

# 2.54mm Pitch Low Profile Connector

## HIF3FB and HIF3FC Series

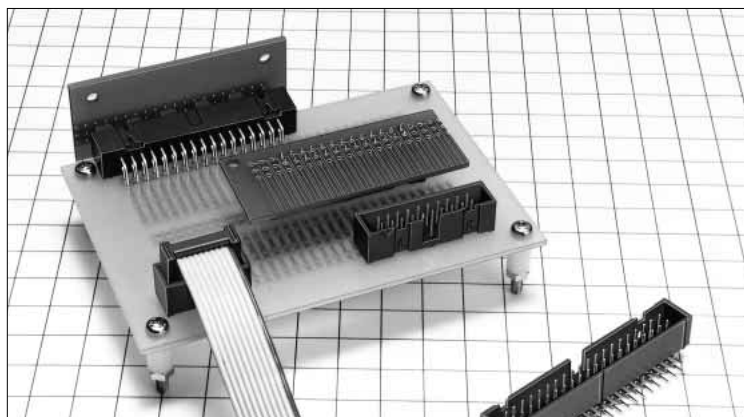


Photo: HIF3FC Series

### ■ Features

#### 1. Flux Prevention

HIF3FC series straight type takes complete flux tight measures.

#### 2. Low Profile

The pin header is a low profile of height 9.2mm. The board to board clearance is 12.2mm for stacking connection.

### ■ Applications

Computers, termination equipment, various kinds of electronic equipment, Office Automation machines and so on

### ■ Product Specifications

|        |   |   |  |
|--------|---|---|--|
| Rating | Current rating: 1A<br>Voltage rating: 200V AC | Operating Temperature Range: -55 to +85°C (Note 1)<br>Operating Humidity Range: 40 to 80% | Storage Temperature Range: -10 to +60°C (Note 2)<br>Operating Humidity Range: 40 to 70% (Note 2) |
|--------|---|---|--|

| Item                             | Specification                                       | Condition   |
|----------------------------------|---|---|
| 1. Insulation Resistance         | 1000M ohms  | 500V DC   |
| 2. Withstanding Voltage          | No flashover or insulation breakdown.               | 650V AC/1 minute.   |
| 3. Contact Resistance            | 15m 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. → 85°C: 30 minutes → 15 to 35°C: 5 minutes max.) 5 cycles |
| 7. Durability (Mating/un-mating) | Contact resistance: 15 m ohms max.                  | 500 cycles  |
| 8. Resistance to Soldering heat  | No deformation of components affecting performance. | Solder bath: 260°C for 10 seconds   |
|                                  |   | Manual soldering: 350°C 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.

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

| Parts     | Material   | Finish       | Remarks                            |
|-----------|------------|--------------|------------------------------------|
| Insulator | PBT        | Black        | UL94V-0                            |
| Contact   | Pin header | Brass        | Contact area : Gold plated         |
|           | Receptacle | Copper alloy | Termination area : Pure tin plated |

### ■ Ordering Information

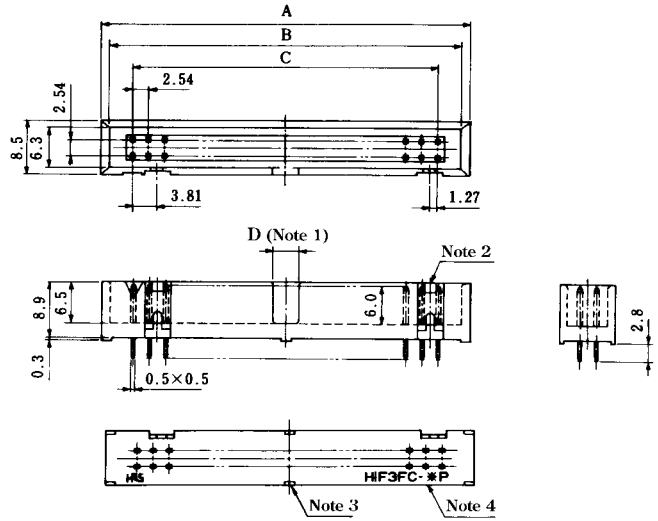
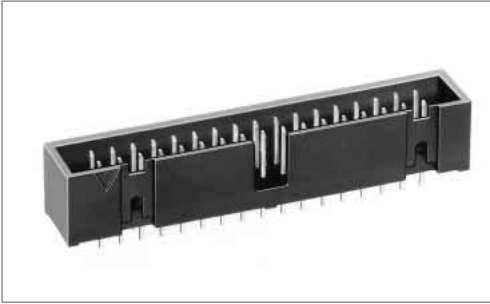
**HIF3FC- \* P A - 2.54 DSA**

① ② ③ ④ ⑤ ⑥

|                       |   |  |
|-----------------------|---|--|
| ① Series Name         | : HIF3FB (60, 64 contacts)<br>: HIF3FC (10~50 contacts) | ④ A: Selective gold plating                                    |
| ② Number of contacts: | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64              | ⑤ Contact pitch: 2.54mm  |
| ③ P                   | : Pin header  | ⑥ Contact type<br>DSA : Straight type<br>DS : Right angle type |
| D                     | : Socket  |  |

HIF3FB and HIF3FC Series 2.54mm Pitch Low Profile Connector

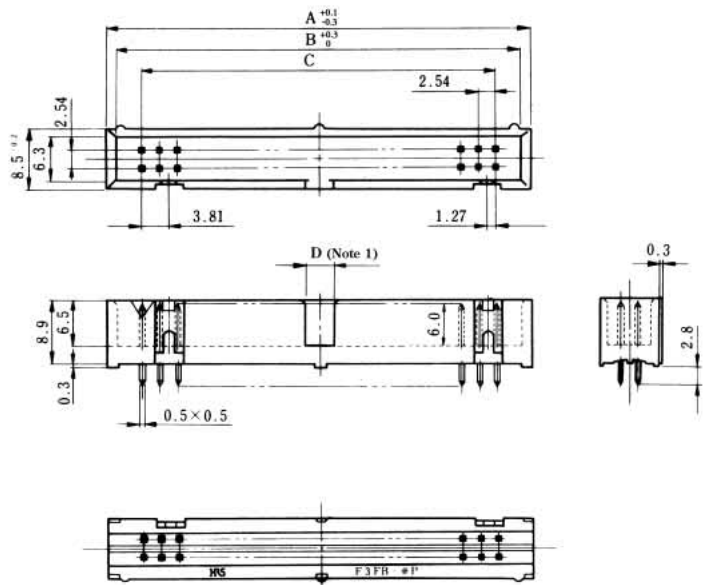
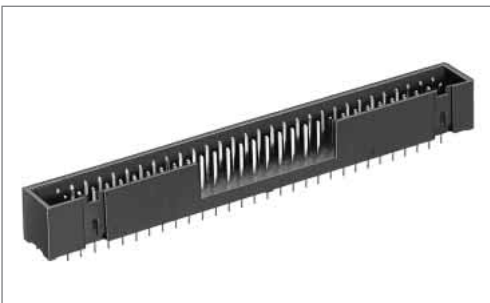
## ■Straight Type Pin Header



- Note 1: Two types of 50 contacts are available. Please use products according to the table as shown below.
- Note 2: The number of polarizing key mounted positions differs according to products. Please refer to the table as shown below.
- Note 3: The 10 contact type has no standoff at the center.
- Note 4: \* indicates the number of contacts.

Unit: mm

| Part Number              | CL No.        | Number of Contacts | A     | B     | C     | D (Note 1) | Polarizing Key Mounted Position(Note 2)           | RoHS |
|--------------------------|---------------|--------------------|-------|-------|-------|------------|---|------|
| HIF3FC -10PA-2.54DSA(71) | 616-0161-4-71 | 10                 | 20.2  | 17.5  | 10.16 | 4.1        | None  | YES  |
| HIF3FC -14PA-2.54DSA(71) | 616-0162-7-71 | 14                 | 25.28 | 22.58 | 15.24 | 4.1        | 1 point on the left side                          |      |
| HIF3FC -16PA-2.54DSA(71) | 616-0163-0-71 | 16                 | 27.82 | 25.12 | 17.78 | 4.1        | 1 point on the right and left sides, respectively |      |
| HIF3FC -20PA-2.54DSA(71) | 616-0164-2-71 | 20                 | 32.9  | 30.2  | 22.86 | 4.1        |   |      |
| HIF3FC -26PA-2.54DSA(71) | 616-0165-5-71 | 26                 | 40.52 | 37.82 | 30.48 | 4.1        |   |      |
| HIF3FC -30PA-2.54DSA(71) | 616-0166-8-71 | 30                 | 45.6  | 42.9  | 35.56 | 4.1        |   |      |
| HIF3FC -34PA-2.54DSA(71) | 616-0167-0-71 | 34                 | 50.68 | 47.98 | 40.64 | 4.1        |   |      |
| HIF3FC -40PA-2.54DSA(71) | 616-0168-3-71 | 40                 | 58.30 | 55.60 | 48.26 | 4.1        |   |      |
| HIF3FC -50PA-2.54DSA(71) | 616-0169-6-71 | 50                 | 71.0  | 68.3  | 60.96 | 4.1        |   |      |
| HIF3FCA-50PA-2.54DSA(71) | 616-0170-5-71 | 50                 | 71.0  | 68.3  | 60.96 | 26.96      |   |      |

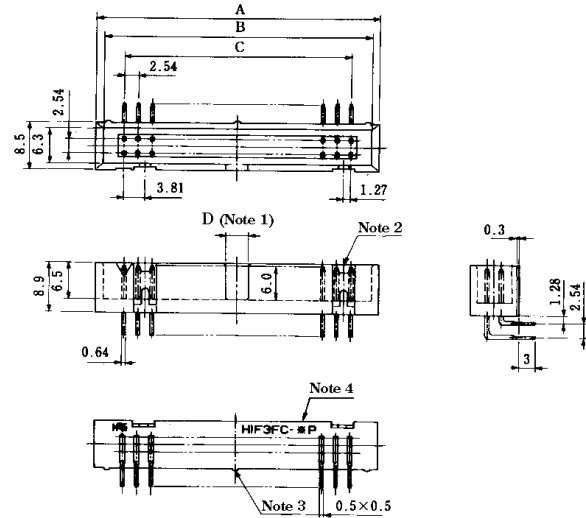
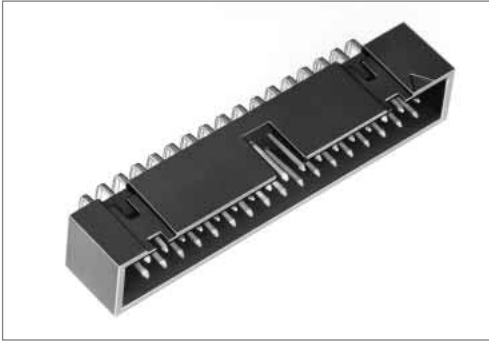


- Note 1: Two types are available. Please use them according to the table as shown below.

Unit: mm

| Part Number              | CL No.        | Number of Contacts | A     | B    | C     | D (Note 1) | Polarizing Key Mounted Position                   | RoHS |
|--------------------------|---------------|--------------------|-------|------|-------|------------|---|------|
| HIF3FB -60PA-2.54DSA(71) | 616-0130-0-71 | 60                 | 83.7  | 81.0 | 73.66 | 4.1        | 1 point on the right and left sides, respectively | YES  |
| HIF3FBA-60PA-2.54DSA(71) | 616-0142-0-71 | 60                 | 83.7  | 81.0 | 73.66 | 26.96      |   |      |
| HIF3FB -64PA-2.54DSA(71) | 616-0131-3-71 | 64                 | 88.78 | 86.1 | 78.74 | 4.1        |   |      |
| HIF3FBA-64PA-2.54DSA(71) | 616-0143-2-71 | 64                 | 88.78 | 86.1 | 78.74 | 26.96      |   |      |

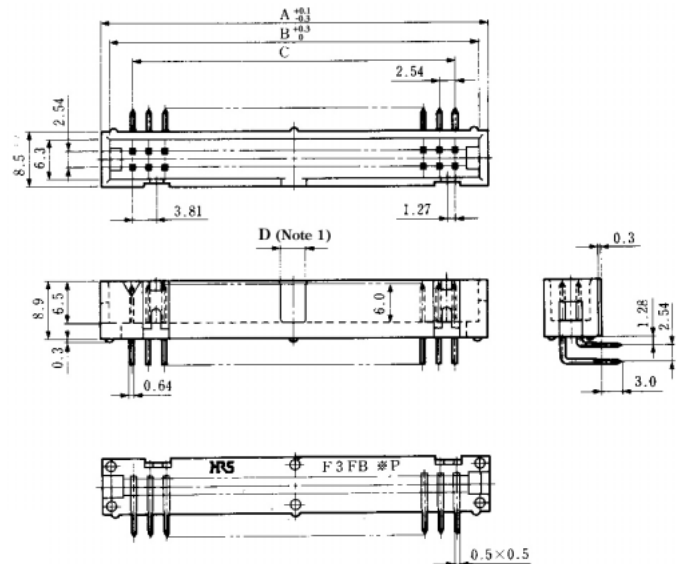
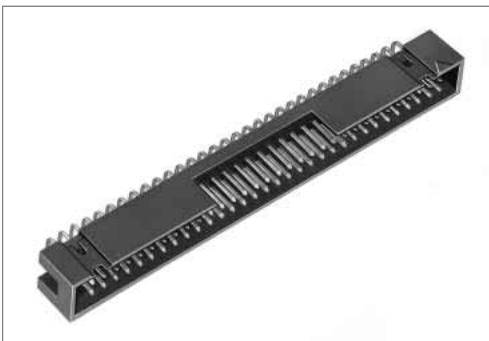
## Right Angle Type Pin Header



- Note 1: Two types of 50 contacts are available. Please use products according to the table as shown below.
- Note 2: The number of polarizing key mounted positions differs according to products. Please refer to the table as shown below.
- Note 3: The 10 contact type has no standoff at the center.
- Note 4: \* indicates the number of contacts.

Unit: mm

| Part Number             | CL No.        | Number of Contacts | A     | B     | C     | D (Note 1) | Polarizing Key Mounted Position(Note 2)           | RoHS |
|-------------------------|---------------|--------------------|-------|-------|-------|------------|---|------|
| HIF3FC -10PA-2.54DS(71) | 616-0061-0-71 | 10                 | 20.2  | 17.5  | 10.16 | 4.1        | None  | YES  |
| HIF3FC -14PA-2.54DS(71) | 616-0062-2-71 | 14                 | 25.28 | 22.58 | 15.24 | 4.1        | 1 point on the left side                          |      |
| HIF3FC -16PA-2.54DS(71) | 616-0063-5-71 | 16                 | 27.82 | 25.12 | 17.78 | 4.1        | 1 point on the right and left sides, respectively |      |
| HIF3FC -20PA-2.54DS(71) | 616-0064-8-71 | 20                 | 32.9  | 30.2  | 22.86 | 4.1        |   |      |
| HIF3FC -26PA-2.54DS(71) | 616-0065-0-71 | 26                 | 40.52 | 37.82 | 30.48 | 4.1        |   |      |
| HIF3FC -30PA-2.54DS(71) | 616-0066-3-71 | 30                 | 45.6  | 42.9  | 35.56 | 4.1        |   |      |
| HIF3FC -34PA-2.54DS(71) | 616-0067-6-71 | 34                 | 50.68 | 47.98 | 40.64 | 4.1        |   |      |
| HIF3FC -40PA-2.54DS(71) | 616-0068-9-71 | 40                 | 58.30 | 55.60 | 48.26 | 4.1        |   |      |
| HIF3FC -50PA-2.54DS(71) | 616-0069-1-71 | 50                 | 71.0  | 68.3  | 60.96 | 4.1        |   |      |
| HIF3FCA-50PA-2.54DS(71) | 616-0070-0-71 | 50                 | 71.0  | 68.3  | 60.96 | 26.96      |   |      |



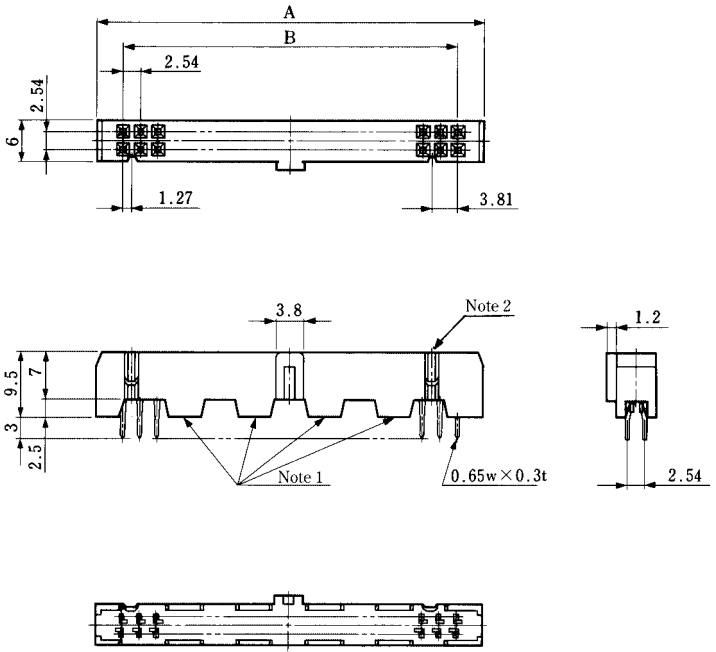
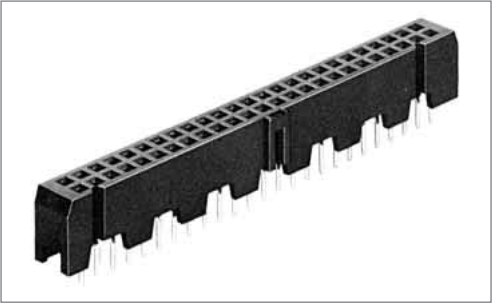
- Note 1: Two types are available. Please use them according to the table as shown below.

Unit: mm

| Part Number             | CL No.        | Number of Contacts | A     | B    | C     | D (Note 1) | Polarizing Key Mounted Position                   | RoHS |
|-------------------------|---------------|--------------------|-------|------|-------|------------|---|------|
| HIF3FB -60PA-2.54DS(71) | 616-0030-6-71 | 60                 | 83.7  | 81.0 | 73.66 | 4.1        | 1 point on the right and left sides, respectively | YES  |
| HIF3FBA-60PA-2.54DS(71) | 616-0042-5-71 | 60                 | 83.7  | 81.0 | 73.66 | 26.96      |   |      |
| HIF3FB -64PA-2.54DS(71) | 616-0031-9-71 | 64                 | 88.78 | 86.1 | 78.74 | 4.1        |   |      |
| HIF3FBA-64PA-2.54DS(71) | 616-0043-8-71 | 64                 | 88.78 | 86.1 | 78.74 | 26.96      |   |      |

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■ Straight Type Receptacle



Unit: mm

| Part Number             | CL No.        | Number of Contacts | A     | B     | Polarizing Key Mounted Position                   | RoHS |
|-------------------------|---------------|--------------------|-------|-------|---|------|
| HIF3FB-10DA-2.54DSA(71) | 616-0201-7-71 | 10                 | 17.27 | 10.16 | None  | YES  |
| HIF3FB-16DA-2.54DSA(71) | 616-0203-2-71 | 16                 | 24.89 | 17.78 | 1 point on the right and left sides, respectively |      |
| HIF3FB-20DA-2.54DSA(71) | 616-0204-5-71 | 20                 | 29.97 | 22.86 |   |      |
| HIF3FB-26DA-2.54DSA(71) | 616-0205-8-71 | 26                 | 37.59 | 30.48 |   |      |
| HIF3FB-30DA-2.54DSA(71) | 616-0206-0-71 | 30                 | 42.67 | 35.56 |   |      |
| HIF3FB-34DA-2.54DSA(71) | 616-0207-3-71 | 34                 | 47.75 | 40.64 |   |      |
| HIF3FB-40DA-2.54DSA(71) | 616-0208-6-71 | 40                 | 55.37 | 48.26 |   |      |
| HIF3FB-50DA-2.54DSA(71) | 616-0209-9-71 | 50                 | 68.07 | 60.96 |   |      |
| HIF3FB-60DA-2.54DSA(71) | 616-0210-8-71 | 60                 | 80.77 | 73.66 |   |      |

Note 1: Standoff number differs according to products.

Note 2: The polarizing key number differs according to products.