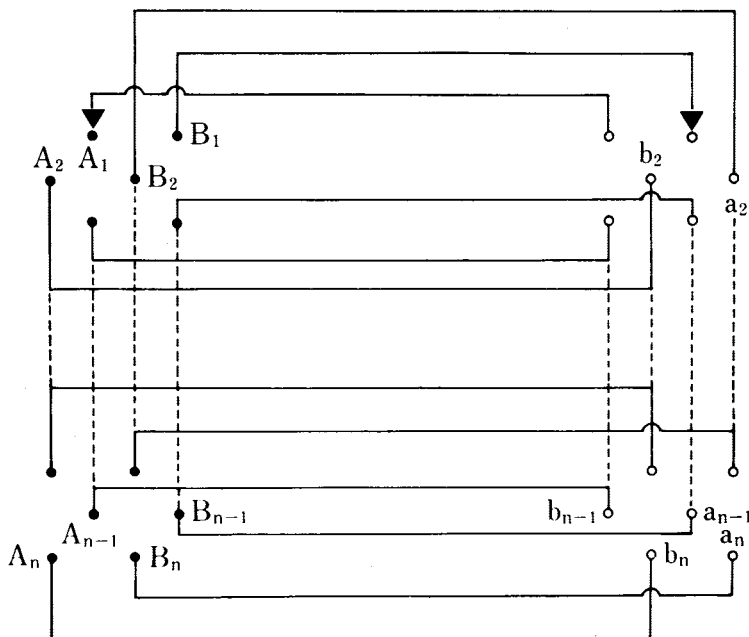
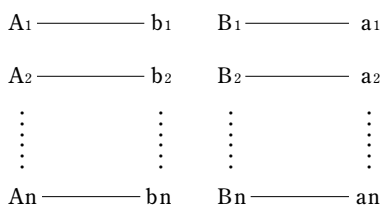


### ●Type A, A



Cable 1 Connection

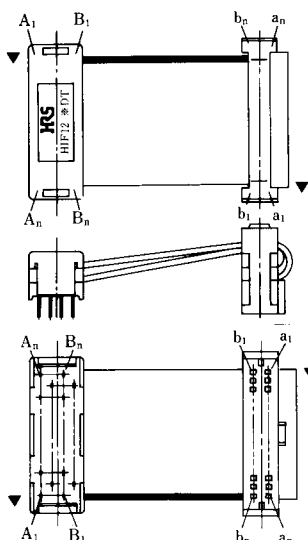
Cable 2 Connection



# HIF12 Series 1.27mm Pitch Connector Directly Mounted on Board

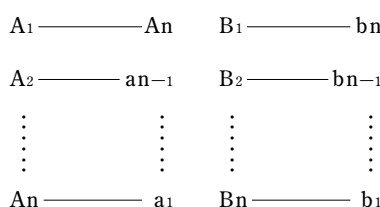
## HIF12-HIF12 Connection Circuit Diagram 34, 50 contacts

### Type A, B

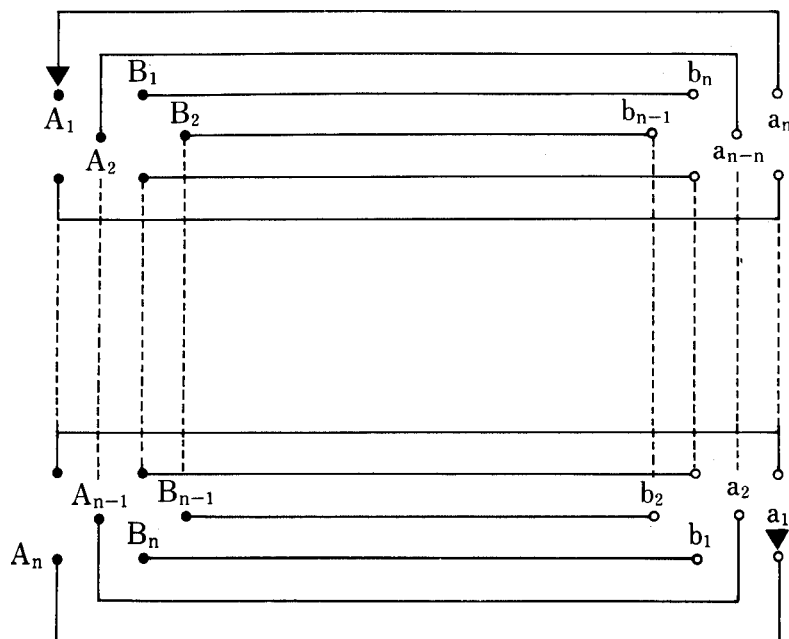


Cable 1 Connection

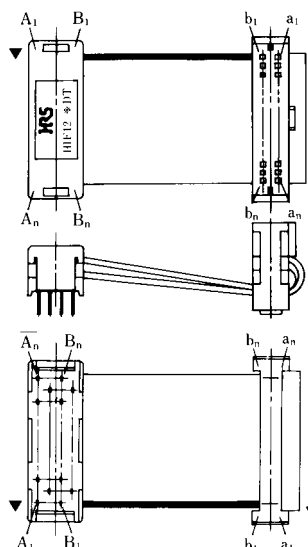
Cable 2 Connection



$$n = \frac{\text{number of contacts}}{2}$$

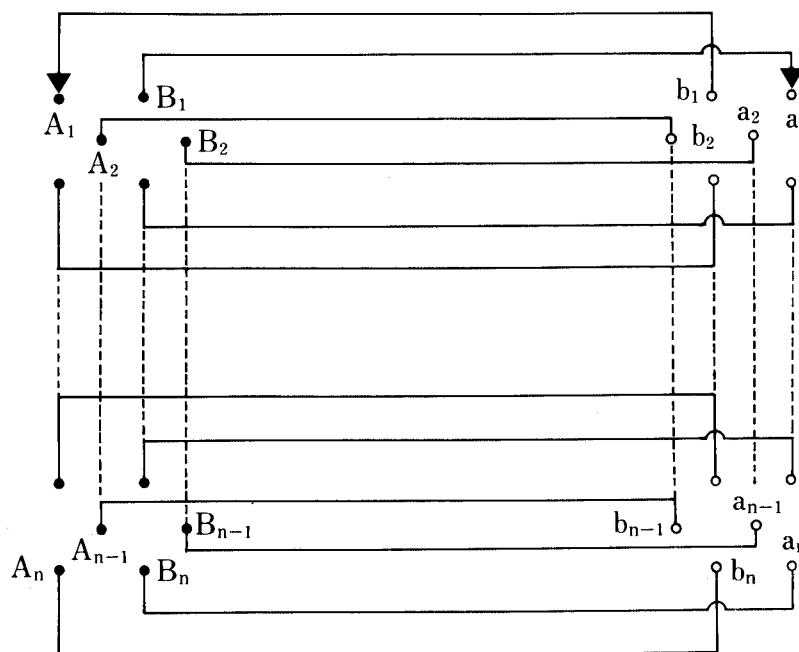
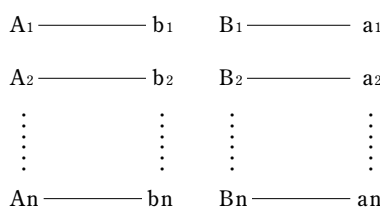


### Type A, A

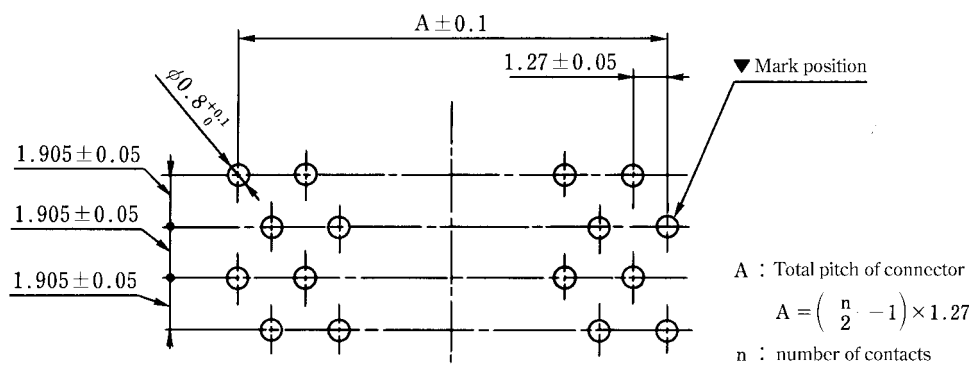


Cable 1 Connection

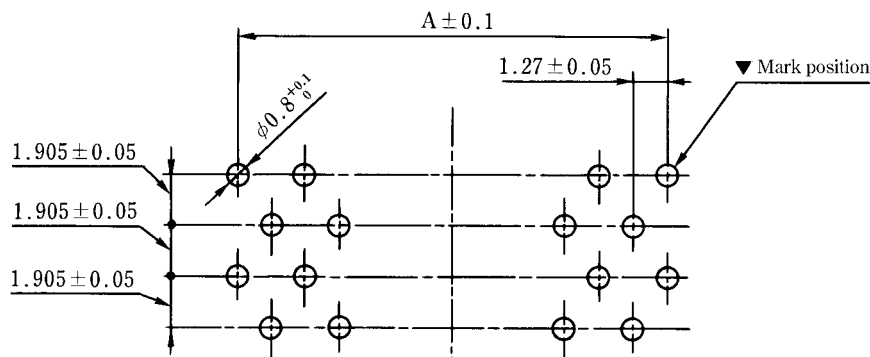
Cable 2 Connection



◆PCB mounting pattern



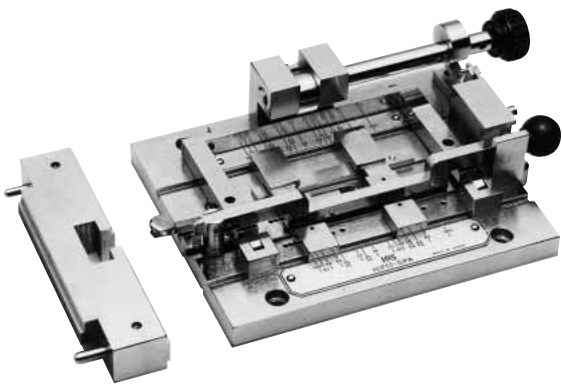
Cable Side  
(40, 52, 60, 68, 80, 100 contacts)



Cable Side  
(34, 50 contacts)

◆Connection Jig

●Guide Plate



| Part Number | CL No.     |
|-------------|------------|
| HIF12-GPA   | 550-0208-9 |

●Hi-Flex Connection Press



| Part Number                     | CL No.     |
|---------------------------------|------------|
| Hi-Flex Connection Press HHP502 | 550-0082-2 |