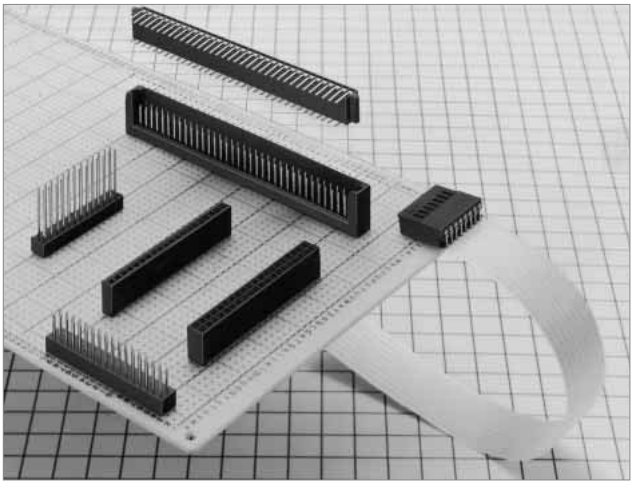
# 2.54mm Pitch Board to Board Connector

## HIF3H Series



## ■Features

### 1. Product Variation

Afford to connect the board to board horizontally or vertically.

### 2. Compatibility

Achieve combination with other HIF3H series.

## ■Applications

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

## ■Product Specifications

| | | | |
|---|---|---|---|
| Rating | Current rating : 3A<br>Voltage rating : 300V AC | Operating Temperature Range : -55 to +85℃ (Note 1)<br>Operating Humidity Range : 40 to 80% | Storage Temperature Range : -10 to +60℃ (Note 2)<br>Operating Humidity Range : 40 to 70% (Note 2) |

| Item | Specification | Condition |
|---|---|---|
| 1. Insulation Resistance | 1000MΩ | 500V DC |
| 2. Withstanding Voltage | No flashover or insulation breakdown. | 1000V AC/1 minute. |
| 3. Contact Resistance | 15mΩ max. | Measured at 0.1A |
| 4. Vibration | No electrical discontinuity of 1μs or more | Frequency : 10 to 55 Hz, single amplitude of 0.75mm, 2 hours in each of the 3 directions. |
| 5. Humidity (Steady state) | Insulation resistance : 1000Ω min. | 96 hours at temperature of 40℃ and humidity of 90% to 95% |
| 6. Temperature Cycle | No damage, cracks, or parts looseness. | ( -55℃ : 30 minutes→15 to 35℃: 5 minutes max.→ 125℃ : 30 minutes→15 to 35℃: 5 minutes max.) 5 cycles |
| 7. Durability (Mating/un-mating) | Contact resistance : 15mΩ max. | 500 cycles |
| 8. Resistance to Soldering heat | No deformation of components affecting performance. | Solder bath : 260℃ for 10 seconds |
| | | Manual soldering : 360℃ 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 / Finish

| Parts | | Material | Finish | Remarks |
|---|---|---|---|---|
| Insulator | | PBT | Black | UL94V-0 |
| Receptacle Contact | DS | Phosphor bronze | Selective gold plated | ——— |
| | DSA | | | |
| Pin header | | Brass or phosphor bronze | Selective gold plated | |

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## ■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

**HIF3H - ＊ P B - 2.54 DSA**
❶ ❷ ❸ ❹ ❺ ❻

| | |
|---|---|
| ❶ Series Name | : HIF3H |
| ❷ Number of contacts | : 4, 6, 10, 12, 14, 16, 20, 24, 26, 30, 34, 40, 50, 60 |
| ❸ P | : Pin header |
| ❹ Contact material | A : Phosphor bronze (DS : brass)<br>B : Brass |
| ❺ Contact pitch | : 2.54mm |
| ❻ Contact type | DS : Right angle type<br>DSA : Straight type<br>W : Wrapping type |

### ●Socket

**HIF3H A - ＊ D A - 2.54 DSA**
❶ ❷ ❸ ❹ ❺ ❻ ❼

| | |
|---|---|
| ❶ Series Name | : HIF3H |
| ❷ No symbol | : Standard<br>A : With mis-insertion preventive guide<br>B : Similarly, guide position center 1 point type for 50, 60 and 64 contacts |
| ❸ Number of contacts | : 4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 25, 26, 30, 34, 40, 50, 60, 64 |
| ❹ Contact alignment | : D : double rows<br>S : single row |
| ❺ A | : Straight selective gold plated |
| B | : Right angle selective gold plated |
| ❻ Contact pitch | : 2.54mm |
| ❼ Contact type | DS : Right angle type<br>DSA : Straight type |

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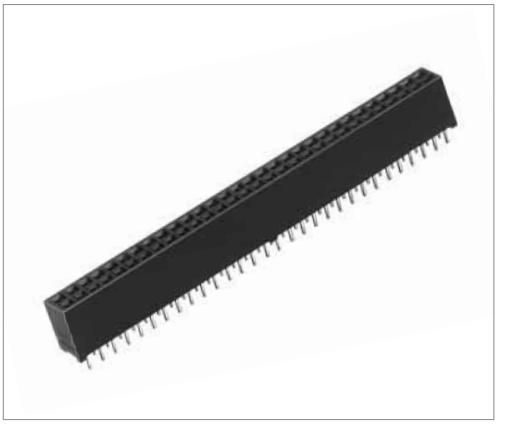
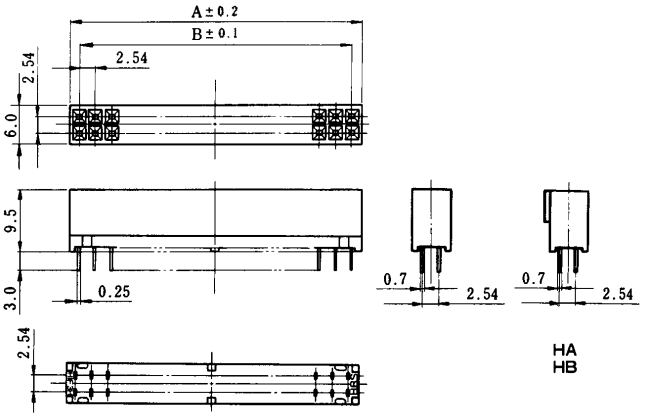
## ■Receptacle Straight Through hole Type



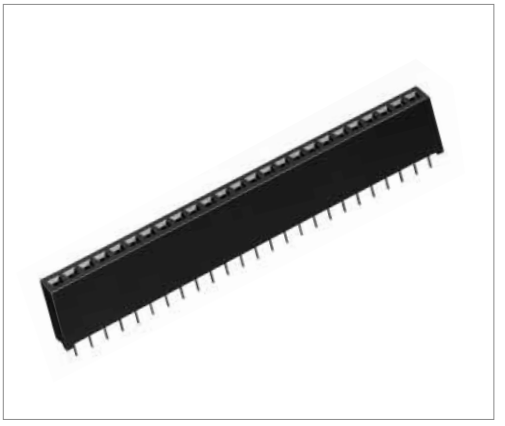


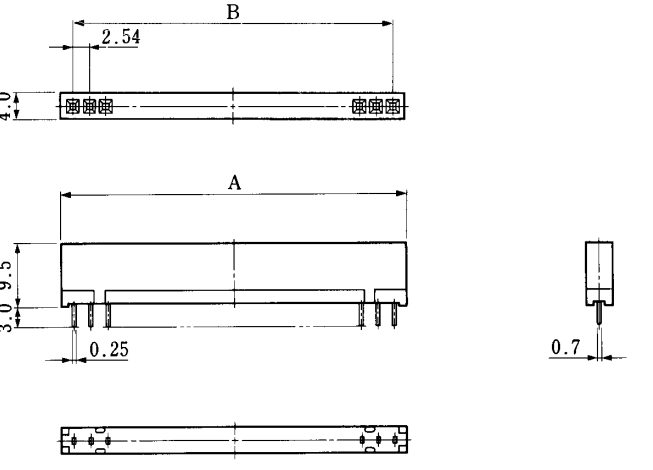

Unit : mm

| Part No. | HRS No. | No. of Contacts | A | B | RoHS |
|---|---|---|---|---|---|
| HIF3H - 6DA-2.54DSA(61) | 618-0139-8 61 | 6 | 8.62 | 5.08 | YES |
| HIF3H -10DA-2.54DSA(61) | 618-0101-5 61 | 10 | 13.7 | 10.16 | |
| HIF3HA-10DA-2.54DSA(61) | 618-0121-2 61 | | | | |
| HIF3H -12DA-2.54DSA(61) | 618-0102-8 61 | 12 | 16.24 | 12.7 | |
| HIF3H -16DA-2.54DSA(61) | 618-0103-0 61 | 16 | 21.32 | 17.78 | |
| HIF3HA-16DA-2.54DSA(61) | 618-0123-8 61 | | | | |
| HIF3H -18DA-2.54DSA(61) | 618-0111-9 61 | 18 | 23.86 | 20.32 | |
| HIF3H -20DA-2.54DSA(61) | 618-0104-3 61 | 20 | 26.4 | 22.86 | |
| HIF3HA-20DA-2.54DSA(61) | 618-0124-0 61 | | | | |
| HIF3H -24DA-2.54DSA(61) | 618-0113-4 61 | 24 | 31.46 | 27.94 | |
| HIF3H -26DA-2.54DSA(61) | 618-0105-6 61 | 26 | 34.02 | 30.48 | |
| HIF3HA-26DA-2.54DSA(61) | 618-0125-3 61 | | | | |

| Part No. | HRS No. | No. of Contacts | A | B | RoHS |
|---|---|---|---|---|---|
| HIF3H -30DA-2.54DSA(61) | 618-0106-9 61 | 30 | 39.1 | 35.56 | YES |
| HIF3HA-30DA-2.54DSA(61) | 618-0126-6 61 | | | | |
| HIF3H -34DA-2.54DSA(61) | 618-0107-1 61 | 34 | 44.18 | 40.64 | |
| HIF3HA-34DA-2.54DSA(61) | 618-0127-9 61 | | | | |
| HIF3H -40DA-2.54DSA(61) | 618-0108-4 61 | 40 | 51.8 | 48.26 | |
| HIF3HA-40DA-2.54DSA(61) | 618-0128-1 61 | | | | |
| HIF3H -50DA-2.54DSA(61) | 618-0109-7 61 | 50 | 64.5 | 60.96 | |
| HIF3HA-50DA-2.54DSA(61) | 618-0129-4 61 | | | | |
| HIF3HB-50DA-2.54DSA(61) | 618-0131-6 61 | | | | |
| HIF3H -60DA-2.54DSA(61) | 618-0110-6 61 | 60 | 77.2 | 73.66 | |
| HIF3HA-60DA-2.54DSA(61) | 618-0130-3 61 | | | | |
| HIF3HB-60DA-2.54DSA(61) | 618-0132-9 61 | | | | |
| HIF3H -64DA-2.54DSA(61) | 618-0112-1 61 | 64 | 82.28 | 78.74 | |
| HIF3HA-64DA-2.54DSA(61) | 618-0134-4 61 | | | | |
| HIF3HB-64DA-2.54DSA(61) | 618-0133-1 61 | | | | |

## ■Receptacle Straight Through hole Type






Unit : mm

| Part No. | HRS No. | No. of Contacts | A | B | RoHS |
|---|---|---|---|---|---|
| HIF3H-6SA-2.54DSA(61) | 562-0713-1 61 | 6 | 16.24 | 12.7 | YES |
| HIF3H-10SA-2.54DSA(61) | 562-0719-8 61 | 10 | 26.4 | 22.86 | |
| HIF3H-12SA-2.54DSA(61) | 562-0723-5 61 | 12 | 31.48 | 27.94 | |
| HIF3H-14SA-2.54DSA(61) | 562-0655-7 61 | 14 | 36.56 | 33.02 | |
| HIF3H-20SA-2.54DSA(61) | 562-0704-0 61 | 20 | 51.8 | 48.26 | |
| HIF3H-25SA-2.54DSA(61) | 562-0705-3 61 | 25 | 64.5 | 60.96 | |

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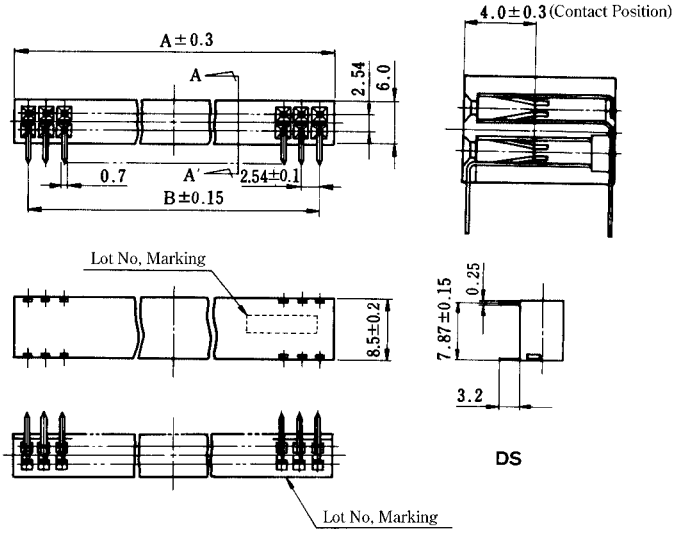
## ■Receptacle Right Angle Through hole Type




Unit : mm

| Part No. | HRS No. | No. of Contacts | A | B | RoHS |
|---|---|---|---|---|---|
| HIF3H- 4DB-2.54DS(61) | 618-0150-0 61 | 4 | 6.0 | 2.54 | YES |
| HIF3H- 8DB-2.54DS(61) | 618-0153-9 61 | 8 | 11.16 | 7.62 | |
| HIF3H-10DB-2.54DS(61) | 618-0141-0 61 | 10 | 13.7 | 10.16 | |
| HIF3H-12DB-2.54DS(61) | 618-0152-6 61 | 12 | 16.24 | 12.70 | |
| HIF3H-14DB-2.54DS(61) | 618-0154-1 61 | 14 | 18.78 | 15.24 | |
| HIF3H-16DB-2.54DS(61) | 618-0142-2 61 | 16 | 21.32 | 17.78 | |

| Part No. | HRS No. | No. of Contacts | A | B | RoHS |
|---|---|---|---|---|---|
| HIF3H-18DB-2.54DS(61) | 618-0165-8 61 | 18 | 23.86 | 20.32 | YES |
| HIF3H-20DB-2.54DS(61) | 618-0143-5 61 | 20 | 26.4 | 22.86 | |
| HIF3H-24DB-2.54DS(61) | 618-0216-7 61 | 24 | 31.48 | 27.94 | |
| HIF3H-26DB-2.54DS(61) | 618-0144-8 61 | 26 | 34.02 | 30.48 | |
| HIF3H-30DB-2.54DS(61) | 618-0145-0 61 | 30 | 39.1 | 35.56 | |
| HIF3H-34DB-2.54DS(61) | 618-0146-3 61 | 34 | 44.18 | 40.64 | |
| HIF3H-40DB-2.54DS(61) | 618-0147-6 61 | 40 | 51.8 | 48.26 | |
| HIF3H-50DB-2.54DS(61) | 618-0148-9 61 | 50 | 64.5 | 60.96 | |
| HIF3H-60DB-2.54DS(61) | 618-0149-1 61 | 60 | 77.2 | 73.66 | |

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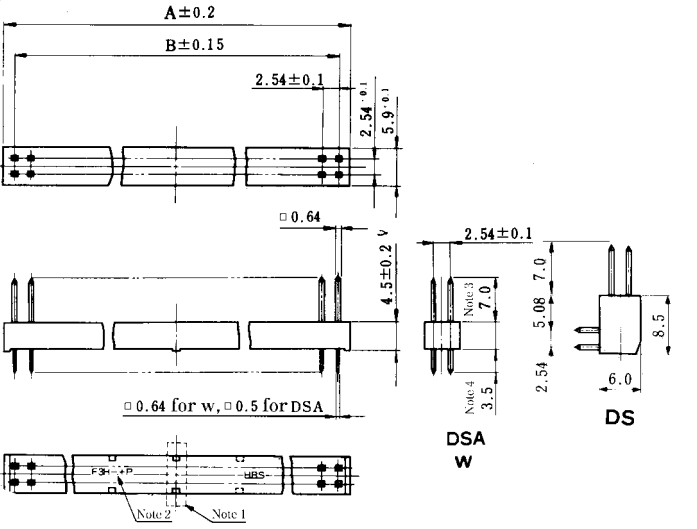
## ■Pin Header Through hole Type




Unit : mm

| Part No. | HRS No. | No. of Contacts | A | B | RoHS |
|---|---|---|---|---|---|
| HIF3H- 4PA-2.54DS(61) | 618-0073-1 61 | 4 | 6 | 2.54 | YES |
| HIF3H- 6PB-2.54DSA(61) | 618-0215-4 61 | 6 | 8.62 | 5.08 | |
| HIF3H-10PB-2.54DSA(61) | 618-0201-0 61 | 10 | 13.7 | 10.16 | |
| HIF3H-10P -2.54W | 618-0185-5 | | | | |
| HIF3H-12PB-2.54DSA(61) | 618-0202-2 61 | 12 | 16.24 | 12.7 | |
| HIF3H-14PB-2.54DSA(61) | 618-0213-9 61 | 14 | 18.78 | 15.24 | |
| HIF3H-16PB-2.54DSA(61) | 618-0203-5 61 | 16 | 21.3 | 17.78 | |
| HIF3H-16PA-2.54DS(61) | 618-0065-3 61 | | | | |
| HIF3H-20PB-2.54DSA(61) | 618-0204-8 61 | 20 | 26.4 | 22.86 | |
| HIF3H-20P -2.54W | 618-0183-0 | | | | |
| HIF3H-24PB-2.54DSA(61) | 618-0205-0 61 | 24 | 31.46 | 27.94 | |
| HIF3H-24PA-2.54DS(61) | 618-0067-9 61 | | | | |
| HIF3H-26PB-2.54DSA(61) | 618-0206-3 61 | 26 | 34.02 | 30.48 | |
| HIF3H-26P -2.54W | 618-0184-2 | | | | |

| Part No. | HRS No. | No. of Contacts | A | B | RoHS |
|---|---|---|---|---|---|
| HIF3H-30PB-2.54DSA(61) | 618-0207-6 61 | 30 | 39.1 | 35.56 | YES |
| HIF3H-30P -2.54W | 618-0186-8 | | | | |
| HIF3H-34PB-2.54DSA(61) | 618-0208-9 61 | 34 | 44.18 | 40.64 | |
| HIF3H-34P -2.54W | 618-0181-4 | | | | |
| HIF3H-40PB-2.54DSA(61) | 618-0209-1 61 | 40 | 51.8 | 48.26 | |
| HIF3H-40P -2.54W | 618-0182-7 | | | | |
| HIF3H-50PB-2.54DSA(61) | 618-0210-0 61 | 50 | 64.5 | 60.96 | |
| HIF3H-60PB-2.54DSA(61) | 618-0211-3 61 | 60 | 77.2 | 73.66 | |
| HIF3H-60P -2.54W | 618-0187-0 | | | | |

Note 1 : The stitch line area is divided in two for 50 and 60 contacts.
Note 2 : ✻indicates the number of contacts.
Note 3 : Wrapping is 6.0.
Note 4 : Wrapping is 16.0.

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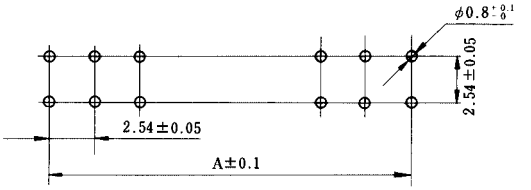
# ◆PCB mounting pattern

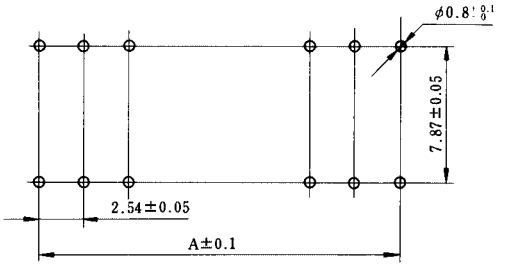
## ●Pin Header Straight and Right Angle Type



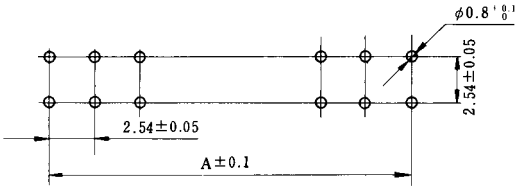

Size A List

| No. of Contacts | A |
|---|---|
| 4 | 2.54 |
| 6 | 5.08 |
| 8 | 7.62 |
| 10 | 10.16 |
| 12 | 12.7 |
| 14 | 15.24 |
| 16 | 17.78 |
| 18 | 20.32 |
| 20 | 22.86 |
| 24 | 27.94 |
| 26 | 30.48 |
| 30 | 35.56 |
| 34 | 40.64 |
| 40 | 48.26 |
| 50 | 60.96 |
| 60 | 73.66 |
| 64 | 78.74 |

## ●Receptacle Right Angle Type




## ●Receptacle Straight Type

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