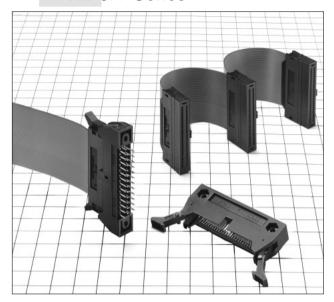
# 0.635mm Pitch ID Cable Connector

#### 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 AWG#30

The applicable cable is AWG#30 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.

### **■**Applications

Computers, peripheral terminal equipment, various kinds of business machines.

### **■**Product Specifications

| Dutin  | Current rating: 0.5A     | Operating Temperature Range : -55 to +85°C(Note 1) | Storage Temperature Range : -10 to +60°C(Note 2) |
|--------|--------------------------|--|--|
| Rating | Voltage rating : 125V AC | Operating Moisture Range: 40 to 80%                | 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 1 $\mu$ s 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.              | (-65°C: 30 minutes ->15 to 35°C: 5 minutes max.<br>125°C: 30 minutes-> 15 to 35°C: 5 minutes max.) 5 cycles |
| 7. Durability (Mating/un-mating) | Contact resistance: 30m ohms max.                   | 500 cycles  |
| Q. Decistores to Coldering heat  | No deformation of components affecting performance  | Flow: 260℃ for 10 seconds   |
| 8. Resistance to Soldering heat  | No deformation of components affecting performance. | Manual soldering: 300℃ for 3 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.

#### ■Material

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

### **■**Ordering Information

#### ●Pin Header

$$\frac{\mathsf{HIF6}}{\bullet} \quad \frac{\mathsf{H}}{\bullet} \quad \frac{*}{\bullet} \quad \frac{\mathsf{P}}{\bullet} \quad \frac{\mathsf{A}}{\bullet} \quad \frac{\mathsf{1.27}}{\bullet} \quad \frac{\mathsf{DSA}}{\bullet}$$

1 Series Name : HIF 6 2 H: Standard type **3** Number of contacts: 34, 40, 50, 60, 80, 100 4 P : Pin header **5** A : Selective gold plating 6 Contact Pitch : 1.27mm 7 Contact style : DS : Right angle type DSA: Straight type

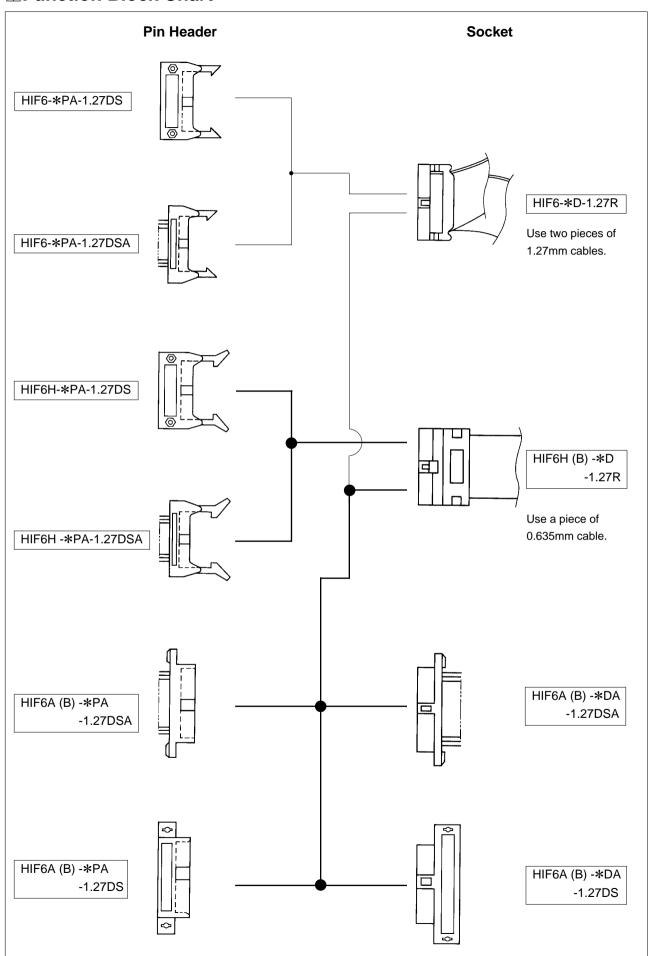
#### **●**Socket

$$\frac{HIF6}{0} \quad \frac{H}{0} - \frac{*}{6} \quad \frac{D}{0} - \frac{1.27}{6} \quad \frac{R}{6}$$

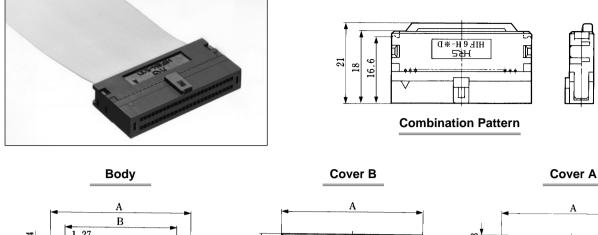
1 Series Name : HIF 6 2 H: Standard type HB: Bus connection type **3** Number of contacts: 34, 40, 50, 60, 80, 100 4 D : Socket 6 Contact Pitch : 1.27mm 6 R: ID type

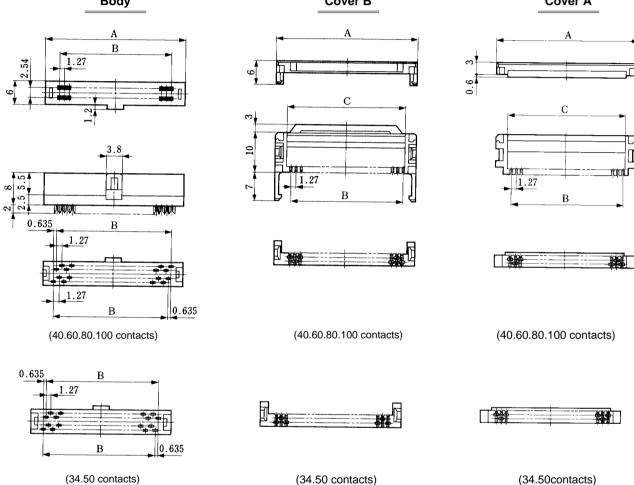
\* If needed, please order HIF6H series connectors with cable attached. Designate the connection circuit and cable length.

#### **♦**Function Block Chart



#### **■**Socket





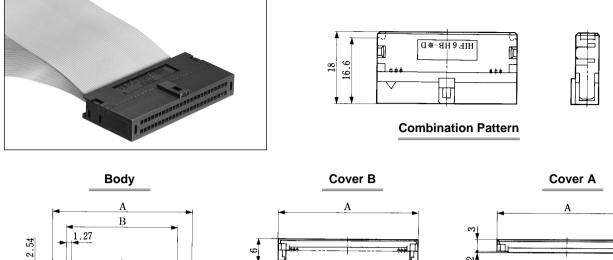
Unit: mm

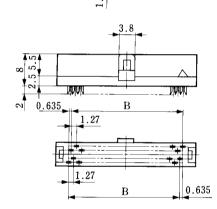
| Part Number      | CL No.     | Number of Contacts | Α     | В     | С     |
|------------------|------------|--------------------|-------|-------|-------|
| HIF6H- 34D-1.27R | 630-0156-0 | 34                 | 27.44 | 20.32 | 21.84 |
| HIF6H- 40D-1.27R | 630-0151-7 | 40                 | 31.25 | 24.13 | 25.65 |
| HIF6H- 50D-1.27R | 630-0152-0 | 50                 | 37.60 | 30.48 | 32.00 |
| HIF6H- 60D-1.27R | 630-0153-2 | 60                 | 43.95 | 36.83 | 38.35 |
| HIF6H- 80D-1.27R | 630-0154-5 | 80                 | 56.65 | 49.53 | 51.05 |
| HIF6H-100D-1.27R | 630-0155-8 | 100                | 69.35 | 62.23 | 63.75 |

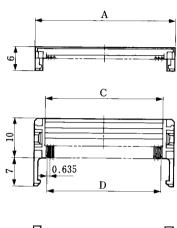
<sup>\*</sup> If needed, please order HIF6H series connectors with cable attached.

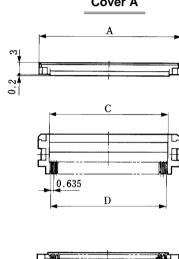
Designate the connection circuit and cable length on catalog pages B72 and B73.

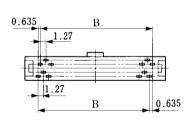
#### **■**Socket for bus-line connection

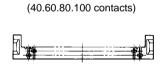


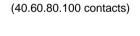














| (34.50) | contacts) |
|---------|-----------|
|---------|-----------|

(34.50 contacts)

(34.50contacts)

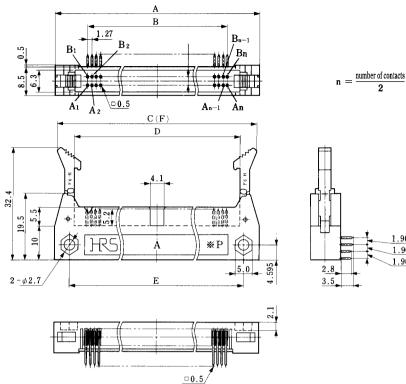
|                   |            |                    |       |       |       | Unit: mm |
|-------------------|------------|--------------------|-------|-------|-------|----------|
| Part Number       | CL No.     | Number of Contacts | Α     | В     | С     | D        |
| HIF6HB- 34D-1.27R | 630-0181-8 | 34                 | 27.44 | 20.32 | 21.84 | 20.955   |
| HIF6HB- 40D-1.27R | 630-0182-0 | 40                 | 31.25 | 24.13 | 25.65 | 24.765   |
| HIF6HB- 50D-1.27R | 630-0183-3 | 50                 | 37.60 | 30.48 | 32.00 | 31.115   |
| HIF6HB- 60D-1.27R | 630-0184-6 | 60                 | 43.95 | 36.83 | 38.35 | 37.465   |
| HIF6HB- 80D-1.27R | 630-0185-9 | 80                 | 56.65 | 49.53 | 51.05 | 50.165   |
| HIF6HB-100D-1.27R | 630-0186-1 | 100                | 69.35 | 62.23 | 63.75 | 62.865   |

<sup>\*</sup> Please order HIF6H series connectors with cable attached.

Designate the connection circuit and cable length on pages B72 and B73.

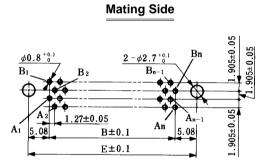
### **■**Right Angle Pin Header





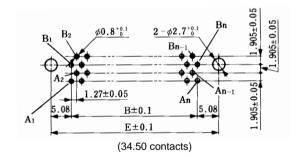
## **●**PCB mounting pattern

•indicates mark positions.



(40.60.80.100 contacts)

#### **Mating Side**

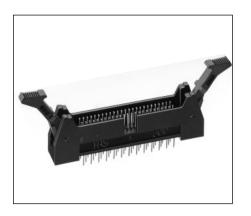


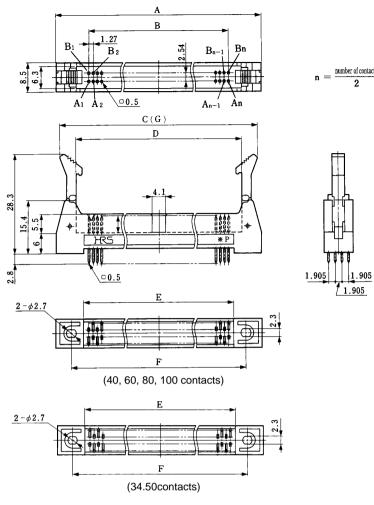
Unit: mm

1.905

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

### **■**Straight Pin Header

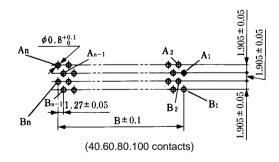




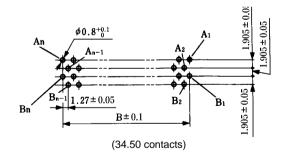
## **●**PCB mounting pattern

indicates mark positions.

#### **Guide Key Side**



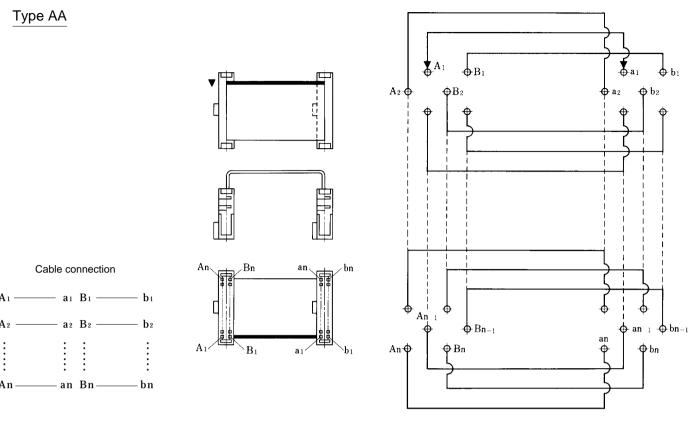
### Guide Key Side

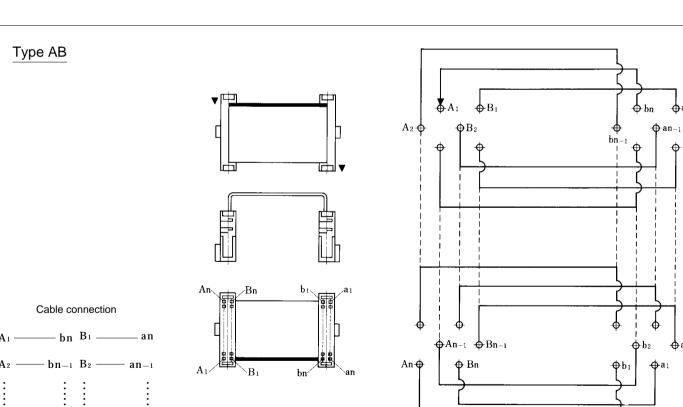


Unit: mm

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

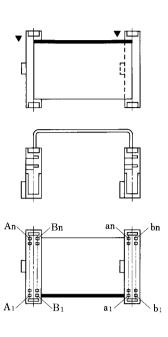
# **◆ Connection Circuit Diagram** 40, 60, 80 and 100 contacts

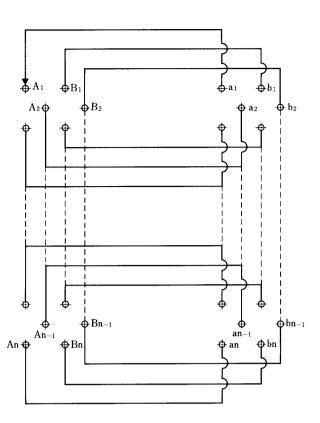




### **◆ Connection Circuit Diagram** 34, 50 contacts

### Type AA





### Type AB

Cable connection

- a<sub>2</sub> B<sub>2</sub> ---

— an Bn——

An \_\_\_\_\_ b<sub>1</sub> Bn \_\_\_\_ a<sub>1</sub>

- a<sub>1</sub> B<sub>1</sub> ----- b<sub>1</sub>

