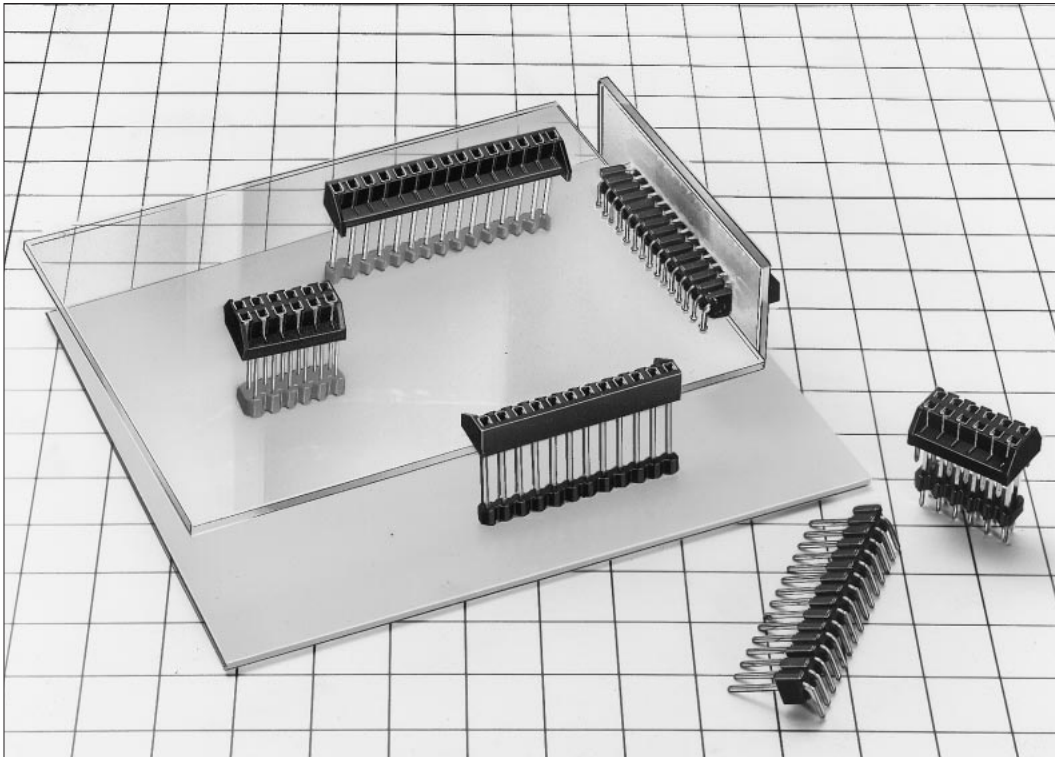


# MDF7 SERIES

## 2.54 mm Pitch Bottom Entry Type Connector



### ■ Features

#### 1. Board-to-board distance can be freely set.

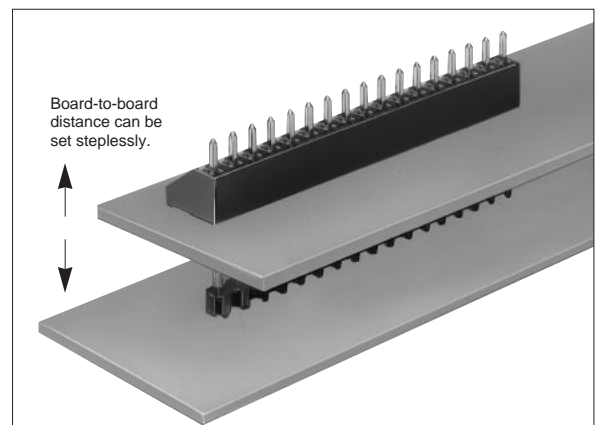
Pass-through construction header pins and many header variations allow you to set the board-to-board steplessly.

#### 2. Arrangement of component sides

Components sides of two boards can be arranged on the same side, without facing each other.

#### 3. Many variations

Single-row, double-row, tin-plated, and gold-plated models are available, as are various types of headers to suit board-to-board distance requirements. For board-to-boards distances not specified in our catalog, please contact us.



### ■ Applications

Telephones, internal connections of OA/FA equipment, connection of IPM and IGBT to boards

Product standard

|        |                                |              |                                       |                             |                                   |                                      |
|--------|--------------------------------|--------------|---------------------------------------|-----------------------------|-----------------------------------|--------------------------------------|
| Rating | Rated current<br>Rated voltage | 3A<br>AC250V | Operating temp.<br>Operating humidity | -35~85°C (Note 1)<br>40~80% | Storage temp.<br>Storage humidity | -10~60°C (Note 2)<br>40~70% (Note 2) |
|--------|--------------------------------|--------------|---------------------------------------|-----------------------------|-----------------------------------|--------------------------------------|

| Item                               | Standard  | Conditions   |  |
|------------------------------------|---|--|--|
| 1. Insulation resistance           | 1000 MΩ or more   | Measured at 500 VDC  |  |
| 2. Withstand voltage               | No flashover or dielectric breakdown allowed                              | AC650V 1 minute  |  |
| 3. Contact resistance              | 30 mΩ or less   | Measured at 100 mA   |  |
| 4. Insertion and withdrawals force | MIN 0.4 N (40gf), MAX 4.4 N (450gf)                                       | To be measured with a steel pin of $\square 0.635 \pm 0.002$ mm                                  |  |
| 5. Vibration resistance            | No electrical discontinuity of 10 μs or more allowed                      | Frequency: 10 - 55 Hz, single-side amplitude: 0.75 mm, 3 directions for 2 hours                  |  |
| 6. Moisture resistance             | Contact resistance: 30 mΩ or less, insulation resistance: 500 MΩ or more  | Temperature: 40±2°C, humidity: 90 - 95%, allow 96 hours before measurement                       |  |
| 7. Temperature cycle               | Contact resistance: 30 mΩ or less, insulation resistance: 1000 MΩ or more | (-55°C for 30 min. → 5 - 35°C for 10 min. → 85°C for 30 min. → 5 - 35°C for 10 min.)<br>5 cycles |  |
| 8. Insertion/extraction life       | Contact resistance: 30 mΩ or less   | Tin-plate : 30 insertions/extractions  | Gold-plate : 50 insertions/extractions                       |
| 9. Solder heat resistance          | No melting of resin affecting the connector performance allowed           | Flow: 250°C for 10 seconds   | Manual soldering: solder temperature:<br>300°C for 3 seconds |

Note 1: Includes temperature rise when power is on.

Note 2: "Storage" refers to a long period of storage without use of the product before being mounted on a board.

The operating temperature and humidity ranges apply to the connectors mounted on a board when turned off, and connectors under temporary storage such as those being transported.

Note 3: The above standards are typical for the MDF7 series. The formal standards are stated in the delivery specifications.

Material

| Product No. | Part       | Material        | Processing                         | UL Rating |
|-------------|------------|-----------------|------------------------------------|-----------|
| Receptacle  | Insulation | Polyamide resin | Black                              | UL94V-0   |
|             | Terminal   | Phosphor bronze | Tin-plated or gold-plated          | _____     |
| Pin header  | Insulation | PBT resin       | Main body : Black / Locator : Grey | UL94V-0   |
|             | Terminal   | Brass           | Tin-plated or gold-plated          | _____     |

Note : Our tin plating is protected from whiskers.

Structure of the product number

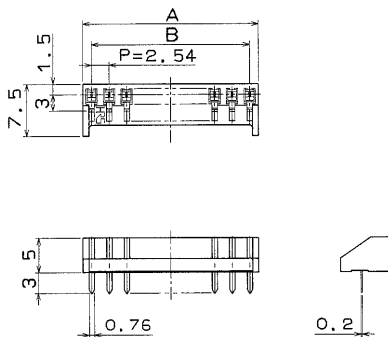
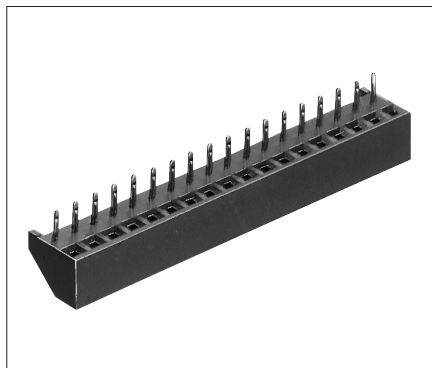
The product specifications can be determined from the product number.

When ordering, select products using the product numbers listed in this catalog. 132 to 136 pages.

MDF7 - \*S - 2.54DSA  
 ①   ②   ③ ④   ④   ⑥

|  |   |
|--|---|
| ① Series Name : MDF  | ⑤ Contact pitch : 2.54mm  |
| ② Series No. : 7   | ⑥ Type of termination<br>DSA : Straight dip<br>DS : Right angle dip |
| ③ Number of contacts : 3~46  |   |
| ④ Types of connectors<br>S : Single row receptacle<br>D : Double row receptacle<br>P : Single row pin header<br>DP : Double row pin header |   |

## Single row receptacle



[Specification No.]: -\*\*, (\*\*)

Blank : Tin-plated

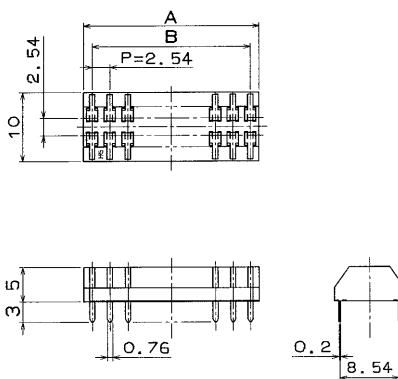
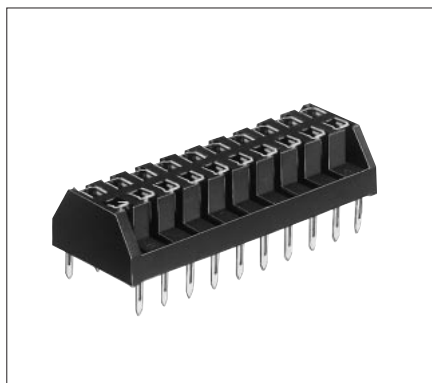
(01) : Gold-plated

Unit : mm

| HRS No.       | Product No.           | No. of contacts | A     | B     | HRS No.       | Product No.           | No. of contacts | A     | B     |
|---------------|-----------------------|-----------------|-------|-------|---------------|-----------------------|-----------------|-------|-------|
| 547-0355-0-** | MDF7- 3S-2.54DSA (**) | 3               | 7.62  | 5.08  | 547-0012-4-** | MDF7-15S-2.54DSA (**) | 15              | 38.10 | 35.56 |
| 547-0112-9-** | MDF7- 5S-2.54DSA (**) | 5               | 12.70 | 10.16 | 547-0141-7-** | MDF7-16S-2.54DSA (**) | 16              | 40.64 | 38.10 |
| 547-0129-1-** | MDF7- 6S-2.54DSA (**) | 6               | 15.24 | 12.70 | 547-0142-0-** | MDF7-17S-2.54DSA (**) | 17              | 43.18 | 40.64 |
| 547-0135-4-** | MDF7- 7S-2.54DSA (**) | 7               | 17.78 | 15.24 | 547-0013-7-** | MDF7-18S-2.54DSA (**) | 18              | 45.72 | 43.18 |
| 547-0136-7-** | MDF7- 8S-2.54DSA (**) | 8               | 20.32 | 17.78 | 547-0143-2-** | MDF7-19S-2.54DSA (**) | 19              | 48.26 | 45.72 |
| 547-0137-0-** | MDF7- 9S-2.54DSA (**) | 9               | 22.86 | 20.32 | 547-0051-6-** | MDF7-20S-2.54DSA (**) | 20              | 50.80 | 48.26 |
| 547-0038-8-** | MDF7-10S-2.54DSA (**) | 10              | 25.40 | 22.86 | 547-0144-5-** | MDF7-21S-2.54DSA (**) | 21              | 53.34 | 50.80 |
| 547-0138-2-** | MDF7-11S-2.54DSA (**) | 11              | 27.94 | 25.40 | 547-0145-8-** | MDF7-22S-2.54DSA (**) | 22              | 55.88 | 53.34 |
| 547-0040-0-** | MDF7-12S-2.54DSA (**) | 12              | 30.48 | 27.94 | 547-0146-0-** | MDF7-23S-2.54DSA (**) | 23              | 58.42 | 55.88 |
| 547-0139-5-** | MDF7-13S-2.54DSA (**) | 13              | 33.02 | 30.48 | 547-0147-3-** | MDF7-24S-2.54DSA (**) | 24              | 60.96 | 58.42 |
| 547-0140-4-** | MDF7-14S-2.54DSA (**) | 14              | 35.56 | 33.02 | 547-0014-0-** | MDF7-25S-2.54DSA (**) | 25              | 63.50 | 60.96 |

Note : Minimum order quantity of the models without a number specified is one pack containing 100 sockets.

## Double row receptacle



Unit : mm

| HRS No.       | Product No.           | No. of contacts | A     | B     |
|---------------|-----------------------|-----------------|-------|-------|
| 547-0032-1-** | MDF7-12D-2.54DSA (**) | 12              | 15.24 | 12.70 |
| 547-0354-8-** | MDF7-14D-2.54DSA (**) | 14              | 17.78 | 15.24 |
| 547-0363-9-** | MDF7-16D-2.54DSA (**) | 16              | 20.32 | 17.78 |
| 547-0033-4-** | MDF7-20D-2.54DSA (**) | 20              | 25.40 | 22.86 |
| 547-0246-5-** | MDF7-22D-2.54DSA (**) | 22              | 27.94 | 25.40 |
| 547-0244-0-** | MDF7-24D-2.54DSA (**) | 24              | 30.48 | 27.94 |
| 547-0247-8-** | MDF7-26D-2.54DSA (**) | 26              | 33.02 | 30.48 |
| 547-0016-5-** | MDF7-30D-2.54DSA (**) | 30              | 38.10 | 35.56 |
| 547-0227-0-** | MDF7-34D-2.54DSA (**) | 34              | 43.18 | 40.64 |
| 547-0228-3-** | MDF7-40D-2.54DSA (**) | 40              | 50.80 | 48.26 |
| 547-0229-6-** | MDF7-46D-2.54DSA (**) | 46              | 58.42 | 55.88 |

[Specification No.]: -\*\*, (\*\*) (Note 2)

Blank : Gold-plated

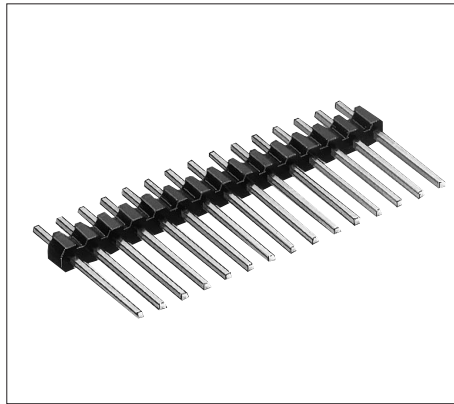
(01) : Tin-plated

Note 1: Minimum order quantity of the models without a number specified is one pack containing 100 sockets.

Note 2: Plating specifications of the double-row MDF7 series:

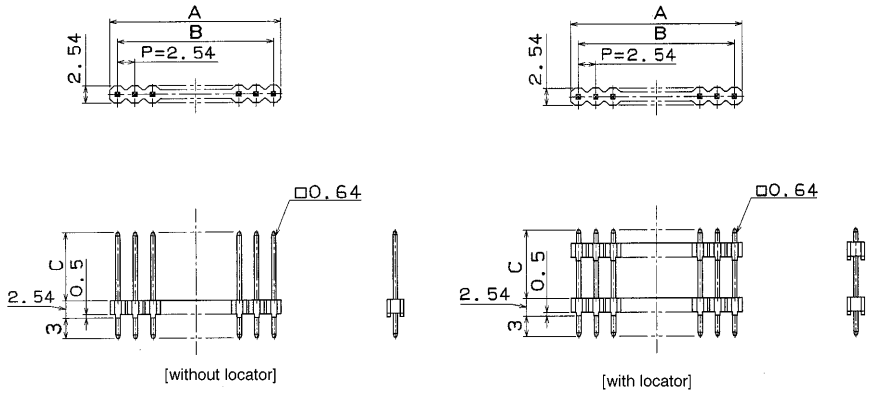
Blank: Gold-plated, (01): Tin-plated (different from the single-row MDF-7)

Single row straight pin header



● Board through-hole dia. :  $\phi 1.0 \pm 0.1$

[Specification No.]: -\*\*, (\*\*)  
 Blank : Tin-plated  
 (01) : Gold-plated



● MDF7 (Board-to-board distance 2.54~5.5mm)

● MDF7B (Board-to-board distance 2.54~12mm)

Unit : mm

Unit : mm

| HRS No.      | Product No.           | No. of contacts | A     | B     | C  |
|--------------|-----------------------|-----------------|-------|-------|----|
| 547-0220-1-* | MDF7- 3P-2.54DSA (**) | 3               | 7.62  | 5.08  | 10 |
| 547-0113-1-* | MDF7- 5P-2.54DSA (**) | 5               | 12.70 | 10.16 | 10 |
| 547-0130-0-* | MDF7- 6P-2.54DSA (**) | 6               | 15.24 | 12.70 | 10 |
| 547-0148-6-* | MDF7- 7P-2.54DSA (**) | 7               | 17.78 | 15.24 | 10 |
| 547-0149-9-* | MDF7- 8P-2.54DSA (**) | 8               | 20.32 | 17.78 | 10 |
| 547-0150-8-* | MDF7- 9P-2.54DSA (**) | 9               | 22.86 | 20.32 | 10 |
| 547-0039-0-* | MDF7-10P-2.54DSA (**) | 10              | 25.40 | 22.86 | 10 |
| 547-0151-0-* | MDF7-11P-2.54DSA (**) | 11              | 27.94 | 25.40 | 10 |
| 547-0043-8-* | MDF7-12P-2.54DSA (**) | 12              | 30.48 | 27.94 | 10 |
| 547-0152-3-* | MDF7-13P-2.54DSA (**) | 13              | 33.02 | 30.48 | 10 |
| 547-0153-6-* | MDF7-14P-2.54DSA (**) | 14              | 35.56 | 33.02 | 10 |
| 547-0018-0-* | MDF7-15P-2.54DSA (**) | 15              | 38.10 | 35.56 | 10 |
| 547-0111-6-* | MDF7-16P-2.54DSA (**) | 16              | 40.64 | 38.10 | 10 |
| 547-0154-9-* | MDF7-17P-2.54DSA (**) | 17              | 43.18 | 40.64 | 10 |
| 547-0022-8-* | MDF7-18P-2.54DSA (**) | 18              | 45.72 | 43.18 | 10 |
| 547-0155-1-* | MDF7-19P-2.54DSA (**) | 19              | 48.26 | 45.72 | 10 |
| 547-0123-5-* | MDF7-20P-2.54DSA (**) | 20              | 50.80 | 48.26 | 10 |
| 547-0156-4-* | MDF7-21P-2.54DSA (**) | 21              | 53.34 | 50.80 | 10 |
| 547-0157-7-* | MDF7-22P-2.54DSA (**) | 22              | 55.88 | 53.34 | 10 |
| 547-0158-0-* | MDF7-23P-2.54DSA (**) | 23              | 58.42 | 55.88 | 10 |
| 547-0159-2-* | MDF7-24P-2.54DSA (**) | 24              | 60.96 | 58.42 | 10 |
| 547-0023-0-* | MDF7-25P-2.54DSA (**) | 25              | 63.50 | 60.96 | 10 |

| HRS No.      | Product No.            | No. of contacts | A     | B     | C     |
|--------------|------------------------|-----------------|-------|-------|-------|
| 547-0304-0-* | MDF7B- 3P-2.54DSA (**) | 3               | 7.62  | 5.08  | 16.46 |
| 547-0133-9-* | MDF7B- 5P-2.54DSA (**) | 5               | 12.70 | 10.16 | 16.46 |
| 547-0131-3-* | MDF7B- 6P-2.54DSA (**) | 6               | 15.24 | 12.70 | 16.46 |
| 547-0177-4-* | MDF7B- 7P-2.54DSA (**) | 7               | 17.78 | 15.24 | 16.46 |
| 547-0178-7-* | MDF7B- 8P-2.54DSA (**) | 8               | 20.32 | 17.78 | 16.46 |
| 547-0179-0-* | MDF7B- 9P-2.54DSA (**) | 9               | 22.86 | 20.32 | 16.46 |
| 547-0048-1-* | MDF7B-10P-2.54DSA (**) | 10              | 25.40 | 22.86 | 16.46 |
| 547-0047-9-* | MDF7B-11P-2.54DSA (**) | 11              | 27.94 | 25.40 | 16.46 |
| 547-0041-2-* | MDF7B-12P-2.54DSA (**) | 12              | 30.48 | 27.94 | 16.46 |
| 547-0180-9-* | MDF7B-13P-2.54DSA (**) | 13              | 33.02 | 30.48 | 16.46 |
| 547-0181-1-* | MDF7B-14P-2.54DSA (**) | 14              | 35.56 | 33.02 | 16.46 |
| 547-0024-3-* | MDF7B-15P-2.54DSA (**) | 15              | 38.10 | 35.56 | 16.46 |
| 547-0182-4-* | MDF7B-16P-2.54DSA (**) | 16              | 40.64 | 38.10 | 16.46 |
| 547-0183-7-* | MDF7B-17P-2.54DSA (**) | 17              | 43.18 | 40.64 | 16.46 |
| 547-0025-6-* | MDF7B-18P-2.54DSA (**) | 18              | 45.72 | 43.18 | 16.46 |
| 547-0184-0-* | MDF7B-19P-2.54DSA (**) | 19              | 48.26 | 45.72 | 16.46 |
| 547-0052-9-* | MDF7B-20P-2.54DSA (**) | 20              | 50.80 | 48.26 | 16.46 |
| 547-0185-2-* | MDF7B-21P-2.54DSA (**) | 21              | 53.34 | 50.80 | 16.46 |
| 547-0186-5-* | MDF7B-22P-2.54DSA (**) | 22              | 55.88 | 53.34 | 16.46 |
| 547-0066-3-* | MDF7B-23P-2.54DSA (**) | 23              | 58.42 | 55.88 | 16.46 |
| 547-0067-6-* | MDF7B-24P-2.54DSA (**) | 24              | 60.96 | 58.42 | 16.46 |
| 547-0026-9-* | MDF7B-25P-2.54DSA (**) | 25              | 63.50 | 60.96 | 16.46 |

Note 1: The board-to-board distances in the above Table are for boards of 1.6 mm in thickness.

Note 2: Minimum order quantity of the models without a number specified is one pack containing 100 sockets.

## ● MDF7P (Board-to-board distance 2.54 ~ 8mm)

## ● MDF7C (Board-to-board distance 5.08 ~ 15mm with locator)

Unit: mm

Unit : mm

| HRS No.      | Product No.            | No. of contacts | A     | B     | C    |
|--------------|------------------------|-----------------|-------|-------|------|
| —————        | MDF7P- 3P-2.54DSA (**) | 3               | 7.62  | 5.08  | 12.5 |
| —————        | MDF7P- 5P-2.54DSA (**) | 5               | 12.70 | 10.16 | 12.5 |
| —————        | MDF7P- 6P-2.54DSA (**) | 6               | 15.24 | 12.70 | 12.5 |
| —————        | MDF7P- 7P-2.54DSA (**) | 7               | 17.78 | 15.24 | 12.5 |
| —————        | MDF7P- 8P-2.54DSA (**) | 8               | 20.32 | 17.78 | 12.5 |
| —————        | MDF7P- 9P-2.54DSA (**) | 9               | 22.86 | 20.32 | 12.5 |
| 547-0360-0-* | MDF7P-10P-2.54DSA (**) | 10              | 25.40 | 22.86 | 12.5 |
| —————        | MDF7P-11P-2.54DSA (**) | 11              | 27.94 | 25.40 | 12.5 |
| 547-0345-7-* | MDF7P-12P-2.54DSA (**) | 12              | 30.48 | 27.94 | 12.5 |
| —————        | MDF7P-13P-2.54DSA (**) | 13              | 33.02 | 30.48 | 12.5 |
| 547-0385-1-* | MDF7P-14P-2.54DSA (**) | 14              | 35.56 | 33.02 | 12.5 |
| 547-0230-5-* | MDF7P-15P-2.54DSA (**) | 15              | 38.10 | 35.56 | 12.5 |
| 547-0346-0-* | MDF7P-16P-2.54DSA (**) | 16              | 40.64 | 38.10 | 12.5 |
| —————        | MDF7P-17P-2.54DSA (**) | 17              | 43.18 | 40.64 | 12.5 |
| —————        | MDF7P-18P-2.54DSA (**) | 18              | 45.72 | 43.18 | 12.5 |
| 547-0347-2-* | MDF7P-19P-2.54DSA (**) | 19              | 48.26 | 45.72 | 12.5 |
| —————        | MDF7P-20P-2.54DSA (**) | 20              | 50.80 | 48.26 | 12.5 |
| —————        | MDF7P-21P-2.54DSA (**) | 21              | 53.34 | 50.80 | 12.5 |
| —————        | MDF7P-22P-2.54DSA (**) | 22              | 55.88 | 53.34 | 12.5 |
| —————        | MDF7P-23P-2.54DSA (**) | 23              | 58.42 | 55.88 | 12.5 |
| —————        | MDF7P-24P-2.54DSA (**) | 24              | 60.96 | 58.42 | 12.5 |
| 547-0348-5-* | MDF7P-25P-2.54DSA (**) | 25              | 63.50 | 60.96 | 12.5 |

| HRS No.      | Product No.            | No. of contacts | A     | B     | C     |
|--------------|------------------------|-----------------|-------|-------|-------|
| —————        | MDF7C- 3P-2.54DSA (**) | 3               | 7.62  | 5.08  | 19.46 |
| 547-0344-4-* | MDF7C- 5P-2.54DSA (**) | 5               | 12.70 | 10.16 | 19.46 |
| 547-0268-8-* | MDF7C- 6P-2.54DSA (**) | 6               | 15.24 | 12.70 | 19.46 |
| 547-0378-6-* | MDF7C- 7P-2.54DSA (**) | 7               | 17.78 | 15.24 | 19.46 |
| 547-0375-8-* | MDF7C- 8P-2.54DSA (**) | 8               | 20.32 | 17.78 | 19.46 |
| —————        | MDF7C- 9P-2.54DSA (**) | 9               | 22.86 | 20.32 | 19.46 |
| —————        | MDF7C-10P-2.54DSA (**) | 10              | 25.40 | 22.86 | 19.46 |
| 547-0376-0-* | MDF7C-11P-2.54DSA (**) | 11              | 27.97 | 25.40 | 19.46 |
| —————        | MDF7C-12P-2.54DSA (**) | 12              | 30.48 | 27.94 | 19.46 |
| 547-0401-6-* | MDF7C-13P-2.54DSA (**) | 13              | 33.02 | 30.48 | 19.46 |
| 547-0380-8-* | MDF7C-14P-2.54DSA (**) | 14              | 35.56 | 33.02 | 19.46 |
| —————        | MDF7C-15P-2.54DSA (**) | 15              | 38.10 | 35.56 | 19.46 |
| —————        | MDF7C-16P-2.54DSA (**) | 16              | 40.64 | 38.10 | 19.46 |
| —————        | MDF7C-17P-2.54DSA (**) | 17              | 43.18 | 40.64 | 19.46 |
| 547-0029-7-* | MDF7C-18P-2.54DSA (**) | 18              | 45.72 | 43.18 | 19.46 |
| 547-0361-3-* | MDF7C-19P-2.54DSA (**) | 19              | 48.26 | 45.72 | 19.46 |
| 547-0198-4-* | MDF7C-20P-2.54DSA (**) | 20              | 50.80 | 48.26 | 19.46 |
| —————        | MDF7C-21P-2.54DSA (**) | 21              | 53.34 | 50.80 | 19.46 |
| —————        | MDF7C-22P-2.54DSA (**) | 22              | 55.88 | 53.34 | 19.46 |
| —————        | MDF7C-23P-2.54DSA (**) | 23              | 58.42 | 55.88 | 19.46 |
| —————        | MDF7C-24P-2.54DSA (**) | 24              | 60.96 | 58.42 | 19.46 |
| 547-0305-2-* | MDF7C-25P-2.54DSA (**) | 25              | 63.50 | 60.96 | 19.46 |

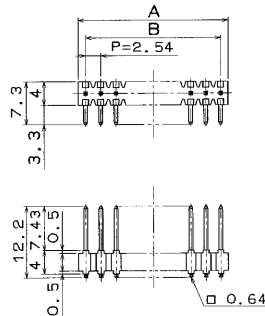
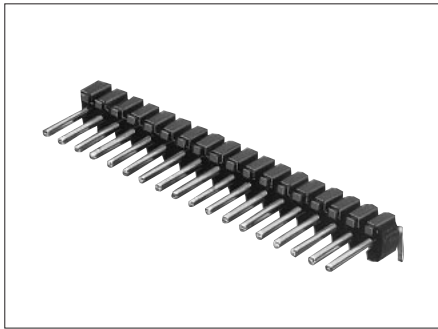
Note 1: The board-to-board distances in the above Table are for boards of 1.6 mm in thickness.

Note 2: Minimum order quantity of the models without a number specified is one pack containing 100 sockets.

Note 3: For the products without HRS No. in the above Table, we will be ready to meet your request by sample or mass production.

Please feel free to ask us.

Single row right angle pin header



[Specification No.]: -\*\*, (\*\*)  
 Blank : Tin-plated  
 (01) : Gold-plated

● Board through-hole dia. :  $\phi 1.1 \pm 0.1$

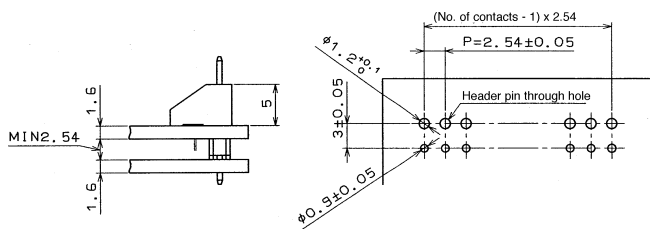
Unit : mm

| HRS No.       | Product No.          | No. of contacts | A     | B     | HRS No.       | Product No.          | No. of contacts | A     | B     |
|---------------|----------------------|-----------------|-------|-------|---------------|----------------------|-----------------|-------|-------|
| 547-0160-1-** | MDF7- 5P-2.54DS (**) | 5               | 12.70 | 10.16 | 547-0169-6-** | MDF7-16P-2.54DS (**) | 16              | 40.64 | 38.10 |
| 547-0161-4-** | MDF7- 6P-2.54DS (**) | 6               | 15.24 | 12.70 | 547-0170-5-** | MDF7-17P-2.54DS (**) | 17              | 43.18 | 40.64 |
| 547-0162-7-** | MDF7- 7P-2.54DS (**) | 7               | 17.78 | 15.24 | 547-0019-3-** | MDF7-18P-2.54DS (**) | 18              | 45.72 | 43.18 |
| 547-0163-0-** | MDF7- 8P-2.54DS (**) | 8               | 20.32 | 17.78 | 547-0171-8-** | MDF7-19P-2.54DS (**) | 19              | 48.26 | 45.72 |
| 547-0164-2-** | MDF7- 9P-2.54DS (**) | 9               | 22.86 | 20.32 | 547-0172-0-** | MDF7-20P-2.54DS (**) | 20              | 50.80 | 48.26 |
| 547-0165-5-** | MDF7-10P-2.54DS (**) | 10              | 25.40 | 22.86 | 547-0173-3-** | MDF7-21P-2.54DS (**) | 21              | 53.34 | 50.80 |
| 547-0166-8-** | MDF7-11P-2.54DS (**) | 11              | 27.94 | 25.40 | 547-0174-6-** | MDF7-22P-2.54DS (**) | 22              | 55.88 | 53.34 |
| 547-0116-0-** | MDF7-12P-2.54DS (**) | 12              | 30.48 | 27.94 | 547-0175-9-** | MDF7-23P-2.54DS (**) | 23              | 58.42 | 55.88 |
| 547-0167-0-** | MDF7-13P-2.54DS (**) | 13              | 33.02 | 30.48 | 547-0176-1-** | MDF7-24P-2.54DS (**) | 24              | 60.96 | 58.42 |
| 547-0168-3-** | MDF7-14P-2.54DS (**) | 14              | 35.56 | 33.02 | 547-0028-4-** | MDF7-25P-2.54DS (**) | 25              | 63.50 | 60.96 |
| 547-0027-1-** | MDF7-15P-2.54DS (**) | 15              | 38.10 | 35.56 |               |                      |                 |       |       |

Note : Minimum order quantity of the models without a number specified is one pack containing 100 sockets.

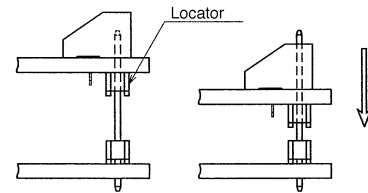
Application drawings and back board dimensional drawings

● When a single-row straight pin header is used



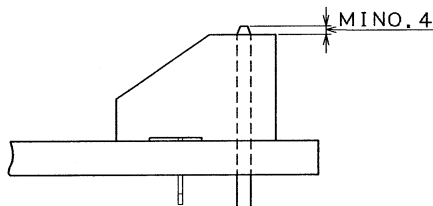
● Header with a locator

The locator will move when the connector is inserted.

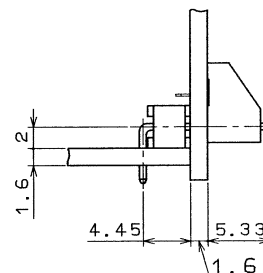


● Conditions for maximizing the setting of the board-to-board distance

The maximum board-to-board distance allows the male pin to protrude from the receptacle by 0.4 mm.

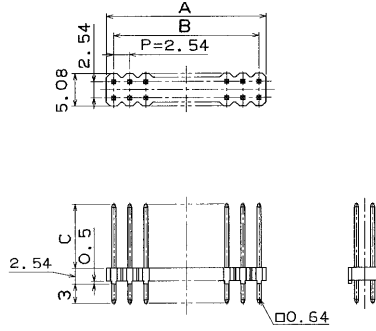
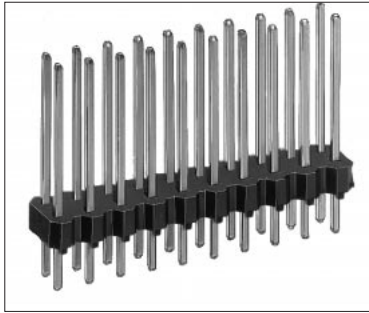


● When a right-angle pin header is used





Double row right angle pin header



● Board through-hole dia. :  $\phi 1.1 \pm 0.1$

[Specification No.]: -\*\*, (\*\*)  
Blank : Gold-plated  
(01) : Tin-plated

● MDF7 (Board-to-board distance 2.54 ~ 5.5mm) ● MDF7P (Board-to-board distance 2.54 ~ 8mm)

| HRS No.      | Product No.            | No. of contacts | A     | B     | C  |
|--------------|------------------------|-----------------|-------|-------|----|
| 547-0034-7-* | MDF7-12DP-2.54DSA (**) | 12              | 15.24 | 12.70 | 10 |
| 547-0365-4-* | MDF7-14DP-2.54DSA (**) | 14              | 17.78 | 15.24 | 10 |
| 547-0364-1-* | MDF7-16DP-2.54DSA (**) | 16              | 20.32 | 17.78 | 10 |
| 547-0114-4-* | MDF7-20DP-2.54DSA (**) | 20              | 25.40 | 22.86 | 10 |
| 547-0093-6-* | MDF7-22DP-2.54DSA (**) | 22              | 27.94 | 25.40 | 10 |
| 547-0250-2-* | MDF7-24DP-2.54DSA (**) | 24              | 30.48 | 27.94 | 10 |
| 547-0251-5-* | MDF7-26DP-2.54DSA (**) | 26              | 33.02 | 30.48 | 10 |
| 547-0037-5-* | MDF7-30DP-2.54DSA (**) | 30              | 38.10 | 35.56 | 10 |
| 547-0252-8-* | MDF7-34DP-2.54DSA (**) | 34              | 43.18 | 40.64 | 10 |
| 547-0253-0-* | MDF7-40DP-2.54DSA (**) | 40              | 50.80 | 48.26 | 10 |
| 547-0254-3-* | MDF7-46DP-2.54DSA (**) | 46              | 58.42 | 55.88 | 10 |

| HRS No.      | Product No.             | No. of contacts | A     | B     | C    |
|--------------|-------------------------|-----------------|-------|-------|------|
| 547-0407-2-* | MDF7P-12DP-2.54DSA (**) | 12              | 15.24 | 12.70 | 12.5 |
| —            | MDF7P-14DP-2.54DSA (**) | 14              | 17.78 | 15.24 | 12.5 |
| 547-0367-0-* | MDF7P-16DP-2.54DSA (**) | 16              | 20.32 | 17.78 | 12.5 |
| 547-0260-6-* | MDF7P-20DP-2.54DSA (**) | 20              | 25.40 | 22.86 | 12.5 |
| 547-0261-9-* | MDF7P-22DP-2.54DSA (**) | 22              | 27.94 | 25.40 | 12.5 |
| 547-0262-1-* | MDF7P-24DP-2.54DSA (**) | 24              | 30.48 | 27.94 | 12.5 |
| 547-0263-4-* | MDF7P-26DP-2.54DSA (**) | 26              | 33.02 | 30.48 | 12.5 |
| 547-0264-7-* | MDF7P-30DP-2.54DSA (**) | 30              | 38.10 | 35.56 | 12.5 |
| —            | MDF7P-34DP-2.54DSA (**) | 34              | 43.18 | 40.64 | 12.5 |
| —            | MDF7P-40DP-2.54DSA (**) | 40              | 50.80 | 48.26 | 12.5 |
| —            | MDF7P-46DP-2.54DSA (**) | 46              | 58.42 | 55.88 | 12.5 |

Note 1: The board-to-board distances in the above Table are for boards of 1.6 mm in thickness.

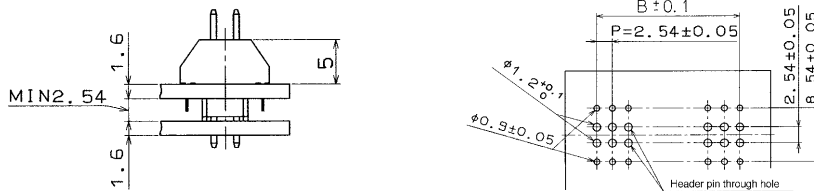
Note 2: Minimum order quantity of the models without a number specified is one pack containing 100 sockets.

Note 3: In the second row plating of the MDF7 series, "blank" denotes gold plating and (01) denotes tin plating, being different from the first row plating.

Note 4: For the products without HRS No. in the above Table, we will be ready to meet your request by sample or mass production. Please feel free to ask us.

Application drawings and back board dimensional drawings

● When a double-row straight pin header is used



Notes on use

|                                     |  |
|-------------------------------------|--|
| 1. Recommended soldering conditions | <ul style="list-style-type: none"> <li>Flow conditions for automatic soldering device: Solder temperature: <math>250 \pm 5^\circ\text{C}</math>, soldering time: Within 3 seconds</li> <li>Manual soldering conditions: Solder temperature: <math>290 \pm 10^\circ\text{C}</math>, soldering time: Within 3 seconds</li> </ul> |
| 2. Board masking                    | When using an automatic soldering device, close the through holes for pin headers with a masking tape, in order to prevent flux from entering.<br>If flux on the contacts is so excessive that it affects the function of the contacts, clean them.  |
| 3. Cleaning conditions              | See "GUIDE TO HIROSE NYLON CONNECTORS."  |
| 4. PRECAUTIONS                      | <ul style="list-style-type: none"> <li>Do not use the connectors to fix the board-to-board distance. Use fixtures to fix the boards.</li> <li>If a board is considered to warp due to vibration, use connectors with gold-plated contacts.</li> <li>Do not use the above connectors for "top entry" mounting.</li> </ul>       |