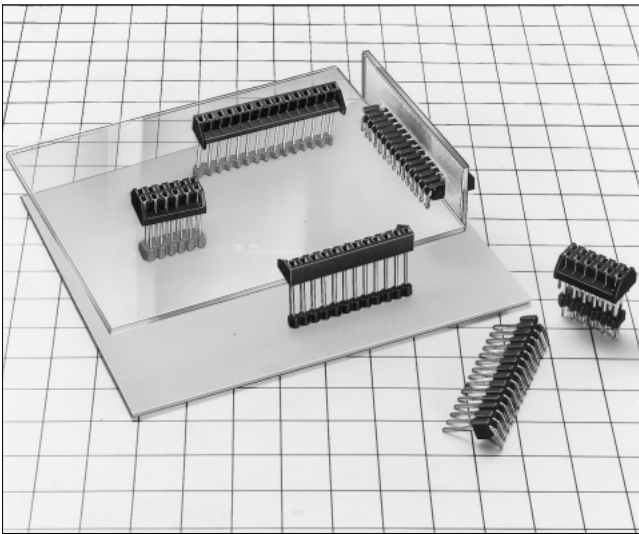


# 2.54mm Pitch Bottom Entry Type Connector

## MDF7 Series



Board to Board size Freely settable

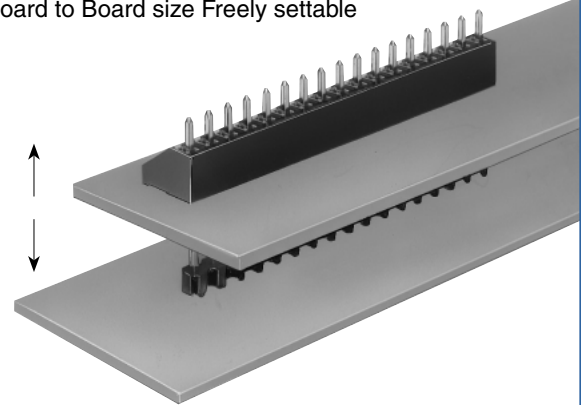


Fig.1

### ■ Features

#### 1. Board to Board Size Freely Settable

The board to board size can be set at infinite stages, according to the header pin through type structure and the diverse header variation.

The board to board size can be set at infinite stages.

#### 2. Integrity of Parts Mounted Surface

The parts mounted surface on two boards aren't face each other, and can be oriented in the same direction.

#### 3. Wide Variation

Single-row product, double-row product, tin plated and gold plated products are lined up. In addition, the header to correspond to the board to board size are prepared. Concerning board to board size, other products can be provided, in addition to products in this catalog. Please contact HRS company as required.

## Product Specifications

| Rating                               | Current rating: 3A                                                    | Operating Temperature Range: -35℃ to +85℃(Note 1)                                            | Storage Temperature Range: -10℃ to +60℃(Note 2) |
|--------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------|
|                                      | Voltage rating: 250V AC                                               | Operating Humidity Range: 40% to 80%                                                         | Storage Humidity Range: 40% to 70%(Note 2)      |
| Item                                 | Specification                                                         | Condition                                                                                    |                                                 |
| 1. Insulation Resistance             | 1000M Ω min.                                                          | 500V DC                                                                                      |                                                 |
| 2. Withstanding voltage              | No flashover or insulation breakdown.                                 | 650V AC/1 minute                                                                             |                                                 |
| 3. Contact Resistance                | 30m Ω max.                                                            | 100mA                                                                                        |                                                 |
| 4. Single Insertion/Extraction Force | MIN 0.4N(40gf), MAX 4.4N(450gf)                                       | Measured by the square steel pin with 0.635±0.002mm                                          |                                                 |
| 5. Vibration                         | No electrical discontinuity of 10 μs or more                          | Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.    |                                                 |
| 6. Humidity (Steady state)           | Contact resistance: 30m Ω max.                                        | 96 hours at temperature of                                                                   |                                                 |
| 7. Temperature Cycle                 | Contact resistance: 30m Ω max.<br>Insulation resistance: 1000M Ω min. | (-55℃: 30 minutes, 5 to 35℃: 10 minutes<br>85℃: 30 minutes, 5 to 35℃: 10 minutes)<br>5cycles |                                                 |
| 8. Durability (Mating/un-mating)     | Contact resistance: 30m Ω max.                                        | Tin plating : 30 cycles<br>Gold plating : 50 cycles                                          |                                                 |
| 9. Resistance to Soldering heat      | No deformation of components affecting performance.                   | Flow: 260℃ for 10 seconds<br>Manual soldering: 350℃ for 3 seconds                            |                                                 |

Note 1: Includes temperature rise caused by current flow.

Note 2: The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non conducting condition of installed connectors in storage, shipment or during transportation.

## Material

| Product    | Part      | Material        | Finish                         | Remarks |
|------------|-----------|-----------------|--------------------------------|---------|
| Receptacle | Insulator | Polyamide       | Black                          | UL94V-0 |
|            | Contact   | Phosphor bronze | Tin plated or gold plated      | ————    |
| Pin Header | Insulator | PBT             | Main unit: Black/Locator: Gray | UL94V-0 |
|            | Contact   | Brass           | Tin plated or gold plated      | ————    |

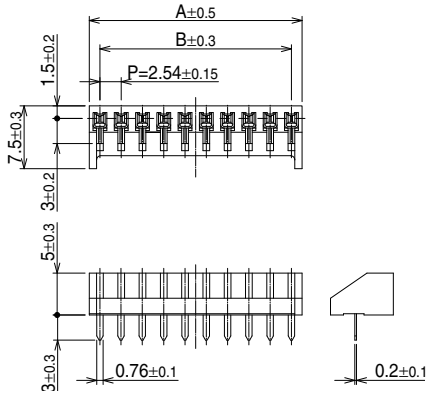
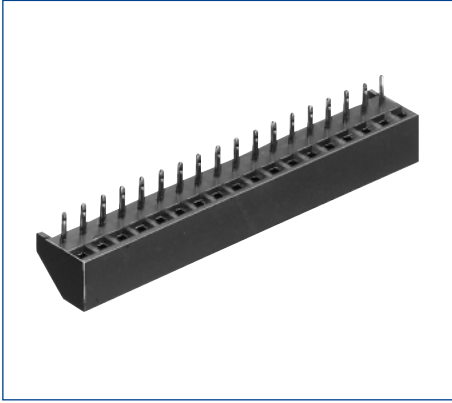
## Ordering Information

**MDF7   -   \* S   -   2.54   DSA   (\*\*)**

①                      ②   ③                      ④                      ⑤                      ⑥

|                                                                                                                                      |                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ① Series Name: MDF7                                                                                                                  | ⑥ Receptacle<br>(55): Tin plated (100 pcs/pack)<br>(56): Gold plated (100 pcs/pack)<br>Pin Header<br>P (55) : Tin plated (100 pcs/pack)<br>(01) : Gold plated (100 pcs/pack)<br>DP (55) : Tin plated (100 pcs/pack)<br>Blank : Gold plated (100 pcs/pack) |
| ② Number of contacts: 3 to 46                                                                                                        |                                                                                                                                                                                                                                                           |
| ③ Connector Type<br>S : Single row receptacle<br>D : Double row receptacle<br>P : Single row pin header<br>DP: Double row pin header |                                                                                                                                                                                                                                                           |
| ④ Contact Pitch : 2.54mm                                                                                                             |                                                                                                                                                                                                                                                           |
| ⑤ Contact type<br>DSA : Straight through hole<br>DS : Right Angle through hole                                                       |                                                                                                                                                                                                                                                           |

# Single Row Receptacle



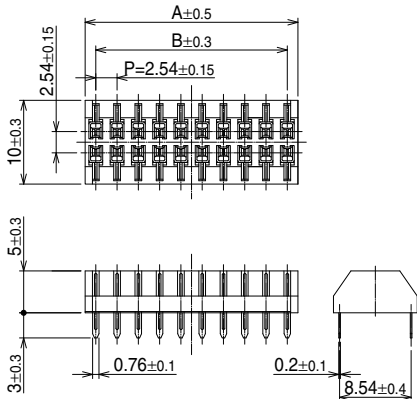
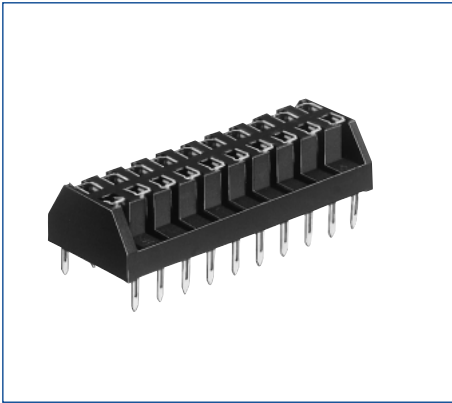
[Specific No.] -\* \*, (\* \*)  
(55) :Tin plated  
(56) :Gold plated

Unit: mm

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

Note: The quantity for delivery is determined 100 pcs/pack. Please order the products per pack.

# Double Row Receptacle



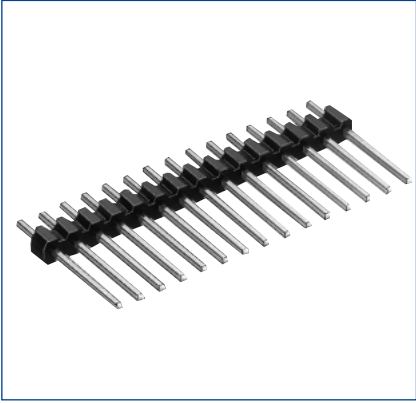
Unit: mm

| Part No.             | HRS No.       | No. of Contacts | A     | B     | RoHS |
|----------------------|---------------|-----------------|-------|-------|------|
| MDF7-12D-2.54DSA(**) | 547-0032-1 ** | 12              | 15.24 | 12.70 | Yes  |
| MDF7-14D-2.54DSA(**) | 547-0354-8 ** | 14              | 17.78 | 15.24 |      |
| MDF7-16D-2.54DSA(**) | 547-0363-9 ** | 16              | 20.32 | 17.78 |      |
| MDF7-20D-2.54DSA(**) | 547-0033-4 ** | 20              | 25.40 | 22.86 |      |
| MDF7-22D-2.54DSA(**) | 547-0246-5 ** | 22              | 27.94 | 25.40 |      |
| MDF7-24D-2.54DSA(**) | 547-0244-0 ** | 24              | 30.48 | 27.94 |      |
| MDF7-26D-2.54DSA(**) | 547-0247-8 ** | 26              | 33.02 | 30.48 |      |
| MDF7-30D-2.54DSA(**) | 547-0016-5 ** | 30              | 38.10 | 35.56 |      |
| MDF7-34D-2.54DSA(**) | 547-0227-0 ** | 34              | 43.18 | 40.64 |      |
| MDF7-40D-2.54DSA(**) | 547-0228-3 ** | 40              | 50.80 | 48.26 |      |
| MDF7-46D-2.54DSA(**) | 547-0229-6 ** | 46              | 58.42 | 55.88 |      |
| MDF7-48D-2.54DSA(**) | 547-0060-7 ** | 48              | 60.96 | 58.42 |      |

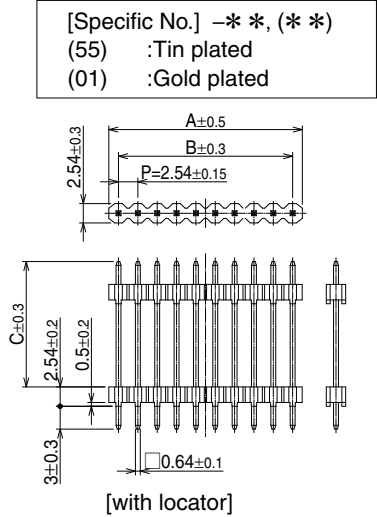
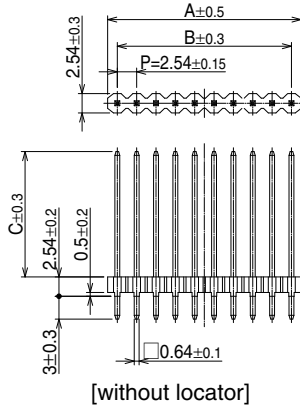
[Specific No.] -\* \*, (\* \*) (Note 2)  
(55) :Tin plated  
(56) :Gold plated

Note 1: A quantity for delivery is determined 100 pcs/pack. Please order the products per pack.

# Single Row Straight Pin Header



●Board Through-hole Diameter:  $\phi 1.0^{+0.1}_0$



## ●MDF7 (PCB distance: 2.54 to 5.5mm)

## ●MDF7B (PCB distance: 2.54 to 12mm)

| Unit: mm             |               |                 |       |       |    |      | Unit: mm              |               |                 |       |       |       |      |
|----------------------|---------------|-----------------|-------|-------|----|------|-----------------------|---------------|-----------------|-------|-------|-------|------|
| Part No.             | HRS No.       | No. of Contacts | A     | B     | C  | RoHS | Part No.              | HRS No.       | No. of Contacts | A     | B     | C     | RoHS |
| MDF7-3P-2.54DSA(**)  | 547-0220-1 ** | 3               | 7.62  | 5.08  | 10 | Yes  | MDF7B-3P-2.54DSA(**)  | 547-0304-0 ** | 3               | 7.62  | 5.08  | 16.46 | Yes  |
| MDF7-5P-2.54DSA(**)  | 547-0113-1 ** | 5               | 12.70 | 10.16 |    |      | MDF7B-5P-2.54DSA(**)  | 547-0133-9 ** | 5               | 12.70 | 10.16 |       |      |
| MDF7-6P-2.54DSA(**)  | 547-0130-0 ** | 6               | 15.24 | 12.70 |    |      | MDF7B-6P-2.54DSA(**)  | 547-0131-3 ** | 6               | 15.24 | 12.70 |       |      |
| MDF7-7P-2.54DSA(**)  | 547-0148-6 ** | 7               | 17.78 | 15.24 |    |      | MDF7B-7P-2.54DSA(**)  | 547-0177-4 ** | 7               | 17.78 | 15.24 |       |      |
| MDF7-8P-2.54DSA(**)  | 547-0149-9 ** | 8               | 20.32 | 17.78 |    |      | MDF7B-8P-2.54DSA(**)  | 547-0178-7 ** | 8               | 20.32 | 17.78 |       |      |
| MDF7-9P-2.54DSA(**)  | 547-0150-8 ** | 9               | 22.86 | 20.32 |    |      | MDF7B-9P-2.54DSA(**)  | 547-0179-0 ** | 9               | 22.86 | 20.32 |       |      |
| MDF7-10P-2.54DSA(**) | 547-0039-0 ** | 10              | 25.40 | 22.86 |    |      | MDF7B-10P-2.54DSA(**) | 547-0048-1 ** | 10              | 25.40 | 22.86 |       |      |
| MDF7-11P-2.54DSA(**) | 547-0151-0 ** | 11              | 27.94 | 25.40 |    |      | MDF7B-11P-2.54DSA(**) | 547-0047-9 ** | 11              | 27.94 | 25.40 |       |      |
| MDF7-12P-2.54DSA(**) | 547-0043-8 ** | 12              | 30.48 | 27.94 |    |      | MDF7B-12P-2.54DSA(**) | 547-0041-2 ** | 12              | 30.48 | 27.94 |       |      |
| MDF7-13P-2.54DSA(**) | 547-0152-3 ** | 13              | 33.02 | 30.48 |    |      | MDF7B-13P-2.54DSA(55) | 547-0180-9 55 | 13              | 33.02 | 30.48 |       |      |
| MDF7-14P-2.54DSA(**) | 547-0153-6 ** | 14              | 35.56 | 33.02 |    |      | MDF7B-14P-2.54DSA(55) | 547-0181-1 55 | 14              | 35.56 | 33.02 |       |      |
| MDF7-15P-2.54DSA(**) | 547-0018-0 ** | 15              | 38.10 | 35.56 |    |      | MDF7B-15P-2.54DSA(**) | 547-0024-3 ** | 15              | 38.10 | 35.56 |       |      |
| MDF7-16P-2.54DSA(**) | 547-0111-6 ** | 16              | 40.64 | 38.10 |    |      | MDF7B-16P-2.54DSA(**) | 547-0182-4 ** | 16              | 40.64 | 38.10 |       |      |
| MDF7-17P-2.54DSA(**) | 547-0154-9 ** | 17              | 43.18 | 40.64 |    |      | MDF7B-17P-2.54DSA(55) | 547-0183-7 55 | 17              | 43.18 | 40.64 |       |      |
| MDF7-18P-2.54DSA(**) | 547-0022-8 ** | 18              | 45.72 | 43.18 |    |      | MDF7B-18P-2.54DSA(55) | 547-0025-6 55 | 18              | 45.72 | 43.18 |       |      |
| MDF7-19P-2.54DSA(**) | 547-0155-1 ** | 19              | 48.26 | 45.72 |    |      | MDF7B-19P-2.54DSA(55) | 547-0184-0 55 | 19              | 48.26 | 45.72 |       |      |
| MDF7-20P-2.54DSA(**) | 547-0123-5 ** | 20              | 50.80 | 48.26 |    |      | MDF7B-20P-2.54DSA(**) | 547-0052-9 ** | 20              | 50.80 | 48.26 |       |      |
| MDF7-21P-2.54DSA(**) | 547-0156-4 ** | 21              | 53.34 | 50.80 |    |      | MDF7B-21P-2.54DSA(55) | 547-0185-2 55 | 21              | 53.34 | 50.80 |       |      |
| MDF7-22P-2.54DSA(**) | 547-0157-7 ** | 22              | 55.88 | 53.34 |    |      | MDF7B-22P-2.54DSA(55) | 547-0186-5 55 | 22              | 55.88 | 53.34 |       |      |
| MDF7-23P-2.54DSA(**) | 547-0158-0 ** | 23              | 58.42 | 55.88 |    |      | MDF7B-23P-2.54DSA(55) | 547-0066-3 55 | 23              | 58.42 | 55.88 |       |      |
| MDF7-24P-2.54DSA(**) | 547-0159-2 ** | 24              | 60.96 | 58.42 |    |      | MDF7B-24P-2.54DSA(55) | 547-0067-6 55 | 24              | 60.96 | 58.42 |       |      |
| MDF7-25P-2.54DSA(**) | 547-0023-0 ** | 25              | 63.50 | 60.96 |    |      | MDF7B-25P-2.54DSA(55) | 547-0026-9 55 | 25              | 63.50 | 60.96 |       |      |

Note 1: PCB distance in the above table represents the case where the 1.6mm thickness board is used.

Note 2: The quantity for delivery is determined 100 pcs/pack. Please order the products per pack.

## ●MDF7P (PCB distance: 2.54 to 8mm)

## ●MDF7C (PCB distance: 5.08 to 15mm, with Locator)

Unit: mm

Unit: mm

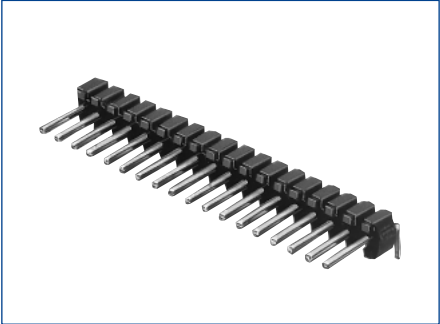
| Part No.              | HRS No.       | No. of Contacts | A     | B     | C    | RoHS | Part No.              | HRS No.       | No. of Contacts | A     | B     | C     | RoHS |
|-----------------------|---------------|-----------------|-------|-------|------|------|-----------------------|---------------|-----------------|-------|-------|-------|------|
| MDF7P-3P-2.54DSA(01)  | 547-0462-0 01 | 3               | 7.62  | 5.08  | 12.5 | Yes  | MDF7C-3P-2.54DSA(**)  | 547-0489-7 ** | 3               | 7.62  | 5.08  | 19.46 | Yes  |
| MDF7P-5P-2.54DSA(**)  | 547-0511-4 ** | 5               | 12.70 | 10.16 |      |      | MDF7C-5P-2.54DSA(**)  | 547-0344-4 ** | 5               | 12.70 | 10.16 |       |      |
| MDF7P-6P-2.54DSA(**)  | 547-0513-0 ** | 6               | 15.24 | 12.70 |      |      | MDF7C-6P-2.54DSA(55)  | 547-0268-8 55 | 6               | 15.24 | 12.70 |       |      |
| MDF7P-7P-2.54DSA(**)  | ————          | 7               | 17.78 | 15.24 |      |      | MDF7C-7P-2.54DSA(**)  | 547-0378-6 ** | 7               | 17.78 | 15.24 |       |      |
| MDF7P-8P-2.54DSA(55)  | 547-0514-2 55 | 8               | 20.32 | 17.78 |      |      | MDF7C-8P-2.54DSA(55)  | 547-0375-8 55 | 8               | 20.32 | 17.78 |       |      |
| MDF7P-9P-2.54DSA(**)  | ————          | 9               | 22.86 | 20.32 |      |      | MDF7C-9P-2.54DSA(55)  | 547-0506-4 55 | 9               | 22.86 | 20.32 |       |      |
| MDF7P-10P-2.54DSA(55) | 547-0360-0 55 | 10              | 25.40 | 22.86 |      |      | MDF7C-10P-2.54DSA(55) | 547-0191-5 55 | 10              | 25.40 | 22.86 |       |      |
| MDF7P-11P-2.54DSA(**) | ————          | 11              | 27.94 | 25.40 |      |      | MDF7C-11P-2.54DSA(55) | 547-0376-0 55 | 11              | 27.97 | 25.40 |       |      |
| MDF7P-12P-2.54DSA(55) | 547-0345-7 55 | 12              | 30.48 | 27.94 |      |      | MDF7C-12P-2.54DSA(**) | 547-0475-2 ** | 12              | 30.48 | 27.94 |       |      |
| MDF7P-13P-2.54DSA(**) | ————          | 13              | 33.02 | 30.48 |      |      | MDF7C-13P-2.54DSA(55) | 547-0401-6 55 | 13              | 33.02 | 30.48 |       |      |
| MDF7P-14P-2.54DSA(55) | 547-0385-1 55 | 14              | 35.56 | 33.02 |      |      | MDF7C-14P-2.54DSA(55) | 547-0380-8 55 | 14              | 35.56 | 33.02 |       |      |
| MDF7P-15P-2.54DSA(55) | 547-0230-5 55 | 15              | 38.10 | 35.56 |      |      | MDF7C-15P-2.54DSA(55) | 547-0187-8 55 | 15              | 38.10 | 35.56 |       |      |
| MDF7P-16P-2.54DSA(55) | 547-0346-0 55 | 16              | 40.64 | 38.10 |      |      | MDF7C-16P-2.54DSA(**) | ————          | 16              | 40.64 | 38.10 |       |      |
| MDF7P-17P-2.54DSA(**) | ————          | 17              | 43.18 | 40.64 |      |      | MDF7C-17P-2.54DSA(**) | ————          | 17              | 43.18 | 40.64 |       |      |
| MDF7P-18P-2.54DSA(**) | ————          | 18              | 45.72 | 43.18 |      |      | MDF7C-18P-2.54DSA(55) | 547-0029-7 55 | 18              | 45.72 | 43.18 |       |      |
| MDF7P-19P-2.54DSA(55) | 547-0347-2 55 | 19              | 48.26 | 45.72 |      |      | MDF7C-19P-2.54DSA(55) | 547-0361-3 55 | 19              | 48.26 | 45.72 |       |      |
| MDF7P-20P-2.54DSA(**) | ————          | 20              | 50.80 | 48.26 |      |      | MDF7C-20P-2.54DSA(**) | 547-0198-4 ** | 20              | 50.80 | 48.26 |       |      |
| MDF7P-21P-2.54DSA(**) | ————          | 21              | 53.34 | 50.80 |      |      | MDF7C-21P-2.54DSA(**) | ————          | 21              | 53.34 | 50.80 |       |      |
| MDF7P-22P-2.54DSA(**) | ————          | 22              | 55.88 | 53.34 |      |      | MDF7C-22P-2.54DSA(**) | ————          | 22              | 55.88 | 53.34 |       |      |
| MDF7P-23P-2.54DSA(**) | ————          | 23              | 58.42 | 55.88 |      |      | MDF7C-23P-2.54DSA(55) | 547-0909-0 55 | 23              | 58.42 | 55.88 |       |      |
| MDF7P-24P-2.54DSA(**) | ————          | 24              | 60.96 | 58.42 |      |      | MDF7C-24P-2.54DSA(**) | ————          | 24              | 60.96 | 58.42 |       |      |
| MDF7P-25P-2.54DSA(55) | 547-0348-5 55 | 25              | 63.50 | 60.96 |      |      | MDF7C-25P-2.54DSA(55) | 547-0305-2 55 | 25              | 63.50 | 60.96 |       |      |

Note 1: PCB distance in the above table represents the case where the 1.6mm thickness board is used.

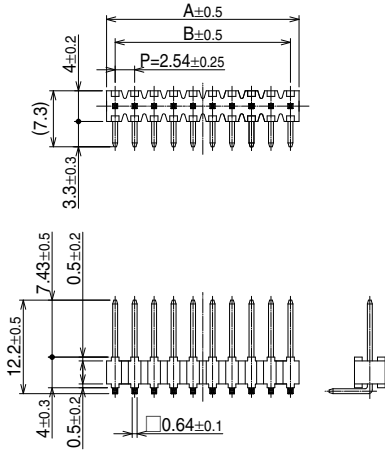
Note 2: A quantity for delivery is determined 100 pcs/pack. Please order the products per pack.

Note 3: As for the products, which HRS No. is not indicated in the above table, we will correspond to samples, and mass-production according to your demand. Please contact our account executive, as required.

Single-Row Right Angle Pin Header



●Board Through-hole Diameter:  $\phi 1.0^{+0.1}_{-0}$



[Specific No.] -\* \*, (\* \*)  
(55) :Tin plated  
(56) :Gold plated

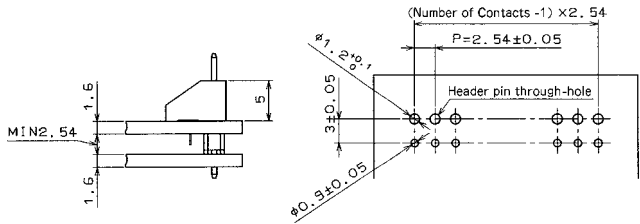
Unit: mm

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

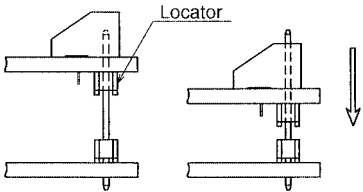
Note: A quantity for delivery is determined 100 pcs/pack. Please order the products per pack.

Application Pattern and PCB mounting pattern

- When the single-row straight pin header is used
- When the header with locator is used

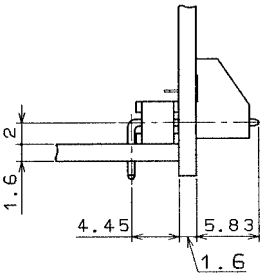
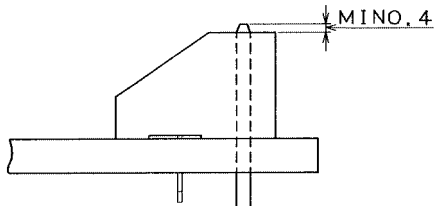


The locator moves as the connector is inserted.

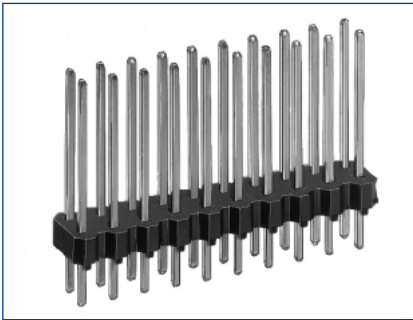


- When the PCB distance is set to MAX
- When the right angle pin header is used

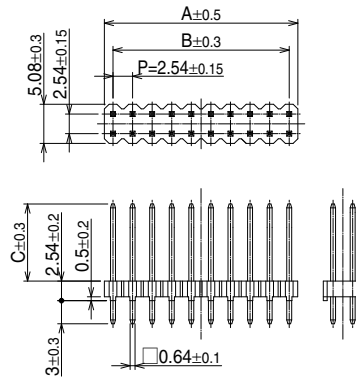
To separate clearance between the boards, the operation limit t is defined as the state where the male pin has passed through the receptacle.



## Double-Row Straight Pin Header



●Board Through-hole Diameter:  $\phi 1.0^{+0.1}_{-0}$



[Specific No.] - \* \*, (\* \*)  
(55) : Tin plated  
Blank : Gold plated

### ●MDF7 (PCB distance: 2.54 to 5.5mm)

Unit: mm

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

### ●MDF7P (PCB distance: 2.54 to 8mm)

Unit: mm

| Part No.               | HRS No.       | No. of Contacts | A     | B     | C    | RoHS |
|------------------------|---------------|-----------------|-------|-------|------|------|
| MDF7P-12DP-2.54DSA(**) | 547-0407-2 ** | 12              | 15.24 | 12.70 | 12.5 | Yes  |
| MDF7P-14DP-2.54DSA(**) | —             | 14              | 17.78 | 15.24 |      |      |
| MDF7P-16DP-2.54DSA(55) | 547-0367-0 55 | 16              | 20.32 | 17.78 |      |      |
| MDF7P-20DP-2.54DSA(55) | 547-0260-6 55 | 20              | 25.40 | 22.86 |      |      |
| MDF7P-22DP-2.54DSA(55) | 547-0261-9 55 | 22              | 27.94 | 25.40 |      |      |
| MDF7P-24DP-2.54DSA(**) | 547-0262-1 ** | 24              | 30.48 | 27.94 |      |      |
| MDF7P-26DP-2.54DSA(**) | 547-0263-4 ** | 26              | 33.02 | 30.48 |      |      |
| MDF7P-30DP-2.54DSA(55) | 547-0264-7 55 | 30              | 38.10 | 35.56 |      |      |
| MDF7P-34DP-2.54DSA(**) | —             | 34              | 43.18 | 40.64 |      |      |
| MDF7P-40DP-2.54DSA(00) | 547-0917-9 00 | 40              | 50.80 | 48.26 |      |      |
| MDF7P-46DP-2.54DSA(**) | —             | 46              | 58.42 | 55.88 |      |      |

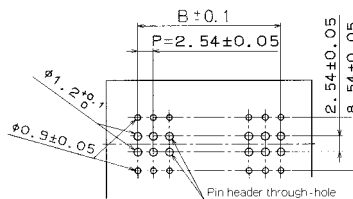
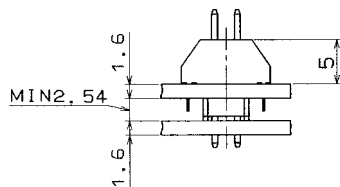
Note 1: PCB distance in the above table represents the state where the 1.6mm thickness board is used.

Note 2: A quantity for delivery is determined 100 pcs/pack. Please order the products per pack.

Note 3: As for the products, which HRS No. is not indicated in the above table, we will correspond to samples, and mass-production according to your demand. Please contact our account executive, as required.

## Application Pattern and PCB mounting pattern

### ●When the double-row straight pin header is used



## Precautions

|                                    |                                                                                                                                                                                                                                                                                                    |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Recommended Soldering Condition | <p>■Flow Condition by Automatic Soldering Unit<br/>Soldering temperature: <math>255\pm 5^{\circ}\text{C}</math>, Soldering time: within 10 seconds</p> <p>■Manual Soldering Condition<br/>Soldering iron temperature: <math>340\pm 10^{\circ}\text{C}</math>, Soldering time: within 3 seconds</p> |
| 2. Board Masking                   | <p>If the automatic soldering unit is used, block the pin header through-hole on the receptacle mounted board with the masking tape, etc., and prevent the flux pervasion.</p> <p>In addition, if much flux is adhered so as to affect the contact, please be sure to clean the board.</p>         |
| 3. Cleaning Condition              | Refer to Nylon Connector Use Hand book.                                                                                                                                                                                                                                                            |
| 4. Cautions                        | <p>■It is impossible to fix the board to the board by the connector only. Please take actions to fix the board without using the connector.</p> <p>■If the board deformation could occur due to vibration, please use the gold plating.</p> <p>■Don't use the connector as the top entry.</p>      |

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