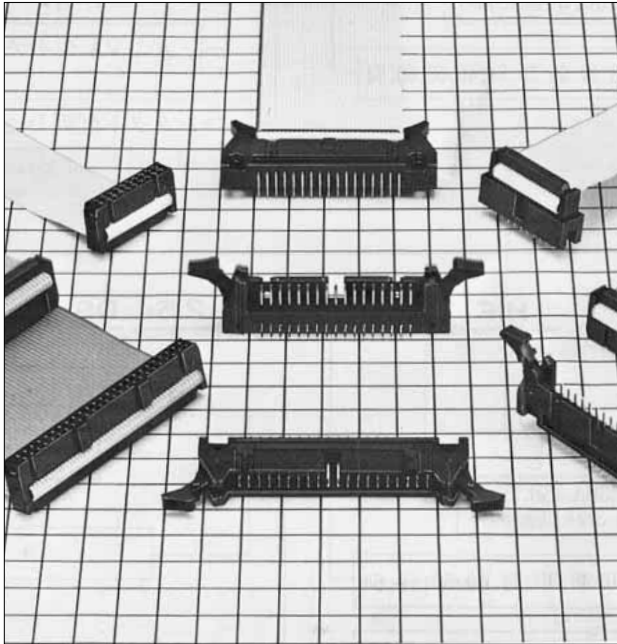


# Ribbon Cable connector Compliant with MIL Standard

## HIF3B Series



### ■Features

#### 1. Product Compliant with MIL Standard

HIF3B series has been developed as a product compliant with MIL standard, and used for wide applications.

#### 2. UL Approval Product

HIF3B series connectors are UL approved.

#### 3. Mechanism to Prevent Mis-insertion

This connector is equipped with the mechanism to prevent Mis-insertion as follows.

- ① The system provides the convex area to insert the guide-key on the pin header side, and to guide it in combination with the socket convex area (MIL standard).
- ② The system embeds and guides the polarizing key in the socket holes.

#### 4. Applicable Cable AWG#28

The applicable cable is UL2651 AWG#28 flat cable (7 cores./ 0.127mm, jacket dia. 0.9±0.1mm).

### ■Product Specifications

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

| Item                             | Specification                                       | Condition                                                                                                   |
|----------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 1. Insulation Resistance         | 1000M ohms min.                                     | 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.<br>125°C: 30 minutes → 15 to 35°C: 5 minutes max.) 5 cycles |
| 7. Durability (Mating/un-mating) | Contact resistance: 15m ohms 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.

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.

Note 4: Please note that there is a risk of deforming the lock when an excessive load is applied to the inside.

### ■Material

| Part               | Material         | Finish                |             | Remarks |
|--------------------|------------------|-----------------------|-------------|---------|
| Insulator          | PBT              | Black                 |             | UL94V-0 |
| Socket Contact     | Beryllium copper | Connection area       | Gold plated | _____   |
| Pin header contact | Brass            | Selective Gold plated |             | _____   |

■Ordering Information

●Socket

HIF   3B   -   \*   D   -   2.54   R  
①   ②   ③   ④   ⑤   ⑥

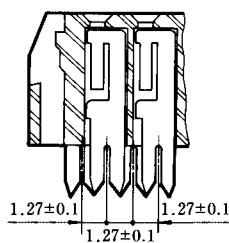
|                      |                                              |
|----------------------|----------------------------------------------|
| ① Series Name        | : HIF                                        |
| ② Series No.         | : 3B, 3BA, 3BB (50, 60, 64 contacts only)    |
| ③ Number of contacts | : 6,10,14,16, 20, 26, 30, 34, 40, 50, 60, 64 |
| ④ Contact alignment  | : D : Double                                 |
| ⑤ Contact pitch      | : 2.54mm                                     |
| ⑥ Connection type    | R : ID type                                  |

●Pin Header

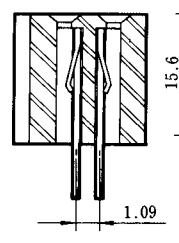
HIF   3B   -   \*   P   A   -   2.54   DS  
①   ②   ③   ④   ⑤   ⑥   ⑦

|                      |                                                                                                                                  |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| ① Series Name        | : HIF                                                                                                                            |
| ② Series No.         | :<br>3B : (14 contacts not included)   3BC: (10 contacts only)<br>3BA, 3BB: (50, 60, 64 contacts only)   3BD: (10 contacts only) |
| ③ Number of contacts | : 6,10,14,16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                     |
| ④ P                  | : Pin header                                                                                                                     |
| ⑤ A                  | : Selective gold plated                                                                                                          |
| ⑥ Contact pitch      | : 2.54mm                                                                                                                         |
| ⑦ Contact style      | DS : Right angle type<br>DSA : Straight type                                                                                     |

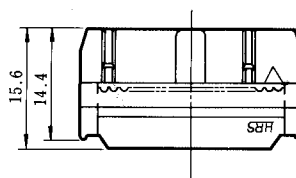
## ■Socket (With guide to prevent mis-insertion)



Section A to A'

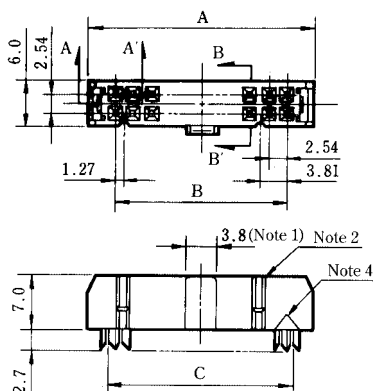


Section B to B'

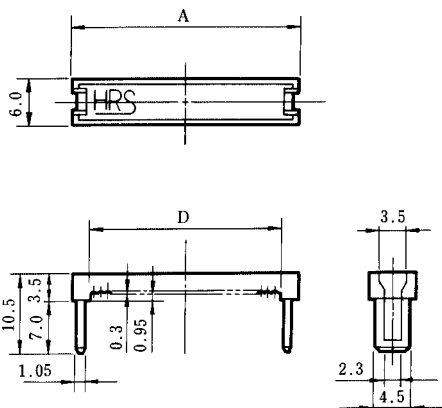


Combination pattern

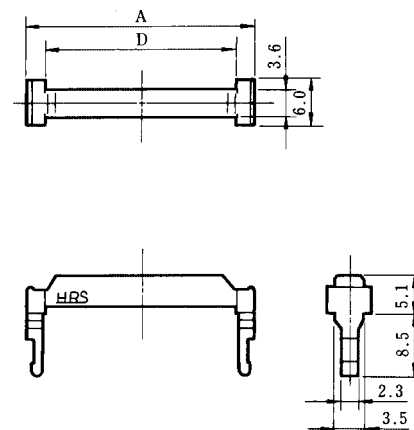
Body



Protector



Clamp



Note1, Note2: The number of polarizing keys and polarizing keyways changes according to products. Refer to the list as shown below.

Note3: The 50, 60 and 64 contact connector contain two types of polarizing guides. Use the products, referring to Notes 1 and 2.

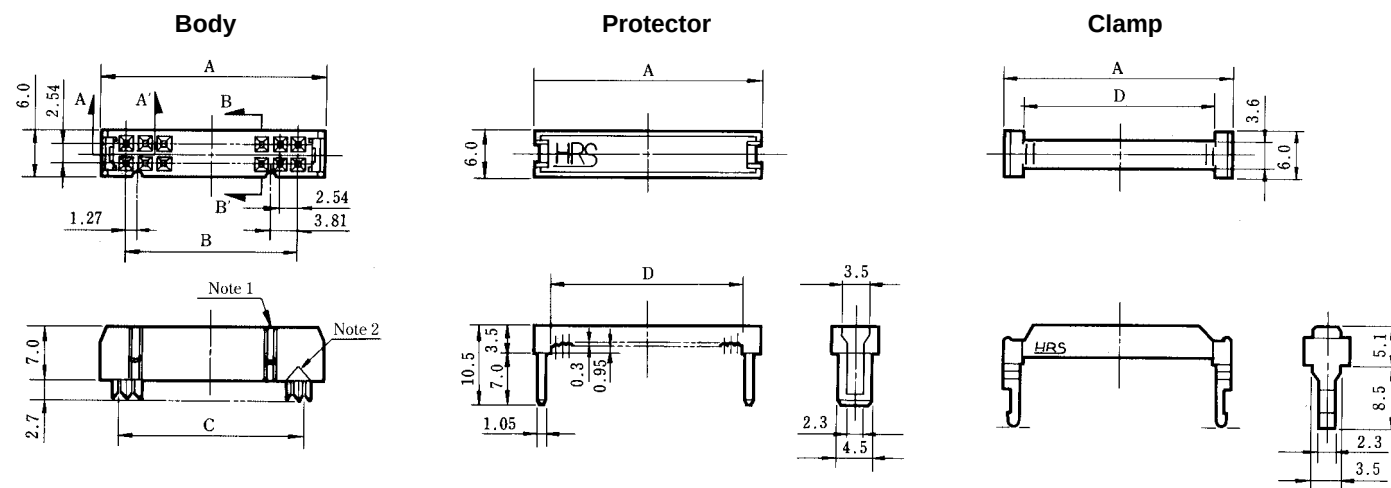
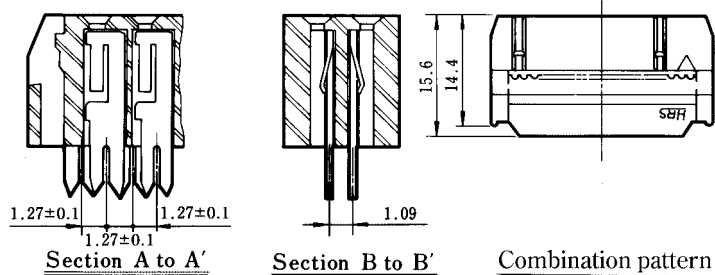
Note4: The 6 contact has no polarizing mark.

Unit:mm

| Part Number      | CL No.     | Number of Contacts | A     | B     | C     | D     | Polarizing Guide<br>(Note 1)       | Polarizing Keyway<br>(Note 2)      | RoHS |
|------------------|------------|--------------------|-------|-------|-------|-------|------------------------------------|------------------------------------|------|
| HIF3BA- 6D-2.54R | 610-0032-3 | 6                  | 12.19 | 5.08  | 6.35  | 7.72  | One at center                      | None                               | YES  |
| HIF3BA-10D-2.54R | 610-0021-7 | 10                 | 17.27 | 10.16 | 11.43 | 12.8  |                                    | One on left side                   |      |
| HIF3BA-14D-2.54R | 610-0022-0 | 14                 | 22.35 | 15.24 | 16.51 | 17.88 |                                    | One on right and left sides, resp. |      |
| HIF3BA-16D-2.54R | 610-0023-2 | 16                 | 24.89 | 17.78 | 19.05 | 20.42 |                                    |                                    |      |
| HIF3BA-20D-2.54R | 610-0024-5 | 20                 | 29.97 | 22.86 | 24.13 | 25.5  |                                    |                                    |      |
| HIF3BA-26D-2.54R | 610-0025-8 | 26                 | 37.59 | 30.48 | 31.75 | 33.12 |                                    |                                    |      |
| HIF3BA-30D-2.54R | 610-0026-0 | 30                 | 42.67 | 35.56 | 36.83 | 38.2  |                                    |                                    |      |
| HIF3BA-34D-2.54R | 610-0027-3 | 34                 | 47.75 | 40.64 | 41.91 | 43.28 |                                    |                                    |      |
| HIF3BA-40D-2.54R | 610-0028-6 | 40                 | 55.37 | 48.26 | 49.53 | 50.9  |                                    |                                    |      |
| HIF3BA-50D-2.54R | 610-0029-9 | 50                 | 68.07 | 60.96 | 62.23 | 63.6  | One on right and left sides, resp. |                                    |      |
| HIF3BB-50D-2.54R | 610-0041-4 | 50                 | 68.07 | 60.96 | 62.23 | 63.6  | One at center                      |                                    |      |
| HIF3BA-60D-2.54R | 610-0030-8 | 60                 | 80.77 | 73.66 | 74.93 | 76.3  | One on right and left sides, resp. |                                    |      |
| HIF3BB-60D-2.54R | 610-0042-7 | 60                 | 80.77 | 73.66 | 74.93 | 76.3  | One at center                      |                                    |      |
| HIF3BA-64D-2.54R | 610-0031-0 | 64                 | 85.85 | 78.74 | 80.01 | 81.38 | One on right and left sides, resp. |                                    |      |
| HIF3BB-64D-2.54R | 610-0043-0 | 64                 | 85.85 | 78.74 | 80.01 | 81.38 | One at center                      |                                    |      |

The products marked with ★ comply with MIL standard.

## Socket



Note1: The number of polarizing keys and polarizing keyways changes according to products. For details, refer to the list as shown below.

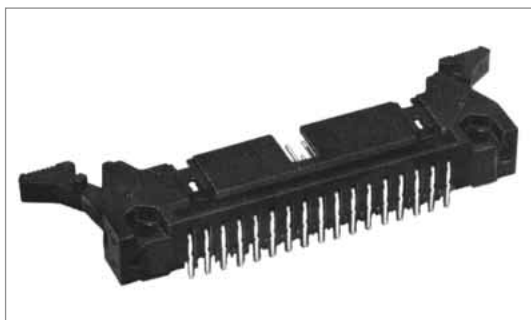
Note2: The 6 contact has no polarizing mark.

Unit:mm

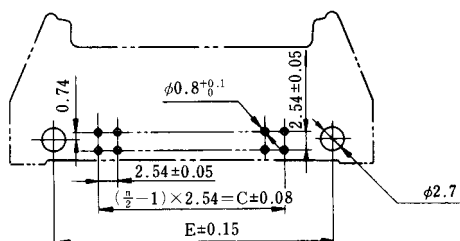
|   | Part Number     | CL No.     | Number of Contacts | A     | B     | C     | D     | Polarizing Guide<br>(Note 1)          | RoHS |
|---|-----------------|------------|--------------------|-------|-------|-------|-------|---------------------------------------|------|
|   | HIF3B- 6D-2.54R | 610-0012-6 | 6                  | 12.19 | 5.08  | 6.35  | 7.72  | None                                  | YES  |
| ★ | HIF3B-10D-2.54R | 610-0001-0 | 10                 | 17.27 | 10.16 | 11.43 | 12.80 | One on left side                      |      |
| ★ | HIF3B-14D-2.54R | 610-0002-2 | 14                 | 22.35 | 15.24 | 16.51 | 17.88 |                                       |      |
| ★ | HIF3B-16D-2.54R | 610-0003-5 | 16                 | 24.89 | 17.78 | 19.05 | 20.42 | One on right and<br>left sides, resp. |      |
| ★ | HIF3B-20D-2.54R | 610-0004-8 | 20                 | 29.97 | 22.86 | 24.13 | 25.50 |                                       |      |
| ★ | HIF3B-26D-2.54R | 610-0005-0 | 26                 | 37.59 | 30.48 | 31.75 | 33.12 |                                       |      |
| ★ | HIF3B-30D-2.54R | 610-0006-3 | 30                 | 42.67 | 35.56 | 36.83 | 38.2  |                                       |      |
| ★ | HIF3B-34D-2.54R | 610-0007-6 | 34                 | 47.75 | 40.64 | 41.91 | 43.28 |                                       |      |
| ★ | HIF3B-40D-2.54R | 610-0008-9 | 40                 | 55.37 | 48.26 | 49.53 | 50.90 |                                       |      |
| ★ | HIF3B-50D-2.54R | 610-0009-1 | 50                 | 68.07 | 60.96 | 62.23 | 63.6  |                                       |      |
| ★ | HIF3B-60D-2.54R | 610-0010-0 | 60                 | 80.77 | 73.66 | 74.93 | 76.3  |                                       |      |
| ★ | HIF3B-64D-2.54R | 610-0011-3 | 64                 | 85.85 | 78.74 | 80.01 | 81.38 |                                       |      |

The products marked with ★ comply with MIL standard.

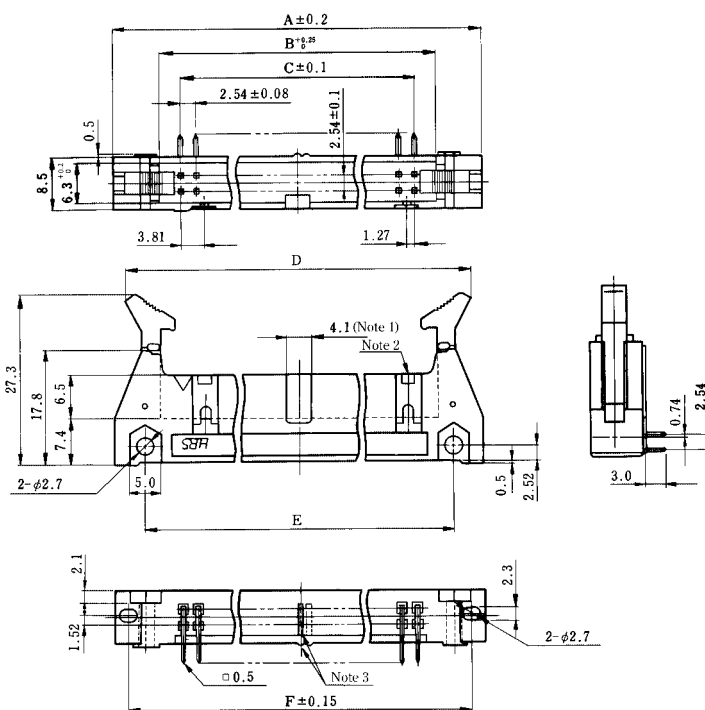
## ■Four Wall Angle Through hole



## ◆PCB mounting pattern



■n=number of contacts



Note 1, Note 2: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

Note 3: The spacer moves to the right according to the number of contacts.

Note 4: The 10, 50, 60 and 64 contact connectors contain two types of polarizing slots.

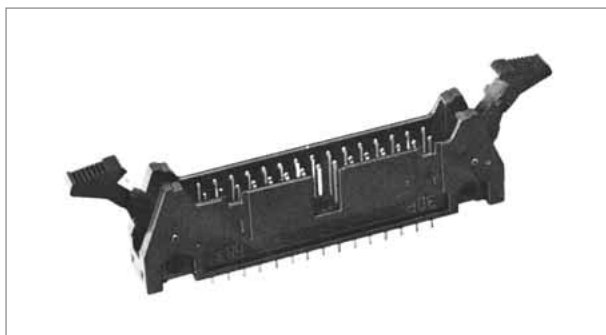
Use products, referring to (Note 1) (Note 2).

Unit:mm

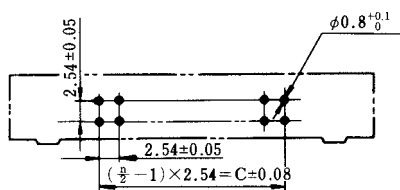
|   | Part Number            | CL No.         | Number of Contacts | A     | B    | C     | D                 | E    | F    | Polarizing Slot<br>(Note 1)        | Polarizing Key Install<br>(Note 2) | RoHS |
|---|------------------------|----------------|--------------------|-------|------|-------|-------------------|------|------|------------------------------------|------------------------------------|------|
| ★ | HIF3BA-10PA-2.54DS(71) | 610-0091-2(71) | 10                 | 32.0  | 17.5 | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9 | None                               | One on right side                  | YES  |
|   | HIF3BD-10PA-2.54DS(71) | 610-0171-0(71) | 10                 | 32.0  | 17.5 | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9 |                                    | None                               |      |
| ★ | HIF3BA-14PA-2.54DS(71) | 610-0092-5(71) | 14                 | 37.1  | 22.6 | 15.24 | 33.24<br>MAX56.2  | 26.9 | 33.0 |                                    | One on right side                  |      |
| ★ | HIF3BA-16PA-2.54DS(71) | 610-0093-8(71) | 16                 | 39.6  | 25.1 | 17.78 | 35.74<br>MAX58.7  | 29.5 | 35.5 | One at center                      |                                    |      |
| ★ | HIF3BA-20PA-2.54DS(71) | 610-0094-0(71) | 20                 | 44.7  | 30.2 | 22.86 | 40.84<br>MAX63.8  | 34.5 | 40.6 |                                    |                                    |      |
| ★ | HIF3BA-26PA-2.54DS(71) | 610-0095-3(71) | 26                 | 52.3  | 37.8 | 30.48 | 48.44<br>MAX71.4  | 42.2 | 48.3 |                                    |                                    |      |
| ★ | HIF3BA-30PA-2.54DS(71) | 610-0096-6(71) | 30                 | 57.4  | 42.9 | 35.56 | 53.54<br>MAX76.5  | 47.2 | 53.3 |                                    |                                    |      |
| ★ | HIF3BA-34PA-2.54DS(71) | 610-0097-9(71) | 34                 | 62.5  | 48.0 | 40.64 | 58.64<br>MAX81.6  | 52.3 | 58.4 |                                    |                                    |      |
| ★ | HIF3BA-40PA-2.54DS(71) | 610-0098-1(71) | 40                 | 70.1  | 55.6 | 48.26 | 66.24<br>MAX89.2  | 59.9 | 66.0 |                                    |                                    |      |
| ★ | HIF3BA-50PA-2.54DS(71) | 610-0099-4(71) | 50                 | 82.8  | 68.3 | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-50PA-2.54DS(71) | 610-0131-5(71) | 50                 | 82.8  | 68.3 | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7 | One at center                      |                                    |      |
| ★ | HIF3BA-60PA-2.54DS(71) | 610-0100-1(71) | 60                 | 95.5  | 81.0 | 73.66 | 91.64<br>MAX114.6 | 85.3 | 91.4 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-60PA-2.54DS(71) | 610-0132-8(71) | 60                 | 95.5  | 81.0 | 73.66 | 91.64<br>MAX114.6 | 85.3 | 91.4 | One at center                      |                                    |      |
| ★ | HIF3BA-64PA-2.54DS(71) | 610-0101-4(71) | 64                 | 100.6 | 86.1 | 78.74 | 96.74<br>MAX119.7 | 90.4 | 96.5 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-64PA-2.54DS(71) | 610-0133-0(71) | 64                 | 100.6 | 86.1 | 78.74 | 96.74<br>MAX119.7 | 90.4 | 96.5 | One at center                      |                                    |      |

The products marked with ★ comply with MIL standard.

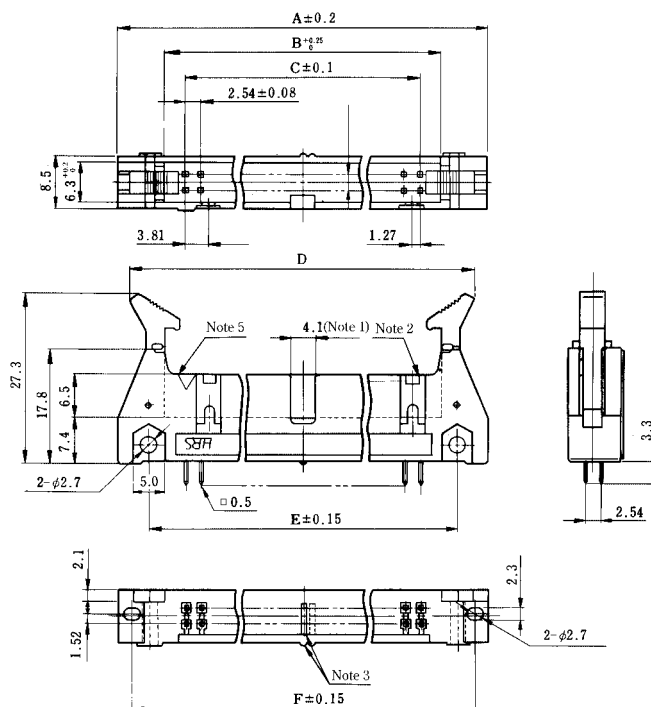
## ■Four-Wall Straight Through hole



## ◆PCB mounting pattern



■n=number of contacts



Note 1, Note 2: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

Note 3: The spacer moves to the right according to the number of contacts.

Note 4: The 10, 50, 60 and 64 contact connectors contain two types of polarizing slots.

Use products, confirming (Note 1) (Note 2).

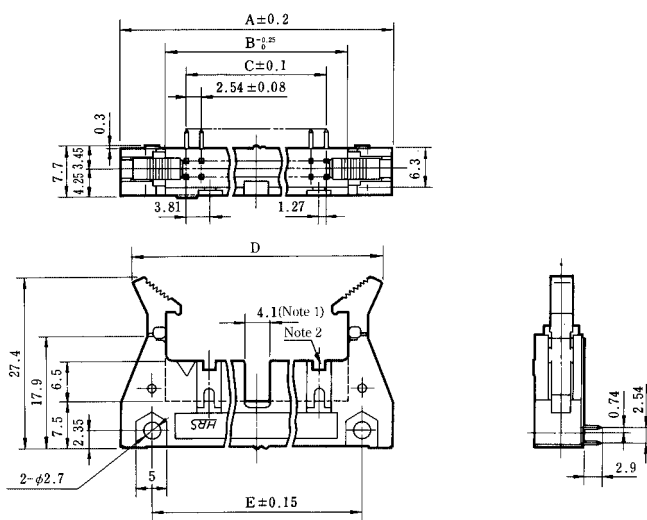
Note 5: The 6 contact has no polarity mark.

Unit:mm

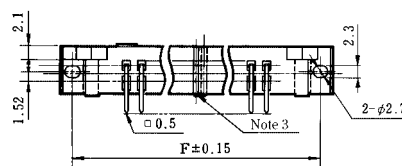
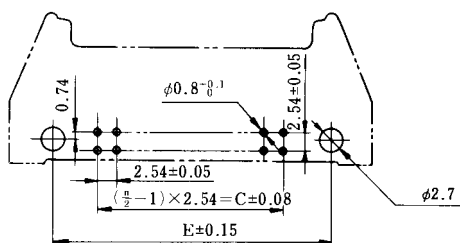
|   | Part Number             | CL No.        | Number of Contacts | A     | B     | C     | D                 | E    | F     | Polarizing Slot<br>(Note 1)        | Polarizing Key Install<br>(Note 2)    | RoHS |
|---|-------------------------|---------------|--------------------|-------|-------|-------|-------------------|------|-------|------------------------------------|---------------------------------------|------|
| ★ | HIF3-6PA-2.54DSA(71)    | 562-0503-9-71 | 6                  | 26.92 | 12.42 | 5.08  | 23.06<br>MAX46.02 | 16.7 | 22.82 | One at center                      | None                                  | YES  |
|   | HIF3BA-10PA-2.54DSA(71) | 610-0111-8-71 | 10                 | 32.0  | 17.5  | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9  | None                               | One on right side                     |      |
| ★ | HIF3BD-10PA-2.54DSA(71) | 610-0181-3-71 | 10                 | 32.0  | 17.5  | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9  | One at center                      | None                                  |      |
| ★ | HIF3BA-14PA-2.54DSA(71) | 610-0112-0-71 | 14                 | 37.1  | 22.6  | 15.24 | 33.24<br>MAX56.2  | 26.9 | 33.0  |                                    | One on right side                     |      |
| ★ | HIF3BA-16PA-2.54DSA(71) | 610-0113-3-71 | 16                 | 39.6  | 25.1  | 17.78 | 35.74<br>MAX58.7  | 29.5 | 35.5  |                                    | One on right and<br>left sides, resp. |      |
| ★ | HIF3BA-20PA-2.54DSA(71) | 610-0114-6-71 | 20                 | 44.7  | 30.2  | 22.86 | 40.84<br>MAX63.8  | 34.5 | 40.6  |                                    |                                       |      |
| ★ | HIF3BA-26PA-2.54DSA(71) | 610-0115-9-71 | 26                 | 52.3  | 37.8  | 30.48 | 48.44<br>MAX71.4  | 42.2 | 48.3  |                                    |                                       |      |
| ★ | HIF3BA-30PA-2.54DSA(71) | 610-0116-1-71 | 30                 | 57.4  | 42.9  | 35.56 | 53.54<br>MAX76.5  | 47.2 | 53.3  |                                    |                                       |      |
| ★ | HIF3BA-34PA-2.54DSA(71) | 610-0117-4-71 | 34                 | 62.5  | 48.0  | 40.64 | 58.64<br>MAX81.6  | 52.3 | 58.4  |                                    |                                       |      |
| ★ | HIF3BA-40PA-2.54DSA(71) | 610-0118-7-71 | 40                 | 70.1  | 55.6  | 48.26 | 66.24<br>MAX89.2  | 59.9 | 66.0  |                                    |                                       |      |
| ★ | HIF3BA-50PA-2.54DSA(71) | 610-0119-0-71 | 50                 | 82.8  | 68.3  | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7  | One on right and left sides, resp. |                                       |      |
| ★ | HIF3BB-50PA-2.54DSA(71) | 610-0141-9-71 | 50                 | 82.8  | 68.3  | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7  | One at center                      |                                       |      |
| ★ | HIF3BA-60PA-2.54DSA(71) | 610-0120-9-71 | 60                 | 95.5  | 81.0  | 73.66 | 91.64<br>MAX114.6 | 85.3 | 91.4  | One on right and left sides, resp. |                                       |      |
| ★ | HIF3BB-60PA-2.54DSA(71) | 610-0142-1-71 | 60                 | 95.5  | 81.0  | 73.66 | 91.64<br>MAX114.6 | 85.3 | 91.4  | One at center                      |                                       |      |
| ★ | HIF3BA-64PA-2.54DSA(71) | 610-0121-1-71 | 64                 | 100.6 | 86.1  | 78.74 | 96.74<br>MAX119.7 | 90.4 | 96.5  | One on right and left sides, resp. |                                       |      |
| ★ | HIF3BB-64PA-2.54DSA(71) | 610-0143-4-71 | 64                 | 100.6 | 86.1  | 78.74 | 96.74<br>MAX119.7 | 90.4 | 96.5  | One at center                      |                                       |      |

The products marked with ★ comply with MIL standard.

## ■Three Wall Angle Type



## ◆PCB mounting pattern



■n=number of contacts

Note 1, Note 2: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

Note 3: The spacer moves according to the number of contacts.

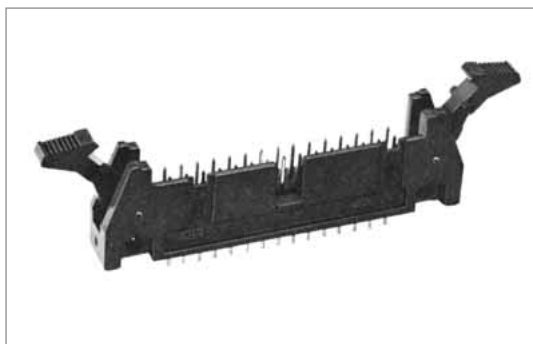
Note 4: The 10 contact connector consists of two types.  
Use products, confirming (Note 1) (Note 2).

Unit:mm

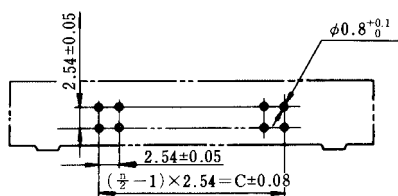
|   | Part Number            | CL No.        | Number of Contacts | A     | B    | C     | D                             | E    | F    | Polarizing Slot<br>(Note 1) | Polarizing Key Install<br>(Note 2)    | RoHS |
|---|------------------------|---------------|--------------------|-------|------|-------|-------------------------------|------|------|-----------------------------|---------------------------------------|------|
| ★ | HIF3B -10PA-2.54DS(71) | 610-0051-8-71 | 10                 | 32.0  | 17.5 | 10.16 | <div>28.14<br/>MAX51.1</div>  | 21.8 | 27.9 | None                        | One on right side                     | YES  |
|   | HIF3BC-10PA-2.54DS(71) | 610-0151-2-71 | 10                 | 32.0  | 17.5 | 10.16 | <div>28.14<br/>MAX51.1</div>  | 21.8 | 27.9 | One at center               | None                                  |      |
| ★ | HIF3B -16PA-2.54DS(71) | 610-0052-0-71 | 16                 | 39.6  | 25.1 | 17.78 | <div>35.74<br/>MAX58.7</div>  | 29.5 | 35.5 |                             | One on right and<br>left sides, resp. |      |
| ★ | HIF3B -20PA-2.54DS(71) | 610-0053-3-71 | 20                 | 44.7  | 30.2 | 22.86 | <div>40.84<br/>MAX63.8</div>  | 34.5 | 40.6 |                             |                                       |      |
| ★ | HIF3B -26PA-2.54DS(71) | 610-0054-6-71 | 26                 | 52.3  | 37.8 | 30.48 | <div>48.44<br/>MAX71.4</div>  | 42.2 | 48.3 |                             |                                       |      |
| ★ | HIF3B -30PA-2.54DS(71) | 610-0055-9-71 | 30                 | 57.4  | 42.9 | 35.56 | <div>53.54<br/>MAX76.5</div>  | 47.2 | 53.3 |                             |                                       |      |
| ★ | HIF3B -34PA-2.54DS(71) | 610-0056-1-71 | 34                 | 62.5  | 48.0 | 40.64 | <div>58.64<br/>MAX81.6</div>  | 52.3 | 58.4 |                             |                                       |      |
| ★ | HIF3B -40PA-2.54DS(71) | 610-0057-4-71 | 40                 | 70.1  | 55.6 | 48.26 | <div>66.24<br/>MAX89.2</div>  | 59.9 | 66.0 |                             |                                       |      |
| ★ | HIF3B -50PA-2.54DS(71) | 610-0058-7-71 | 50                 | 82.8  | 68.3 | 60.96 | <div>78.94<br/>MAX101.9</div> | 72.6 | 78.7 |                             |                                       |      |
| ★ | HIF3B -60PA-2.54DS(71) | 610-0059-0-71 | 60                 | 95.5  | 81.0 | 73.66 | <div>91.64<br/>MAX114.6</div> | 85.3 | 91.4 |                             |                                       |      |
| ★ | HIF3B -64PA-2.54DS(71) | 610-0060-9-71 | 64                 | 100.6 | 86.1 | 78.74 | <div>96.74<br/>MAX119.7</div> | 90.4 | 96.5 |                             |                                       |      |

The products marked with ★ comply with MIL standard.

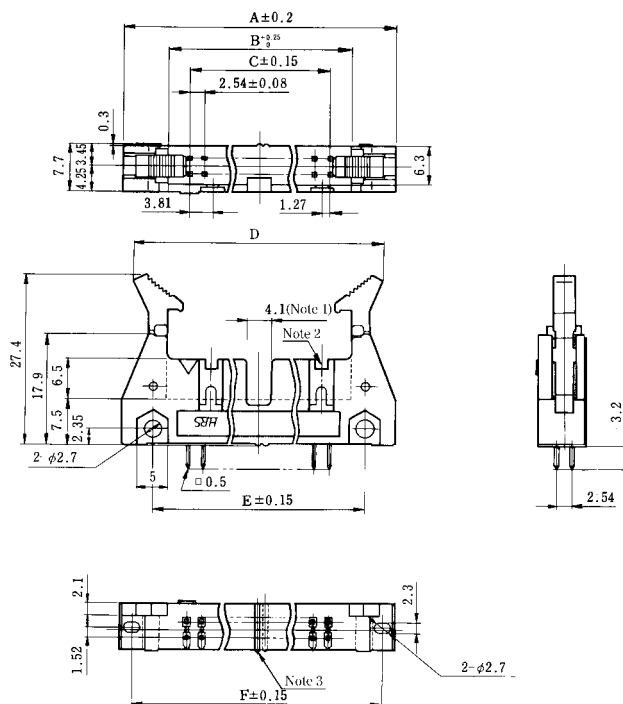
## Three Wall Straight Through hole



## PCB mounting pattern



■n=number of contacts



Note1,Note2: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

Note3: The spacer moves to the right according to the number of contacts.

Note4: The 10 contact connector consists of two types.

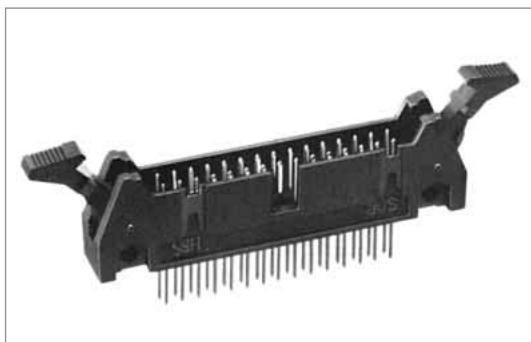
Use products, referring to (Note 1) and (Note 2).

Unit:mm

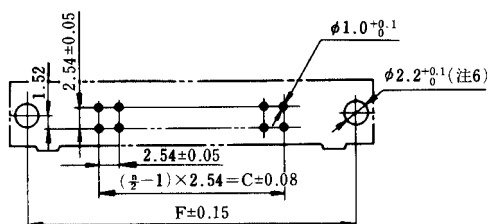
|   | Part Number             | CL No.        | Number of Contacts | A     | B    | C     | D                 | E    | F    | Polarizing Slot<br>(Note 1)        | Polarizing Key Install<br>(Note 2)    | RoHS |
|---|-------------------------|---------------|--------------------|-------|------|-------|-------------------|------|------|------------------------------------|---------------------------------------|------|
| ★ | HIF3B -10PA-2.54DSA(71) | 610-0071-5-71 | 10                 | 32.0  | 17.5 | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9 | None                               | One on right side                     | YES  |
|   | HIF3BC-10PA-2.54DSA(71) | 610-0161-6-71 | 10                 | 32.0  | 17.5 | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9 |                                    | None                                  |      |
| ★ | HIF3B -16PA-2.54DSA(71) | 610-0072-8-71 | 16                 | 39.6  | 25.1 | 17.78 | 35.74<br>MAX58.7  | 29.5 | 35.5 | One at center                      | One on right and<br>left sides, resp. |      |
| ★ | HIF3B -20PA-2.54DSA(71) | 610-0073-0-71 | 20                 | 44.7  | 30.2 | 22.86 | 40.84<br>MAX63.8  | 34.5 | 40.6 |                                    |                                       |      |
| ★ | HIF3B -26PA-2.54DSA(71) | 610-0074-3-71 | 26                 | 52.3  | 37.8 | 30.48 | 48.44<br>MAX71.4  | 42.2 | 48.3 |                                    |                                       |      |
| ★ | HIF3B -30PA-2.54DSA(71) | 610-0075-6-71 | 30                 | 57.4  | 42.9 | 35.56 | 53.54<br>MAX76.5  | 47.2 | 53.3 |                                    |                                       |      |
| ★ | HIF3B -34PA-2.54DSA(71) | 610-0076-9-71 | 34                 | 62.5  | 48.0 | 40.64 | 58.64<br>MAX81.6  | 52.3 | 58.4 |                                    |                                       |      |
| ★ | HIF3B -40PA-2.54DSA(71) | 610-0077-1-71 | 40                 | 70.1  | 55.6 | 48.26 | 66.24<br>MAX89.2  | 59.9 | 66.0 |                                    |                                       |      |
| ★ | HIF3B -50PA-2.54DSA(71) | 610-0078-4-71 | 50                 | 82.8  | 68.3 | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7 | One on right and left sides, resp. |                                       |      |
| ★ | HIF3B -60PA-2.54DSA(71) | 610-0079-7-71 | 60                 | 95.5  | 81.0 | 73.66 | 91.64<br>MAX114.6 | 85.3 | 91.4 |                                    |                                       |      |
| ★ | HIF3B -64PA-2.54DSA(71) | 610-0080-6-71 | 64                 | 100.6 | 86.1 | 78.74 | 96.74<br>MAX119.7 | 90.4 | 96.5 |                                    |                                       |      |

The products marked with ★ comply with MIL standard.

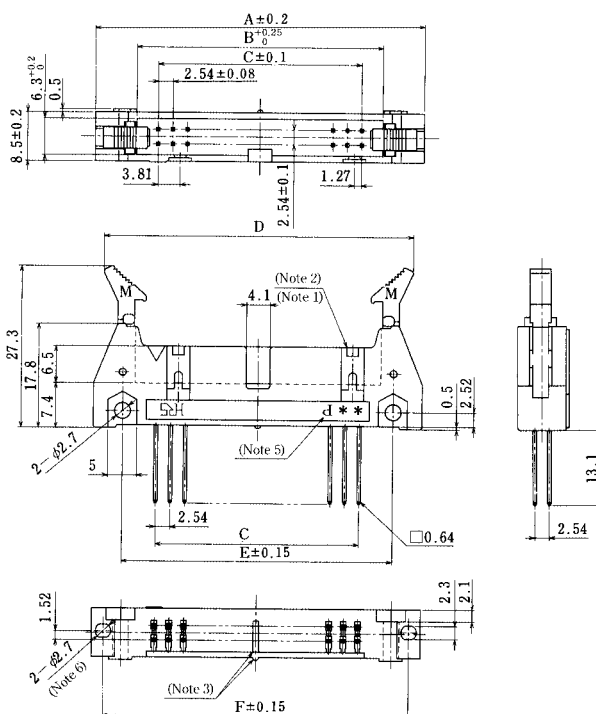
## ■Four Wall Wrapping Type



## ◆PCB mounting pattern



■n=number of contacts



Note 1, Note 2. The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

Note 3. The spacer moves to the right according to the number of contacts.

Note 4. The 10, 50, 60 and 64 contact connectors consists of two types. Use products, confirming (Note 1) (Note 2).

Note 5. The mark \* indicates the number of contacts.

Note 6. The nut built-in specification product is also provided. The product can be fixed by M2 screws from the rear side. Use the screw of (board thickness) +4 mm under the neck.

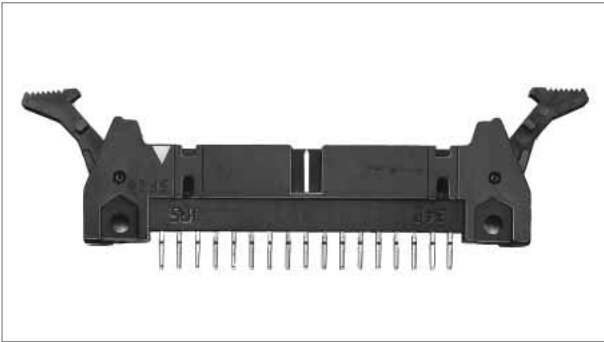
Unit:mm

|   | Part Number      | CL No.     | Number of Contacts | A     | B    | C     | D                 | E    | F    | Polarizing Slot<br>(Note 1)        | Polarizing Key Install<br>(Note 2) | RoHS |
|---|------------------|------------|--------------------|-------|------|-------|-------------------|------|------|------------------------------------|------------------------------------|------|
| ★ | HIF3BA-10P-2.54W | 610-0503-8 | 10                 | 32.0  | 17.5 | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9 | None                               | One on right side                  | YES  |
|   | HIF3BD-10P-2.54W | 610-0492-3 | 10                 | 32.0  | 17.5 | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9 | One at center                      | None                               |      |
| ★ | HIF3BA-14P-2.54W | 610-0493-6 | 14                 | 37.1  | 22.6 | 15.24 | 33.24<br>MAX56.2  | 26.9 | 33.0 |                                    | One on right side                  |      |
| ★ | HIF3BA-16P-2.54W | 610-0494-9 | 16                 | 39.6  | 25.1 | 17.78 | 35.74<br>MAX58.7  | 29.5 | 35.5 |                                    | One on right and left sides, resp. |      |
| ★ | HIF3BA-20P-2.54W | 610-0495-1 | 20                 | 44.7  | 30.2 | 22.86 | 40.84<br>MAX63.8  | 34.5 | 40.6 |                                    |                                    |      |
| ★ | HIF3BA-26P-2.54W | 610-0496-4 | 26                 | 52.3  | 37.8 | 30.48 | 48.44<br>MAX71.4  | 42.2 | 48.3 |                                    |                                    |      |
| ★ | HIF3BA-30P-2.54W | 610-0497-7 | 30                 | 57.4  | 42.9 | 35.56 | 53.54<br>MAX76.5  | 47.2 | 53.3 |                                    |                                    |      |
| ★ | HIF3BA-34P-2.54W | 610-0498-0 | 34                 | 62.5  | 48.0 | 40.64 | 58.64<br>MAX81.6  | 52.3 | 58.4 |                                    |                                    |      |
| ★ | HIF3BA-40P-2.54W | 610-0499-2 | 40                 | 70.1  | 55.6 | 48.26 | 66.24<br>MAX89.2  | 59.9 | 66.0 |                                    |                                    |      |
| ★ | HIF3BA-50P-2.54W | 610-0504-0 | 50                 | 82.8  | 68.3 | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-50P-2.54W | 610-0500-0 | 50                 | 82.8  | 68.3 | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7 | One at center                      |                                    |      |
| ★ | HIF3BA-60P-2.54W | 610-0505-3 | 60                 | 95.5  | 81.0 | 73.66 | 91.64<br>MAX114.6 | 85.3 | 91.4 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-60P-2.54W | 610-0501-2 | 60                 | 95.5  | 81.0 | 73.66 | 91.64<br>MAX114.6 | 85.3 | 91.4 | One at center                      |                                    |      |
| ★ | HIF3BA-64P-2.54W | 610-0506-6 | 64                 | 100.6 | 86.1 | 78.74 | 96.74<br>MAX119.7 | 90.4 | 96.5 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-64P-2.54W | 610-0502-5 | 64                 | 100.6 | 86.1 | 78.74 | 96.74<br>MAX119.7 | 90.4 | 96.5 | One at center                      |                                    |      |

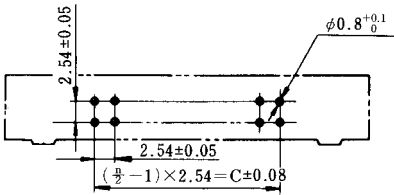
The products marked with ★ comply with MIL standard.

■Four Wall Straight Through hole

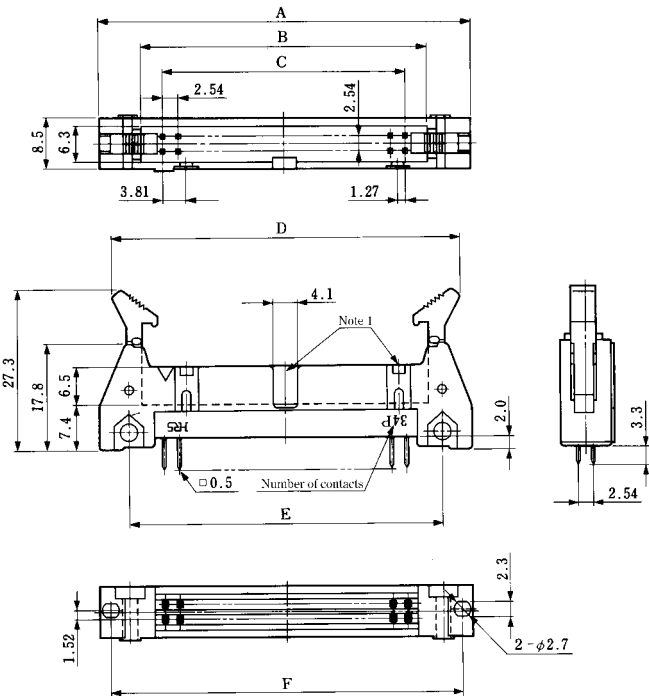
[Flux Blister Prevention Type]



◆PCB mounting pattern



■n=number of contacts



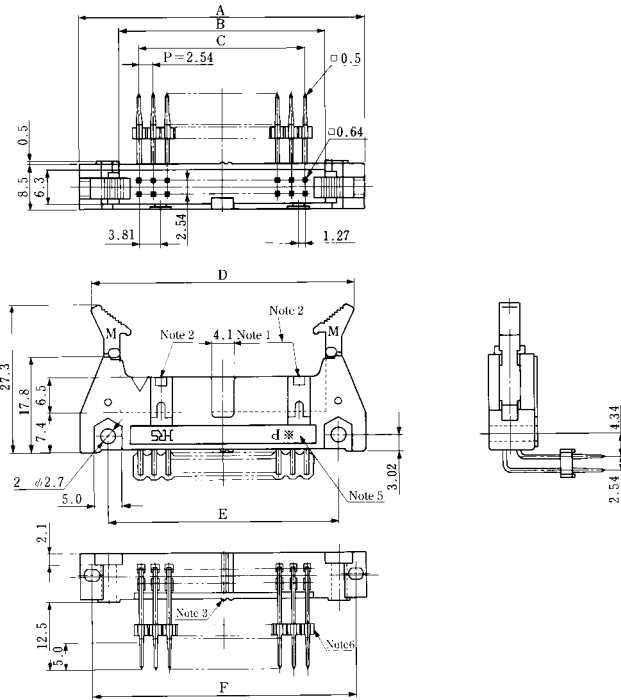
Note1: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

Unit:mm

|   | Part Number             | CL No.        | Number of Contacts | A     | B    | C     | D                 | E    | F    | Polarizing Slot | Polarizing Key Install             | RoHS |
|---|-------------------------|---------------|--------------------|-------|------|-------|-------------------|------|------|-----------------|------------------------------------|------|
| ★ | HIF3CA-10PA-2.54DSA(71) | 610-0701-1-71 | 10                 | 32.0  | 17.5 | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9 | None            | One on right side                  | YES  |
|   | HIF3CD-10PA-2.54DSA(71) | 610-0722-1-71 | 10                 | 32.0  | 17.5 | 10.16 | 28.14<br>MAX51.1  | 21.8 | 27.9 |                 | None                               |      |
| ★ | HIF3CA-16PA-2.54DSA(71) | 610-0703-7-71 | 16                 | 39.6  | 25.1 | 17.78 | 35.74<br>MAX58.7  | 29.5 | 35.5 | One at center   | One on right and left sides, resp. |      |
| ★ | HIF3CA-20PA-2.54DSA(71) | 610-0704-0-71 | 20                 | 44.7  | 30.2 | 22.86 | 40.84<br>MAX63.8  | 34.5 | 40.6 |                 |                                    |      |
| ★ | HIF3CA-26PA-2.54DSA(71) | 610-0705-2-71 | 26                 | 52.3  | 37.8 | 30.48 | 48.44<br>MAX71.4  | 42.2 | 48.3 |                 |                                    |      |
| ★ | HIF3CA-30PA-2.54DSA(71) | 610-0706-5-71 | 30                 | 57.4  | 42.9 | 35.56 | 53.54<br>MAX76.5  | 47.2 | 53.3 |                 |                                    |      |
| ★ | HIF3CA-34PA-2.54DSA(71) | 610-0707-8-71 | 34                 | 62.5  | 48.0 | 40.64 | 58.64<br>MAX81.6  | 52.3 | 58.4 |                 |                                    |      |
| ★ | HIF3CA-40PA-2.54DSA(71) | 610-0708-0-71 | 40                 | 70.1  | 55.6 | 48.26 | 66.24<br>MAX89.2  | 59.9 | 66.0 |                 |                                    |      |
| ★ | HIF3CA-50PA-2.54DSA(71) | 610-0709-3-71 | 50                 | 82.8  | 68.3 | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7 |                 |                                    |      |
| ★ | HIF3CB-50PA-2.54DSA(71) | 610-0721-9-71 | 50                 | 82.8  | 68.3 | 60.96 | 78.94<br>MAX101.9 | 72.6 | 78.7 | One at center   |                                    |      |
| ★ | HIF3CB-60PA-2.54DSA(71) | 610-0723-4-71 | 60                 | 95.5  | 81.0 | 73.66 | 91.64<br>MAX114.6 | 85.3 | 91.4 |                 |                                    |      |
| ★ | HIF3CB-64PA-2.54DSA(71) | 610-0724-7-71 | 64                 | 100.6 | 86.1 | 78.74 | 96.74<br>MAX119.7 | 90.4 | 96.5 |                 |                                    |      |

The products marked with ★ comply with MIL standard.

## Two Stage Staking Right Angle Through hole



Note 1, Note 2: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

Note 3: The spacer moves to the right according to the number of contacts.

Note 4: The 10, 50, 60 and 64 contact connectors consists of two types.

Use products, confirming (Note 1) (Note 2).

Note 5: The mark \* indicates the number of contacts.

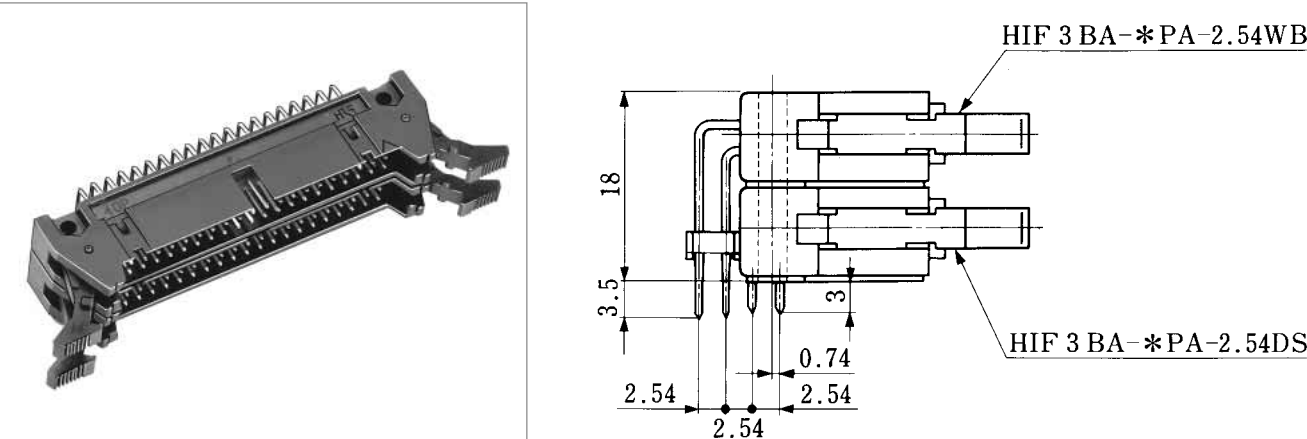
Note 6: The locator is located optionally.

Unit:mm

|   | Part Number            | CL No.        | Number of Contacts | A     | B    | C     | D                                 | E    | F    | Polarizing Slot<br>(Note 1)        | Polarizing Key Install<br>(Note 2) | RoHS |
|---|------------------------|---------------|--------------------|-------|------|-------|-----------------------------------|------|------|------------------------------------|------------------------------------|------|
| ★ | HIF3BA-10PA-2.54WB(71) | 610-1502-0-71 | 10                 | 32.0  | 17.5 | 10.16 | <small>28.14<br/>MAX51.1</small>  | 21.8 | 27.9 | None                               | One on right side                  | YES  |
|   | HIF3BD-10PA-2.54WB(71) | 610-1503-3-71 | 10                 | 32.0  | 17.5 | 10.16 | <small>28.14<br/>MAX51.1</small>  | 21.8 | 27.9 | One at center                      | None                               |      |
| ★ | HIF3BA-16PA-2.54WB(71) | 610-1505-9-71 | 16                 | 39.6  | 25.1 | 17.78 | <small>35.74<br/>MAX58.7</small>  | 29.5 | 35.5 |                                    |                                    |      |
| ★ | HIF3BA-20PA-2.54WB(71) | 610-1506-1-71 | 20                 | 44.7  | 30.2 | 22.86 | <small>40.84<br/>MAX63.8</small>  | 34.5 | 40.6 |                                    |                                    |      |
| ★ | HIF3BA-26PA-2.54WB(71) | 610-1507-4-71 | 26                 | 52.3  | 37.8 | 30.48 | <small>48.44<br/>MAX71.4</small>  | 42.2 | 48.3 |                                    |                                    |      |
| ★ | HIF3BA-30PA-2.54WB(71) | 610-1508-7-71 | 30                 | 57.4  | 42.9 | 35.56 | <small>53.54<br/>MAX76.5</small>  | 47.2 | 53.3 |                                    |                                    |      |
| ★ | HIF3BA-34PA-2.54WB(71) | 610-1509-0-71 | 34                 | 62.5  | 48.0 | 40.64 | <small>58.64<br/>MAX81.6</small>  | 52.3 | 58.4 |                                    |                                    |      |
| ★ | HIF3BA-40PA-2.54WB(71) | 610-1510-9-71 | 40                 | 70.1  | 55.6 | 48.26 | <small>66.24<br/>MAX89.2</small>  | 59.9 | 66.0 |                                    |                                    |      |
| ★ | HIF3BA-50PA-2.54WB(71) | 610-1511-1-71 | 50                 | 82.8  | 68.3 | 60.96 | <small>78.94<br/>MAX101.9</small> | 72.6 | 78.7 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-50PA-2.54WB(71) | 610-1512-4-71 | 50                 | 82.8  | 68.3 | 60.96 | <small>78.94<br/>MAX101.9</small> | 72.6 | 78.7 | One at center                      |                                    |      |
| ★ | HIF3BA-60PA-2.54WB(71) | 610-1513-7-71 | 60                 | 95.5  | 81.0 | 73.66 | <small>91.64<br/>MAX114.6</small> | 85.3 | 91.4 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-60PA-2.54WB(71) | 610-1514-0-71 | 60                 | 95.5  | 81.0 | 73.66 | <small>91.64<br/>MAX114.6</small> | 85.3 | 91.4 | One at center                      |                                    |      |
| ★ | HIF3BA-64PA-2.54WB(71) | 610-1515-2-71 | 64                 | 100.6 | 86.1 | 78.74 | <small>96.74<br/>MAX119.7</small> | 90.4 | 96.5 | One on right and left sides, resp. |                                    |      |
| ★ | HIF3BB-64PA-2.54WB(71) | 610-1516-5-71 | 64                 | 100.6 | 86.1 | 78.74 | <small>96.74<br/>MAX119.7</small> | 90.4 | 96.5 | One at center                      |                                    |      |

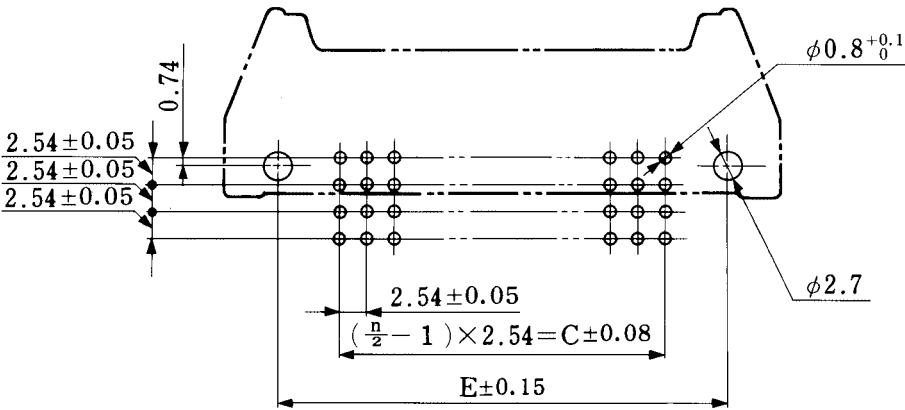
The products marked with ★ comply with MIL standard.

◆Combination Pattern

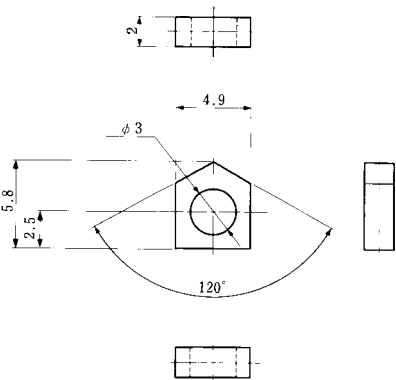


Note : Fix the HIF3-mounting hole spacer by screws between upper stage and lower stage connectors.

◆PCB mounting pattern



■Mounting Hole Spacer

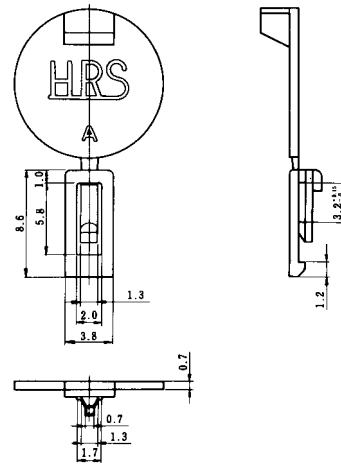


| Part Number                | CL No.     | Finish    | RoHS |
|----------------------------|------------|-----------|------|
| HIF-3 mounting hole spacer | 562-0714-4 | PBT Black | YES  |

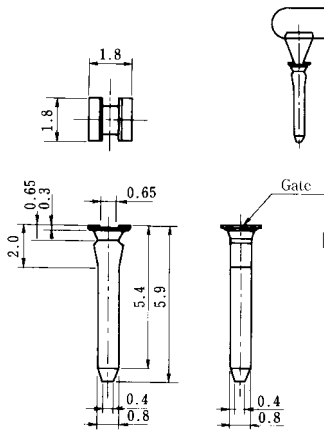
Note : 2 pieces are contained in a bag.

## ◆Polarizing Key

HIF3B-GK  
CL562-0601-8



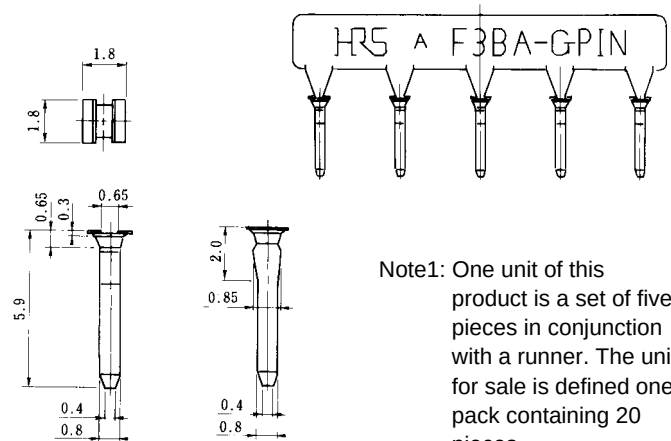
HIF3-GPIN(A)



Note1: One unit of this product is a set of five pieces in conjunction with a runner. The unit for sale is defined one pack containing 20 pieces.

Note2: This product is applicable to HIF3A-\*D2.54R, HIF3C-\*D2.54C and HIF3BA-\*D2.54C products.

HIF3BA-GPIN



Note1: One unit of this product is a set of five pieces in conjunction with a runner. The unit for sale is defined one pack containing 20 pieces.

Note2: This product is applicable to the HIF3BA-\*D2.54R product.

| Part Number  | CL No.     | Material            | Remarks           | RoHS |
|--------------|------------|---------------------|-------------------|------|
| HIF3-GPIN(A) | 562-0126-6 | Poly acetal (white) | A set of 5 pieces | YES  |

| Part Number | CL No.     | Material            | Remarks           | RoHS |
|-------------|------------|---------------------|-------------------|------|
| HIF3BA-GPIN | 612-0500-2 | Poly acetal (white) | A set of 5 pieces | YES  |

## ◆HIF3-Multi Clamp



This clamp is used for intermediate connection in the bus-line system, etc. Remove compulsory force from the insulation displacement area of the connector in intermediate connection.

Note: The pin header corresponds to the HIF3BAE series (lock E).

## ◆HIF3-\*CL Pull Tab



This pull tab is used for the HIF3 series equipped with cable clamp function. Remove all compulsory force, which is loaded on the insulation displacement area of the connector for extraction.

Note: This HIF3-\* Pull Tab can not be used for HIF3BA-\*PD.

Note: The pin header corresponds to the HIF3BAE series (lock E).

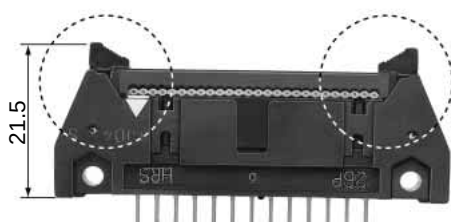


## ◆Lock

### ●Low Profile Lock Pin Header

#### Lock G

Part Number : HIF3BAG-\*\*PA-2.54DSA(71)

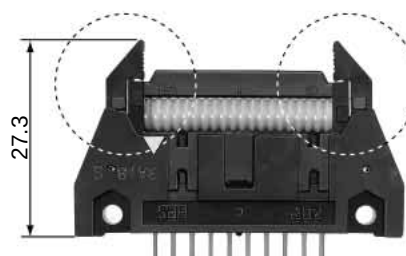


- Low profile type, and used for lock ejection. Connector height is reduced. Since no connector clamp is needed on the cable side, this is used without turning back on the cable side. Take care about this point.

### ●F Type Lock Pin Header

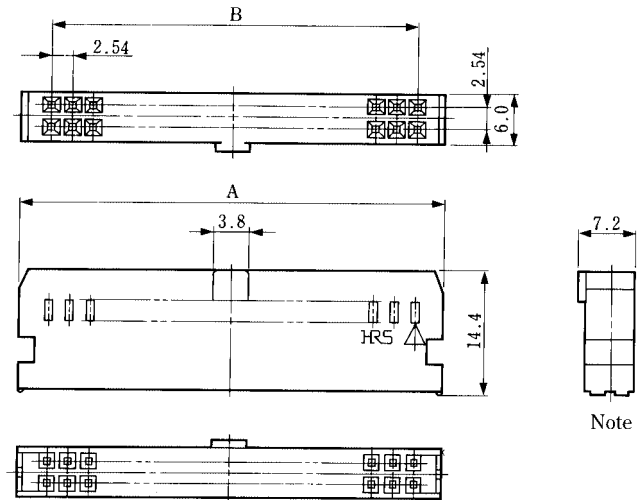
#### Lock F

Part Number : HIF3BAG-\*\*PA-2.54DSA(71)



- Locking range more reduced than conventional lock type. Even if connectors are aligned laterally, the mounting space is reduced. Note : The clamp must be replaced for HIF3A socket type 60 contacts only. Take care about this point.

## ■Socket for Crimping

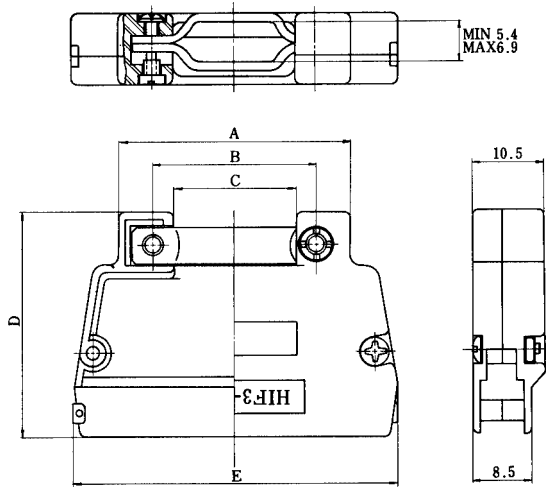


Unit: mm

| Part Number      | CL No.     | Number of Contacts | A     | B     | Polarizing Guide               | RoHS |
|------------------|------------|--------------------|-------|-------|--------------------------------|------|
| HIF3BA-10D-2.54C | 610-1041-0 | 10                 | 17.25 | 10.16 | One at center                  | YES  |
| HIF3BA-14D-2.54C | 610-1051-3 | 14                 | 22.35 | 15.24 |                                |      |
| HIF3BA-16D-2.54C | 610-1042-2 | 16                 | 24.8  | 17.78 |                                |      |
| HIF3BA-20D-2.54C | 610-1043-5 | 20                 | 29.95 | 22.86 |                                |      |
| HIF3BA-26D-2.54C | 610-1044-8 | 26                 | 37.55 | 30.48 |                                |      |
| HIF3BA-30D-2.54C | 610-1045-0 | 30                 | 42.63 | 35.56 |                                |      |
| HIF3BA-34D-2.54C | 610-1046-3 | 34                 | 47.75 | 40.64 |                                |      |
| HIF3BA-40D-2.54C | 610-1047-6 | 40                 | 55.35 | 48.26 |                                |      |
| HIF3BA-50D-2.54C | 610-1048-9 | 50                 | 68.04 | 60.96 | One right and left side, resp. |      |
| HIF3BB-50D-2.54C | 610-1061-7 |                    |       |       | One at center                  |      |
| HIF3BA-60D-2.54C | 610-1049-1 | 60                 | 80.77 | 73.66 | One right and left side, resp. |      |
| HIF3BB-60D-2.54C | 610-1062-0 |                    |       |       | One at center                  |      |
| HIF3BA-64D-2.54C | 610-1064-5 | 64                 | 85.85 | 78.74 | One right and left side, resp. |      |
| HIF3BB-64D-2.54C | 610-1063-2 |                    |       |       | One at center                  |      |

Note: Some variations may differ from those in above figures.

■Cover Case for Crimping socket



| Unit: mm      |               |                    |      |      |      |      |       |      |
|---------------|---------------|--------------------|------|------|------|------|-------|------|
| Part Number   | CL No.        | Number of Contacts | A    | B    | C    | D    | E     | RoHS |
| HIF3-20CV(72) | 562-0201-0-72 | 20                 | 24.5 | 18.0 | 12.0 | 30.5 | 29.95 | YES  |
| HIF3-26CV(72) | 562-0202-2-72 | 26                 | 30.2 | 20.0 | 14.0 | 32.0 | 37.55 |      |
| HIF3-30CV(72) | 562-0203-5-72 | 30                 | 32.2 | 22.0 | 16.0 | 33.0 | 42.63 |      |
| HIF3-34CV(72) | 562-0204-8-72 | 34                 | 34.2 | 24.0 | 18.0 | 33.5 | 47.75 |      |
| HIF3-40CV(72) | 562-0205-0-72 | 40                 | 36.2 | 26.0 | 20.0 | 35.5 | 55.35 |      |
| HIF3-50CV(72) | 562-0206-3-72 | 50                 | 39.2 | 29.0 | 23.0 | 38.0 | 68.04 |      |
| HIF3-60CV(72) | 562-0207-6-72 | 60                 | 42.2 | 32.0 | 26.0 | 40.5 | 80.77 |      |

Note 1: The type F lock pin header cannot be used for a mating member.

Note 2: Note that the product cannot be used with AWG #20.

Applicable jacket diameters are as described below.

- 20 contacts: 1.7 mm diameter MAX
- 26 to 40 contacts: 1.6 mm diameter MAX
- 50 to 60 contacts: 1.4 mm diameter MAX



◆Tools

●Crimping Tool



Manual Crimping Tool HIF3-T2226HC

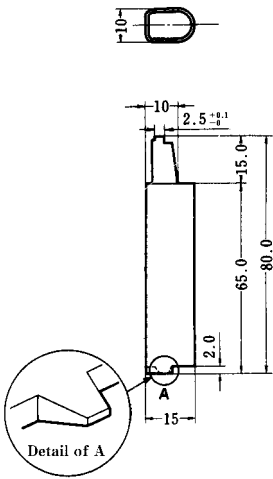
| Part Number  | CL No.     |
|--------------|------------|
| HIF3-T2226HC | 550-0063-8 |

●Automatic Crimping Tool (Type: CM-105)



| Part Number | CL No.     |
|-------------|------------|
| CM-105      | 901-0005-4 |

●Contact Extraction Tools



| Part Number | CL No.     |
|-------------|------------|
| HIF1-PO     | 550-0049-7 |

How to use the extraction tool

(1) How to extract contacts

As shown in Figure 1, where the extraction tool is inserted in the lance fixed slot on the insulated case, slightly pull the cable, and the contact can be removed.

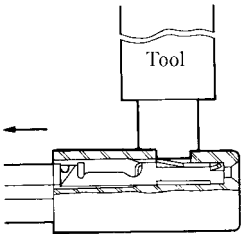


Figure 1

(2) How to adjust the lance (raise)

In order to re-insert the contact removed from the insulated case, raise the contact lance area using the tool A, and re-insert the contact, as shown in Figure 2.

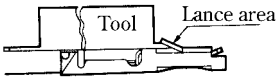


Figure 2

| Type      | Item                         | Part Number                     | CL No.     | Applicable Contact             | Applicable Cable               |
|-----------|------------------------------|---------------------------------|------------|--------------------------------|--------------------------------|
| Manual    | Manual crimping tool         | HIF3-T2226HC                    | 550-0063-8 | HIF3-2226SC<br>HIF3-2226SCA    | AWG#22 to #26                  |
|           |                              | HIF3-TA2428HC                   | 550-0100-2 | HIF3-2428SC<br>HIF3-2428SCA    | AWG#24 to #28                  |
|           |                              | HIF3-TA2022HC                   | 550-0124-0 | HIF3-2022SC                    | AWG#20 to #22                  |
|           |                              | HIF3-TB2226HC                   | 550-0154-1 | HIF3-2226SCC                   | AWG#22 to #26                  |
|           |                              | HIF3-TB2630HC                   | 550-0155-4 | HIF3-2630SCC                   | AWG#26 to #30                  |
| Automatic | Automatic crimping tool unit | CM-105                          | 901-0005-4 | —————                          | —————                          |
|           | Applicator                   | AP105-HIF3-22-28SCF<br>(Note1)  | 901-4031-6 | HIF3-2226SCF<br>HIF3-2428SCF   | AWG#22 to #26<br>AWG#24 to #28 |
|           |                              | AP105-HIF3-22-28SCFA<br>(Note1) | 901-4030-3 | HIF3-2226SCFA<br>HIF3-2428SCFA | AWG#22 to #26<br>AWG#24 to #28 |
|           |                              | AP105-HIF3-2022S                | 901-4027-9 | HIF3-2022SCF                   | AWG#20 to #22                  |
|           |                              | AP105-HIF3-2226SCFC             | 901-4005-6 | HIF3-2226SCFC                  | AWG#22 to #26                  |
|           |                              | AP105-HIF3-2630SCFC             | 901-4006-9 | HIF3-2630SCFC                  | AWG#26 to #30                  |
|           |                              | AP105-HIF3-3236SCFC             | 901-4007-1 | HIF3-3236SCFC                  | AWG#32 to #36                  |
|           | Extraction tool              | HIF1-PO                         | 550-0049-7 | —————                          | —————                          |

Note1: AP106-HIF3-22-28SCF and AP105-HIF3-22-28CFA can be modified by changing a few parts.

## ◆Socket Side (Crimping) Assembling Procedures

- (1) As shown in Figure 1, peel the applicable cable (AWG#20 to #26) jacket, and connect it using crimping jig HIF3-TA2022HC, HIF3-TA2226HC, or HIF3-TA2426HC. In this case, insert the cable so as to hit the contact cable stripper position as shown Figure 2.
- (2) After connection as shown Figure 2, check the contact direction, and insert the contact as shown Figures 3 and 4. Slightly pull the cable, and check whether the contact lance position is firmly fixed to the insulation case, as shown in the area (A).

Note1 : For handling procedures for special crimping tools, refer to the "Handling Instruction Manual".

Note2 : Wire strip length: Refer to crimp condition sheet.

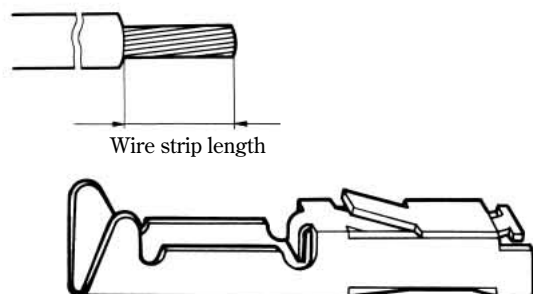


Figure 1

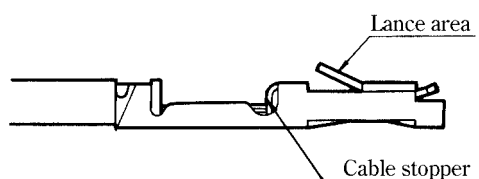


Figure 2

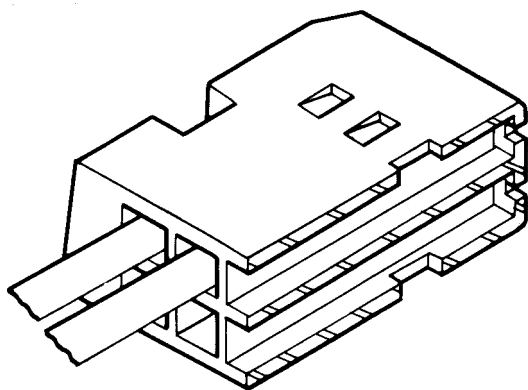


Figure 3

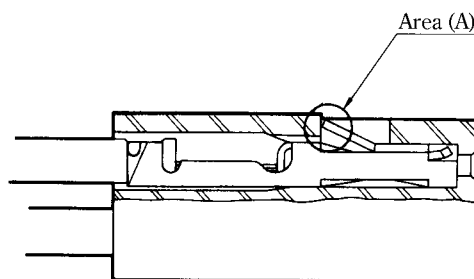
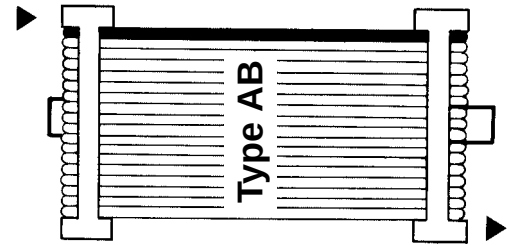
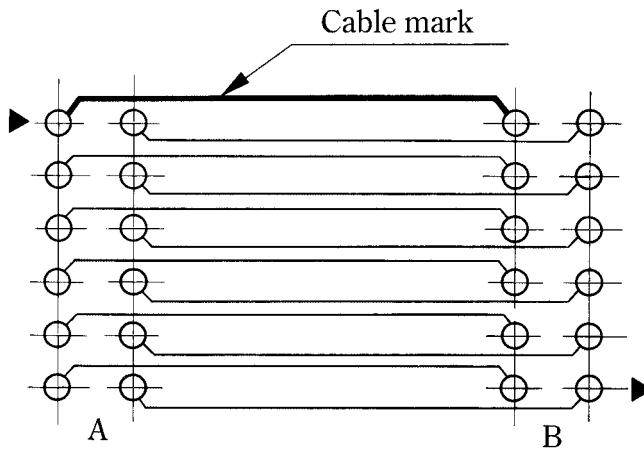


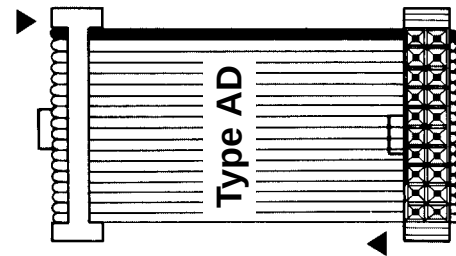
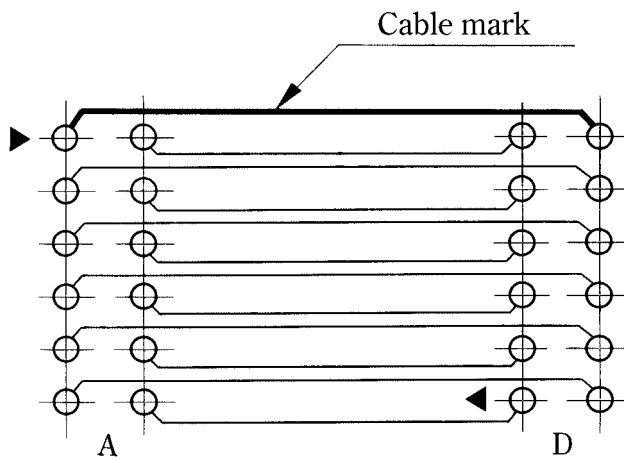
Figure 4

## HIF3B Connection Circuit Diagram

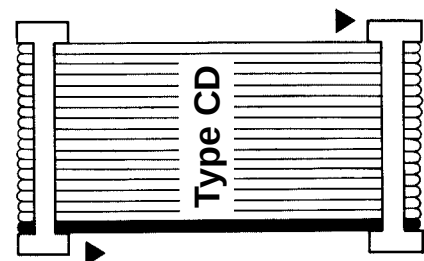
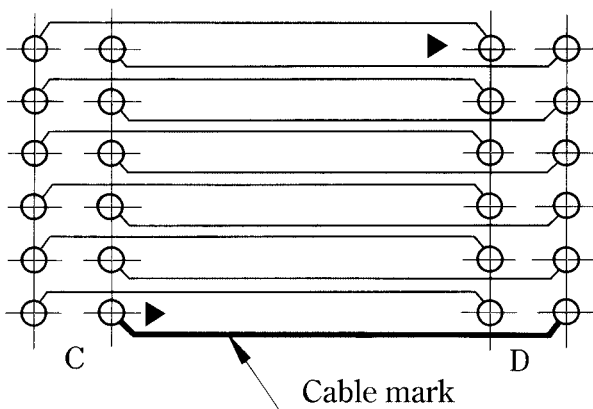
### Type AB



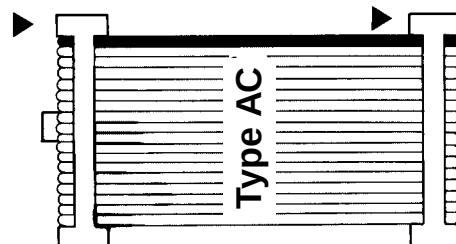
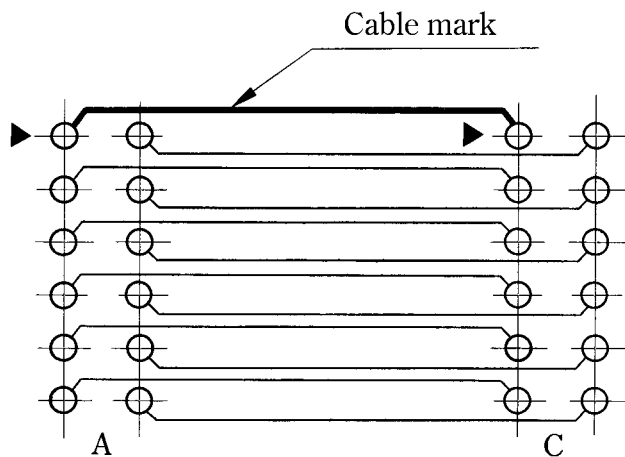
### Type AD



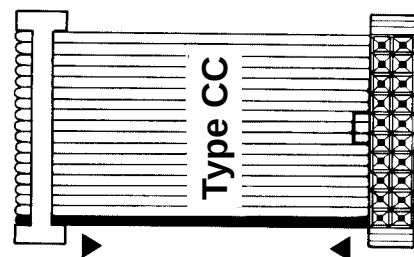
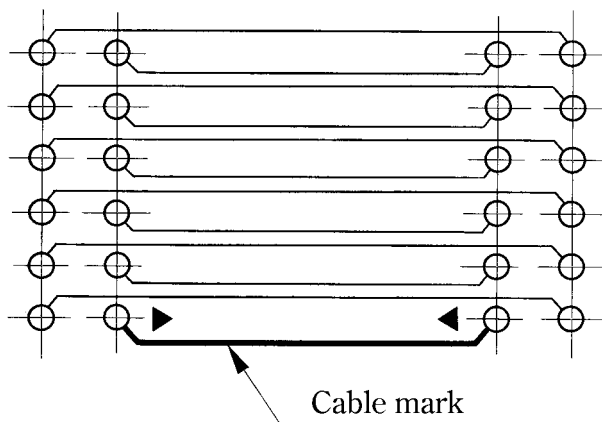
### Type CD



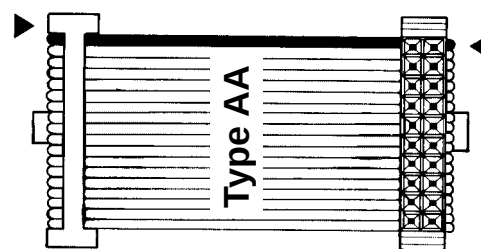
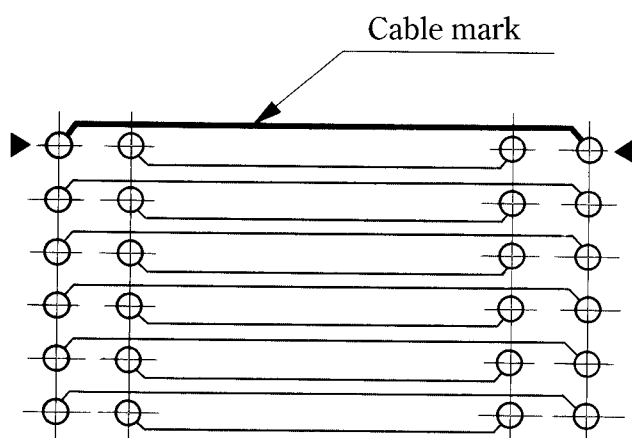
## Type AC



## Type CC

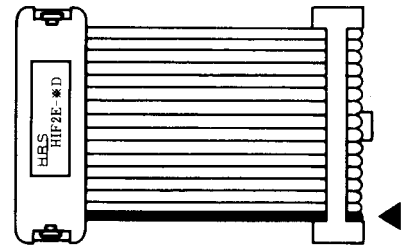
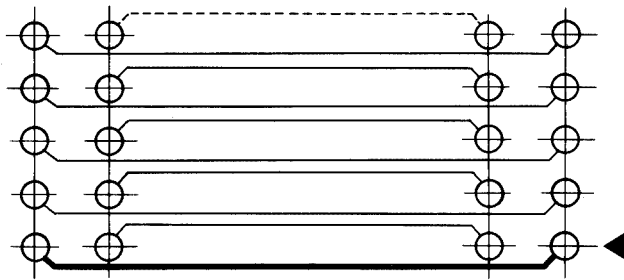


## Type AA

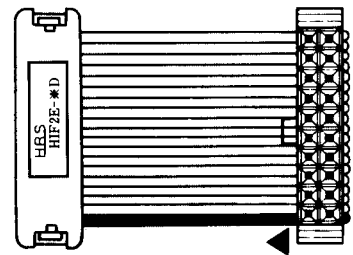
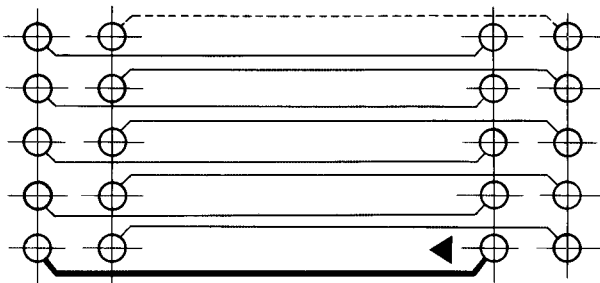


# HIF2E R(S) A to HIF3B Connection Circuit Diagram

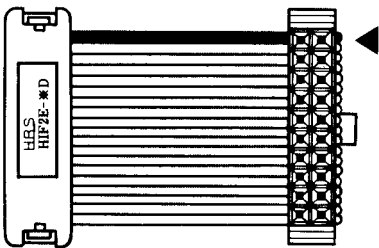
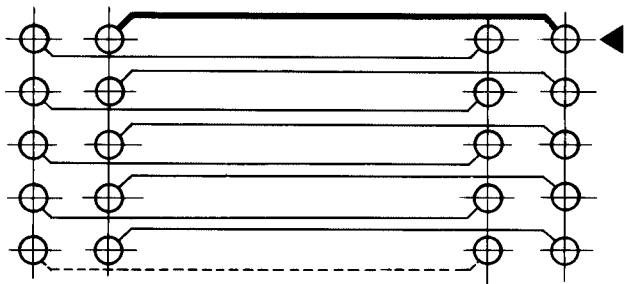
## Type AA



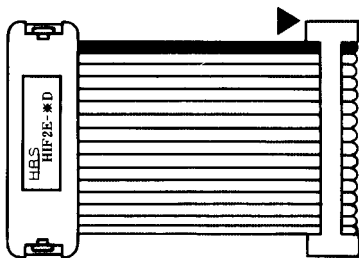
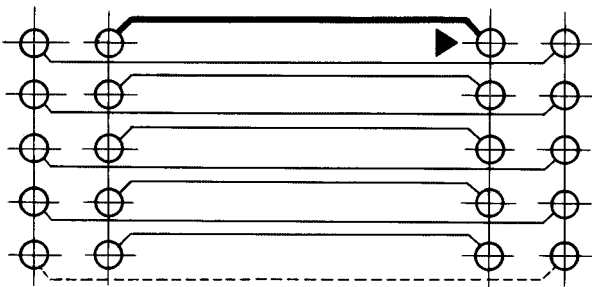
## Type AC



Type BA

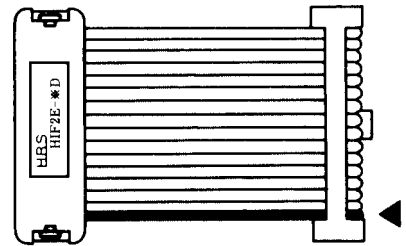
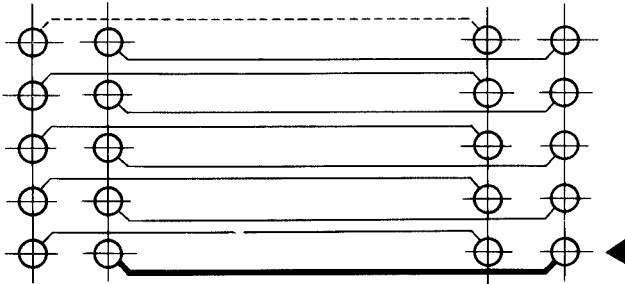


Type BC

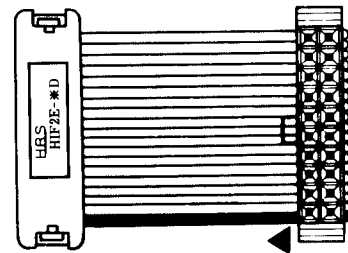
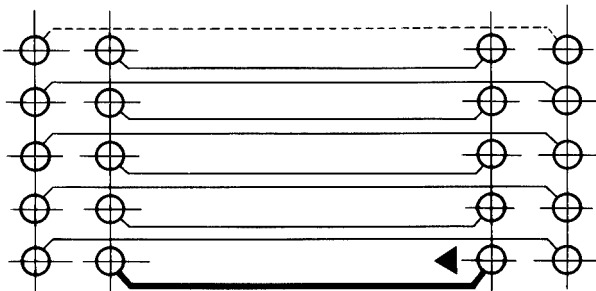


## HIF2E R(S)B to HIF3 Connection Circuit Diagram

### Type AA

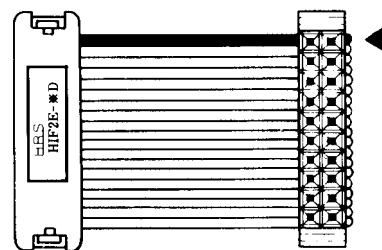
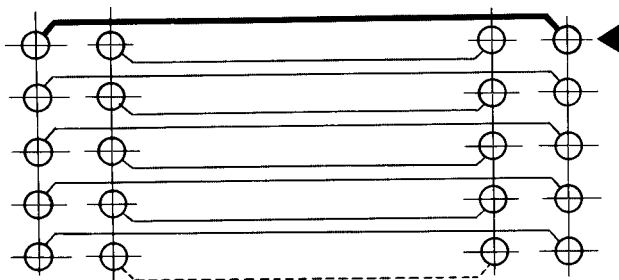


### Type AC



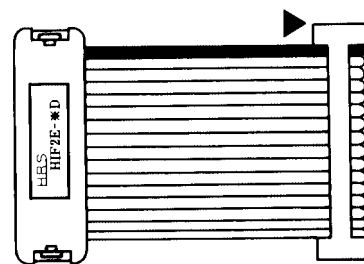
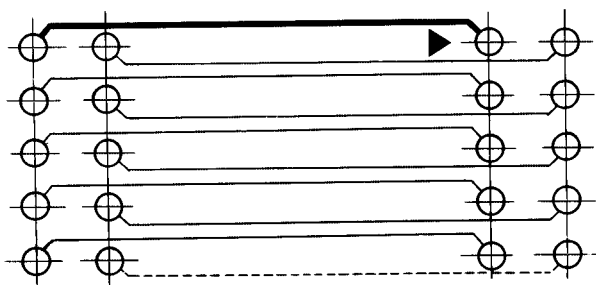
### Type BA

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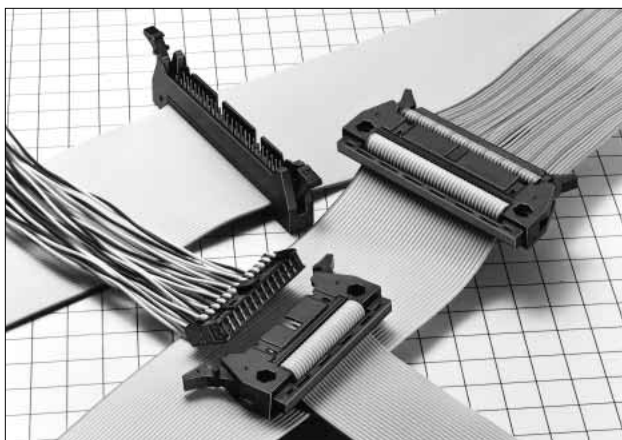


### Type BC

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## HIF3B In-line Type Ribbon Cable Connector



### ■Features

#### 1. In-line Type

This connector can be used for internal wiring cable to cable within equipment.

#### 2. Compatibility

This connector is compatible with HIF3A series as well as HIF3B series socket.

#### 3. Applicable Cable

The applicable cable is UL2651 AWG#28 flat cable (7 pcs./6.127mm, jacket diameter: 0.8 to 1.0mm).

### ■Product Specifications

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

| Item                             | Specification                              | Condition                                                                                                   |
|----------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 1. Insulation Resistance         | 1000M ohms min.                            | 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.     | (-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: 15m ohms max.          | 500 cycles                                                                                                  |

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 |
| Plug Contact | Beryllium copper | Gold plated over nickel underplated | ———     |

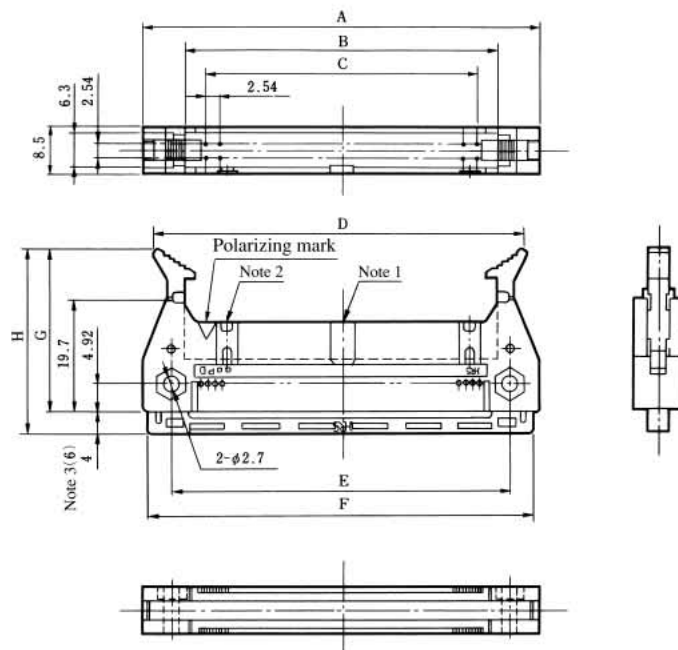
### ■Ordering Information

**HIF3BA - \* P D - 2.54 R - MC**

①                      ②    ③    ④                      ⑤                      ⑥                      ⑦

|                      |                                             |                                      |
|----------------------|---------------------------------------------|--------------------------------------|
| ① Series Name        | : HIF3BB (50, 60, 64 contacts only)         | ③ P : Plug                           |
|                      | : HIF3BD (10 contacts only)                 | ④ D : contact alignment : D : Double |
|                      | : HIF3BAE (60 contacts only)                | ⑤ Contact Pitch : 2.54mm             |
| ② Number of Contacts | : 10, 16, 20, 26, 30, 34, 40, 50, 60 and 64 | ⑥ Connection type : Ribbon cable     |
|                      |                                             | ⑦ MC : Mold clamp                    |

## ■ Plug



Note 1, Note 2: The number of polarizing slot and key installed positions changes according to products.

The 10 contact connector only has no position for polarizing key insulation.

Note 3: The number indicated in parentheses are sizes for 60 and 64 contact connectors.

Note 4: The HIF3BAE-60PD-2.54R-MC product partially differs in a locking form, and the mating member is applicable for HIF3A only.

Unit:mm

| Part Number           | CL No.     | Number of Contacts | A        | B             | C     | D                | E     | F     | G     | H                                  | Polarizing slot                    | RoHS |
|-----------------------|------------|--------------------|----------|---------------|-------|------------------|-------|-------|-------|------------------------------------|------------------------------------|------|
| HIF3BD -10PD-2.54R-MC | 611-0031-7 | 10                 | 31.98    | 17.48         | 10.16 | 28.14<br>MAX51.1 | 21.88 | 30.13 | 29.2  | 33.2                               | One at center                      | YES  |
| HIF3BA -16PD-2.54R-MC | 611-0032-0 | 16                 | 39.60    | 25.10         | 17.78 | 35.74<br>MAX58.7 | 29.50 | 37.75 |       |                                    |                                    |      |
| HIF3BA -20PD-2.54R-MC | 611-0033-2 | 20                 | 44.68    | 30.18         | 22.86 | 40.84<br>MAX63.8 | 34.58 | 42.83 |       |                                    |                                    |      |
| HIF3BA -26PD-2.54R-MC | 611-0034-5 | 26                 | 52.30    | 37.80         | 30.48 | 48.44<br>MAX71.4 | 42.20 | 50.45 |       |                                    |                                    |      |
| HIF3BA -30PD-2.54R-MC | 611-0035-8 | 30                 | 57.38    | 42.88         | 35.56 | 53.54<br>MAX76.5 | 47.28 | 55.53 |       |                                    |                                    |      |
| HIF3BA -34PD-2.54R-MC | 611-0036-0 | 34                 | 62.46    | 47.96         | 40.64 | 58.64<br>MAX81.6 | 52.36 | 60.61 |       |                                    |                                    |      |
| HIF3BA -40PD-2.54R-MC | 611-0037-3 | 40                 | 70.08    | 55.58         | 48.26 | 66.24<br>MAX89.2 | 59.98 | 68.23 |       |                                    |                                    |      |
| HIF3BA -50PD-2.54R-MC | 611-0038-6 | 50                 | 82.78    | 68.28         | 60.96 | 78.94            | 72.68 | 80.93 |       | One on right and left sides, resp. |                                    |      |
| HIF3BB -50PD-2.54R-MC | 611-0041-0 | 50                 |          |               |       | MAX101.9         |       |       |       | One at center                      |                                    |      |
| HIF3BA -60PD-2.54R-MC | 611-0039-9 | 60                 | 95.48    | 80.98         | 73.66 | 91.64            | 85.38 | 93.63 | 31.2  | 37.2                               | One on right and left sides, resp. |      |
| HIF3BB -60PD-2.54R-MC | 611-0042-3 | 60                 |          |               |       | MAX114.6         |       |       |       |                                    | One at center                      |      |
| HIF3BAE-60PD-2.54R-MC | 611-0059-6 | 60                 |          |               |       | 91.7<br>MAX121.3 |       |       |       |                                    | One on right and left sides, resp. |      |
| HIF3BA -64PD-2.54R-MC | 611-0040-8 | 64                 |          |               |       | 100.56           | 86.06 | 78.74 | 96.74 | 90.46                              | 98.71                              |      |
| HIF3BB -64PD-2.54R-MC | 611-0045-1 | 64                 | MAX119.7 | One at center |       |                  |       |       |       |                                    |                                    |      |

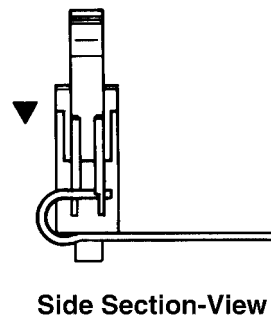
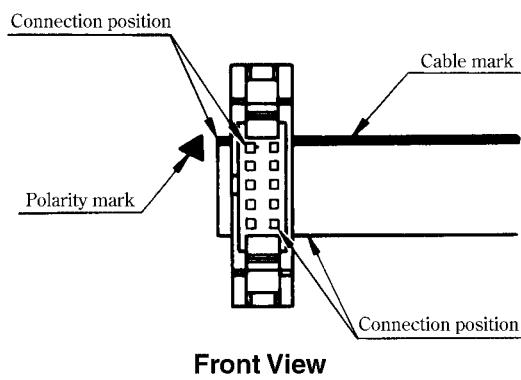
\*D size      locking size  
                  unlocking size

## ◆ Connection Procedures

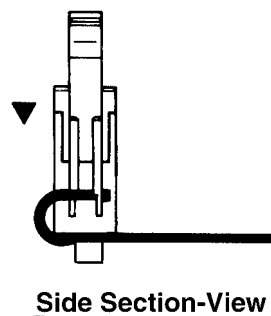
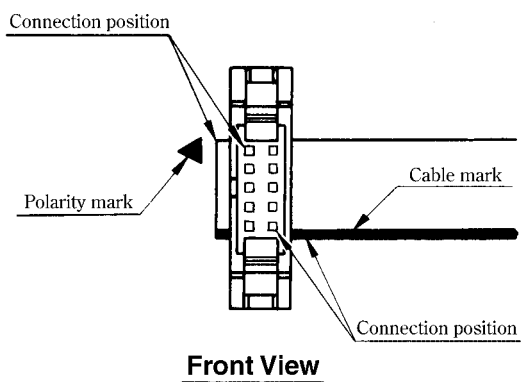
Note1: Cable length tolerance    Less than 500  $\pm \frac{1}{8}$  (mm)  
                                                  More than 500  $\pm \frac{3}{8}$  (mm)

Note2: When a cable such as a twist cable or a slit (like a roller screen) cable is used, the cable pitch will change according to cable manufacturers. If connection failure has occurred, please contact Hirose sales.

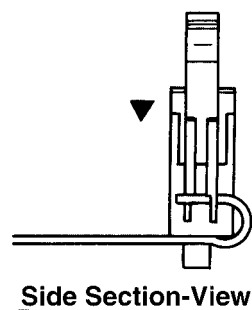
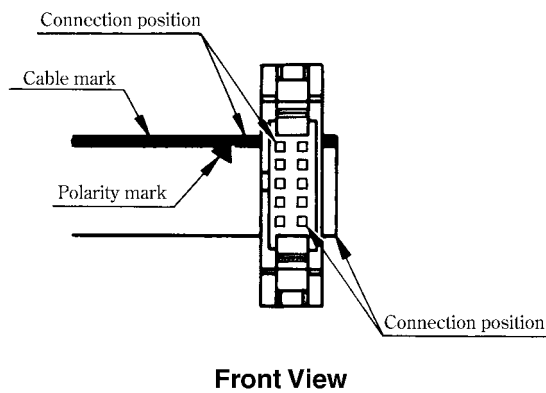
**Type AO**



**Type BO**



**Type CO**



**Type DO**

