

# 2mm Pitch Miniature Connector

## A3 • A4 Series



### ■Features

#### 1. Miniature Type and High Density Mounting

These connectors are designed in a miniature and light weight product, and mounted in the high density. The crimping case is structured in the 2mm pitch grid, so that connectors can be arranged for use.

#### 2. Variation in Number of Contacts

In addition to the dip type, SMT and crimping types are available with broad variations.

#### 3. Stacking Variation

When the connector is used for board to board, set 6mm between boards in conjunction with the pin header A3B, or 5.1mm between boards in conjunction with the pin header A3C.

### ■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 10μs 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. Humidity resistance (Steady state) | 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. Operating Life                     | Contact resistance: 20m ohms max.                   | 100 cycles                                                                                                  |
| 8. Resistance to Soldering heat       | No deformation of components affecting performance. | Solder bath: 260°C for 10 seconds                                                                           |
|                                       |                                                     | Manual soldering: DIP: 350°C for 3 seconds<br>SMT: 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.

### ■Applications

VTR, vehicle telephones, and other various kinds of electronic equipment

### ■Material

| Part      |                           | Material        | Finish                | Remarks |
|-----------|---------------------------|-----------------|-----------------------|---------|
| Insulator | Pin header (Through hole) | Polyamid        | Black                 | UL94V-0 |
|           | Receptacle (Through hole) | PBT             |                       |         |
|           | Pin header (SMT)          | PPS (Note)      | Light brown           |         |
|           | Receptacle (SMT)          |                 |                       |         |
|           | Crimping socket           | PBT             | Black                 |         |
| Contact   | Pin header                | Brass           | Selective gold plated | _____   |
|           | Receptacle                | Phosphor bronze |                       |         |
|           | Crimping contact          |                 |                       |         |

Note : Slight variations in color of the plastic compounds do not affect form ,fit or function of the connector.

■ Ordering Information

● Pin Header (DIP type)

**A3B** - **12** **P** - **2** **DS**  
①                      ②   ③                      ④   ⑤

|   |                                                                                                                                                                                                                                                                                         |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ① | Series Name: A3B : double row<br>A4B : single row<br>A3C : double row (low profile product)                                                                                                                                                                                             |
| ② | Number of contacts: Double row...4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 44, 40, 50 (44 and 50 contacts correspond to the right angle type only. Straight angle type corresponds to the A3C type.)<br>Single row... 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 |
| ③ | P, PA: Pin header                                                                                                                                                                                                                                                                       |
| ④ | Contact pitch : 2mm                                                                                                                                                                                                                                                                     |
| ⑤ | Contact type<br>DS : Right angle type<br>DSA : Straight type                                                                                                                                                                                                                            |

● Receptacle (DIP type)

**A3** - **44** **D** - **2** **DS**  
①                      ②   ③                      ④   ⑤

|   |                                                                                                                                                                    |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ① | Series Name: A3 : double row<br>A3C : double row<br>A3D : double row (for FFC, FFC) (Note)                                                                         |
| ② | Number of contacts: 3 : 44, 50<br>3C, 3D : 4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 28, 32, 50                                                                         |
| ③ | DA: Receptacle                                                                                                                                                     |
| ④ | Contact pitch : 2mm                                                                                                                                                |
| ⑤ | Contact type<br>DS: Right angle type<br>DSA: Straight type (lead length: 3mm)<br>DSC: Straight type (lead length: 2mm)<br>DSE: Straight type (lead length: 1.27mm) |

Note : A standoff has been added to the center portion of the connector to provide stable mounting.

● Crimping Socket

**A3B** - **44** **D** - **2** **C**  
①                      ②   ③                      ④   ⑤

|   |                                                                                                                                          |
|---|------------------------------------------------------------------------------------------------------------------------------------------|
| ① | Series Name: A3B : double row<br>A4B : single row                                                                                        |
| ② | Number of contacts: Double row...4, 6, 8, 10, 12, 14, 18, 20, 24, 26, 28, 44<br>Single row... 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 16, 18 |
| ③ | Contact alignment: D : double row<br>S : single row                                                                                      |
| ④ | Contact pitch : 2mm                                                                                                                      |
| ⑤ | Connection type: C : crimping                                                                                                            |

A3 • A4 Series 2mm Pitch Miniature Connector

●Crimping Contact

**A 3B - 2630 SCFC**  
① ② ③ ④

|   |                                                                           |
|---|---------------------------------------------------------------------------|
| ① | Series Name: A                                                            |
| ② | Series No.: 3B                                                            |
| ③ | Applicable cable size<br>2630: AWG#26 to AWG#30<br>3236: AWG#32 to AWG#36 |
| ④ | Packaging type<br>SCFC: Reel<br>SCC: Bag                                  |

● Pin Header (SMT type)

**A 3 A - 44 P A - 2 SV**  
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

|   |                                                                                 |
|---|---------------------------------------------------------------------------------|
| ① | Series Name: A                                                                  |
| ② | Series No.: 3                                                                   |
| ③ | Positioning Boss:A : With boss<br>No symbol : Without boss                      |
| ④ | Number of contacts: 4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 28, 30, 32, 44, 40, 50 |
| ⑤ | P: Pin header                                                                   |
| ⑥ | A: Selective gold plating                                                       |
| ⑦ | Contact pitch : 2mm                                                             |
| ⑧ | Contact type<br>SV: Board virtical type                                         |

● Receptacle (SMT type)

**A 3 A - 32 D A - 2 SV**  
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

|   |                                                                     |
|---|---------------------------------------------------------------------|
| ① | Series Name: A                                                      |
| ② | Series No.: 3                                                       |
| ③ | Positioning Boss: A : With boss<br>No symbol : Without boss         |
| ④ | Number of contacts: 4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 28, 30, 32 |
| ⑤ | D: Receptacle                                                       |
| ⑥ | A: Selective gold plating                                           |
| ⑦ | Contact pitch : 2mm                                                 |
| ⑧ | Contact type<br>SV: Virtical type                                   |

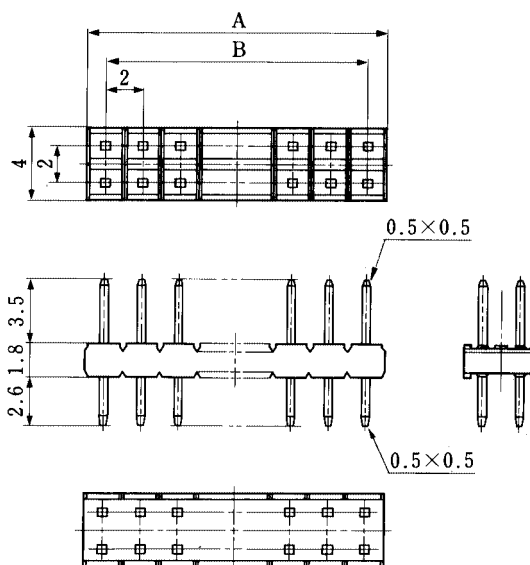
## ■ Pin Header

### ● A3B Straight Type

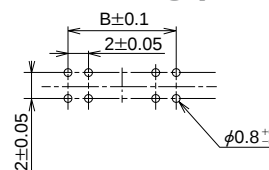


| Part Number       | CL No.        | Number of Contacts | A    | B    | RoHS |
|-------------------|---------------|--------------------|------|------|------|
| A3B- 4PA-2DSA(71) | 621-0401-1-71 | 4                  | 4.0  | 2.0  | YES  |
| A3B- 6PA-2DSA(71) | 621-0402-4-71 | 6                  | 6.0  | 4.0  |      |
| A3B- 8PA-2DSA(71) | 621-0403-7-71 | 8                  | 8.0  | 6.0  |      |
| A3B-10PA-2DSA(71) | 621-0404-0-71 | 10                 | 10.0 | 8.0  |      |
| A3B-12PA-2DSA(71) | 621-0405-2-71 | 12                 | 12.0 | 10.0 |      |
| A3B-14PA-2DSA(71) | 621-0406-5-71 | 14                 | 14.0 | 12.0 |      |
| A3B-16PA-2DSA(71) | 621-0407-8-71 | 16                 | 16.0 | 14.0 |      |
| A3B-18PA-2DSA(71) | 621-0408-0-71 | 18                 | 18.0 | 16.0 |      |
| A3B-20PA-2DSA(71) | 621-0409-3-71 | 20                 | 20.0 | 18.0 |      |
| A3B-22PA-2DSA(71) | 621-0410-2-71 | 22                 | 22.0 | 20.0 |      |
| A3B-24PA-2DSA(71) | 621-0411-5-71 | 24                 | 24.0 | 22.0 |      |
| A3B-26PA-2DSA(71) | 621-0412-8-71 | 26                 | 26.0 | 24.0 |      |
| A3B-28PA-2DSA(71) | 621-0413-0-71 | 28                 | 28.0 | 26.0 |      |
| A3B-30PA-2DSA(71) | 621-0414-3-71 | 30                 | 30.0 | 28.0 |      |
| A3B-32PA-2DSA(71) | 621-0415-6-71 | 32                 | 32.0 | 30.0 |      |

Note: Please, order the product per 100 pcs.



### ◆ PCB mounting pattern



### ● A3B Right Angle Type



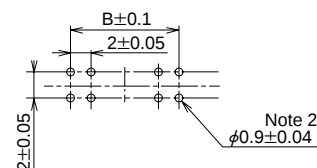
| Part Number      | CL No.        | Number of Contacts | A    | B    | Kink Positions       | RoHS |
|------------------|---------------|--------------------|------|------|----------------------|------|
| A3B- 4PA-2DS(71) | 621-0351-5-71 | 4                  | 4.0  | 2.0  | 2                    | YES  |
| A3B- 6PA-2DS(71) | 621-0352-8-71 | 6                  | 6.0  | 4.0  | 1 or 2 alternately   |      |
| A3B- 8PA-2DS(71) | 621-0353-0-71 | 8                  | 8.0  | 6.0  | 2 alternately        |      |
| A3B-10PA-2DS(71) | 621-0354-3-71 | 10                 | 10.0 | 8.0  | 2 or 3 alternately   |      |
| A3B-12PA-2DS(71) | 621-0355-6-71 | 12                 | 12.0 | 10.0 | 3 alternately        |      |
| A3B-14PA-2DS(71) | 621-0356-9-71 | 14                 | 14.0 | 12.0 | 3 or 4 alternately   |      |
| A3B-16PA-2DS(71) | 621-0357-1-71 | 16                 | 16.0 | 14.0 | 4 alternately        |      |
| A3B-18PA-2DS(71) | 621-0358-4-71 | 18                 | 18.0 | 16.0 | 4 or 5 alternately   |      |
| A3B-20PA-2DS(71) | 621-0359-7-71 | 20                 | 20.0 | 18.0 | 5 alternately        |      |
| A3B-22PA-2DS(71) | 621-0360-6-71 | 22                 | 22.0 | 20.0 | 5 or 6 alternately   |      |
| A3B-24PA-2DS(71) | 621-0361-9-71 | 24                 | 24.0 | 22.0 | 6 alternately        |      |
| A3B-26PA-2DS(71) | 621-0362-1-71 | 26                 | 26.0 | 24.0 | 6 or 7 alternately   |      |
| A3B-28PA-2DS(71) | 621-0363-4-71 | 28                 | 28.0 | 26.0 | 7 alternately        |      |
| A3B-30PA-2DS(71) | 621-0364-7-71 | 30                 | 30.0 | 28.0 | 7 or 8 alternately   |      |
| A3B-32PA-2DS(71) | 621-0365-0-71 | 32                 | 32.0 | 30.0 | 8 alternately        |      |
| A3B-44PA-2DS(71) | 621-0377-9-71 | 44                 | 44.0 | 42.0 | 11 alternately       |      |
| A3B-50PA-2DS(71) | 621-0383-1-71 | 50                 | 50.0 | 48.0 | 12 or 13 alternately |      |

Note 1: Please order the product per 100 pcs.

Note 2: Diameter of 28 or more contacts is  $\phi 0.95 \pm 0.04$ .

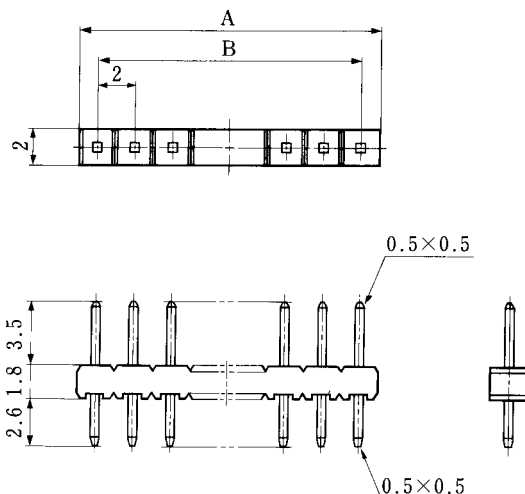
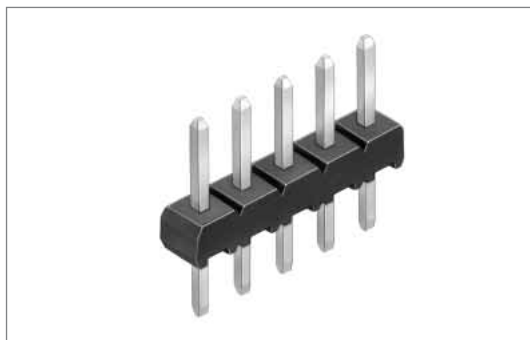


### ◆ PCB mounting pattern



## A4B Series 2mm Pitch Miniature Connector

### ●A4B Straight Type

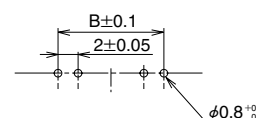


| Part Number       | CL No.        | Number of Contacts | A    | B    | RoHS |
|-------------------|---------------|--------------------|------|------|------|
| A4B- 2PA-2DSA(71) | 622-0401-8-71 | 2                  | 4.0  | 2.0  | YES  |
| A4B- 3PA-2DSA(71) | 622-0402-0-71 | 3                  | 6.0  | 4.0  |      |
| A4B- 4PA-2DSA(71) | 622-0403-3-71 | 4                  | 8.0  | 6.0  |      |
| A4B- 5PA-2DSA(71) | 622-0404-6-71 | 5                  | 10.0 | 8.0  |      |
| A4B- 6PA-2DSA(71) | 622-0405-9-71 | 6                  | 12.0 | 10.0 |      |
| A4B- 7PA-2DSA(71) | 622-0406-1-71 | 7                  | 14.0 | 12.0 |      |
| A4B- 8PA-2DSA(71) | 622-0407-4-71 | 8                  | 16.0 | 14.0 |      |
| A4B- 9PA-2DSA(71) | 622-0408-7-71 | 9                  | 18.0 | 16.0 |      |
| A4B-10PA-2DSA(71) | 622-0409-0-71 | 10                 | 20.0 | 18.0 |      |
| A4B-12PA-2DSA(71) | 622-0411-1-71 | 12                 | 24.0 | 22.0 |      |
| A4B-13PA-2DSA(71) | 622-0412-4-71 | 13                 | 26.0 | 24.0 |      |
| A4B-14PA-2DSA(71) | 622-0413-7-71 | 14                 | 28.0 | 26.0 |      |
| A4B-15PA-2DSA(71) | 622-0414-0-71 | 15                 | 30.0 | 28.0 |      |
| A4B-16PA-2DSA(71) | 622-0415-2-71 | 16                 | 32.0 | 30.0 |      |

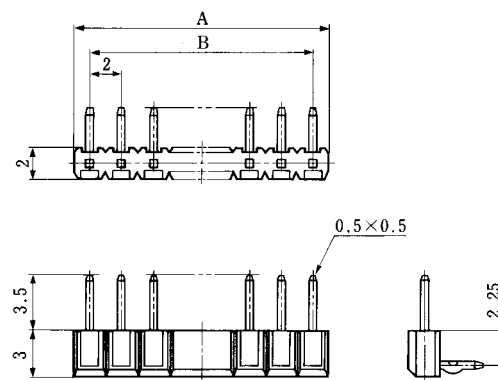
Note: Please order the product per 100 pcs.



### ◆PCB mounting pattern



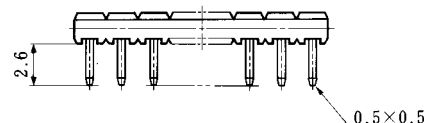
### ●A4B Right Angle Type



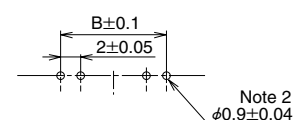
| Part Number      | CL No.        | Number of Contacts | A    | B    | Kink Positions     | RoHS |
|------------------|---------------|--------------------|------|------|--------------------|------|
| A4B- 2PA-2DS(71) | 622-0351-1-71 | 2                  | 4.0  | 2.0  | 2                  | YES  |
| A4B- 3PA-2DS(71) | 622-0352-4-71 | 3                  | 6.0  | 4.0  | 1 or 2 alternately |      |
| A4B- 4PA-2DS(71) | 622-0353-7-71 | 4                  | 8.0  | 6.0  | 2 alternately      |      |
| A4B- 5PA-2DS(71) | 622-0354-0-71 | 5                  | 10.0 | 8.0  | 2 or 3 alternately |      |
| A4B- 6PA-2DS(71) | 622-0355-2-71 | 6                  | 12.0 | 10.0 | 3 alternately      |      |
| A4B- 7PA-2DS(71) | 622-0356-5-71 | 7                  | 14.0 | 12.0 | 3 or 4 alternately |      |
| A4B- 8PA-2DS(71) | 622-0357-8-71 | 8                  | 16.0 | 14.0 | 4 alternately      |      |
| A4B- 9PA-2DS(71) | 622-0358-0-71 | 9                  | 18.0 | 16.0 | 4 or 5 alternately |      |
| A4B-10PA-2DS(71) | 622-0359-3-71 | 10                 | 20.0 | 18.0 | 5 alternately      |      |
| A4B-11PA-2DS(71) | 622-0360-2-71 | 11                 | 22.0 | 20.0 | 5 or 6 alternately |      |
| A4B-12PA-2DS(71) | 622-0361-5-71 | 12                 | 24.0 | 22.0 | 6 alternately      |      |
| A4B-13PA-2DS(71) | 622-0362-8-71 | 13                 | 26.0 | 24.0 | 6 or 7 alternately |      |
| A4B-14PA-2DS(71) | 622-0363-0-71 | 14                 | 28.0 | 26.0 | 7 alternately      |      |
| A4B-15PA-2DS(71) | 622-0364-3-71 | 15                 | 30.0 | 28.0 | 7 or 8 alternately |      |
| A4B-16PA-2DS(71) | 622-0365-6-71 | 16                 | 32.0 | 30.0 | 8 alternately      |      |

Note 1: Please order the product per 100 pcs.

Note 2: Dinmeter is  $0.95 \pm 0.04$  for 14pos, or more.



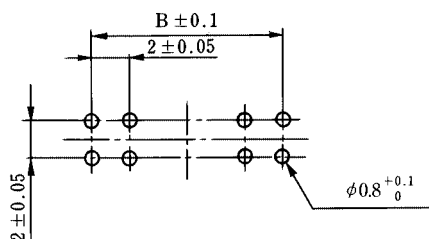
### ◆PCB mounting pattern



## Pin Header



## PCB mounting pattern



Note: Please order the product per 100 pcs.

Unit: mm

| Part Number  | CL No.     | Number of Contacts | A    | B    | RoHS |
|--------------|------------|--------------------|------|------|------|
| A3C- 2P-2DSA | 621-0601-0 | 2                  | 2.0  | —    | YES  |
| A3C- 4P-2DSA | 621-0602-3 | 4                  | 4.0  | 2.0  |      |
| A3C- 6P-2DSA | 621-0603-6 | 6                  | 6.0  | 4.0  |      |
| A3C- 8P-2DSA | 621-0604-9 | 8                  | 8.0  | 6.0  |      |
| A3C-10P-2DSA | 621-0605-1 | 10                 | 10.0 | 8.0  |      |
| A3C-12P-2DSA | 621-0606-4 | 12                 | 12.0 | 10.0 |      |
| A3C-14P-2DSA | 621-0607-7 | 14                 | 14.0 | 12.0 |      |
| A3C-16P-2DSA | 621-0608-0 | 16                 | 16.0 | 14.0 |      |
| A3C-18P-2DSA | 621-0609-2 | 18                 | 18.0 | 16.0 |      |
| A3C-20P-2DSA | 621-0610-1 | 20                 | 20.0 | 18.0 |      |
| A3C-22P-2DSA | 621-0611-4 | 22                 | 22.0 | 20.0 |      |
| A3C-24P-2DSA | 621-0612-7 | 24                 | 24.0 | 22.0 |      |
| A3C-26P-2DSA | 621-0613-0 | 26                 | 26.0 | 24.0 |      |
| A3C-28P-2DSA | 621-0614-2 | 28                 | 28.0 | 26.0 |      |
| A3C-32P-2DSA | 621-0615-5 | 32                 | 32.0 | 30.0 |      |
| A3C-44P-2DSA | 621-0622-0 | 44                 | 44.0 | 42.0 |      |
| A3C-48P-2DSA | 621-0625-9 | 48                 | 48.0 | 46.0 |      |
| A3C-50P-2DSA | 621-0628-7 | 50                 | 50.0 | 48.0 |      |

## ■ Receptacle

### ● A3 Right Angle Type



### ◆ PCB mounting pattern



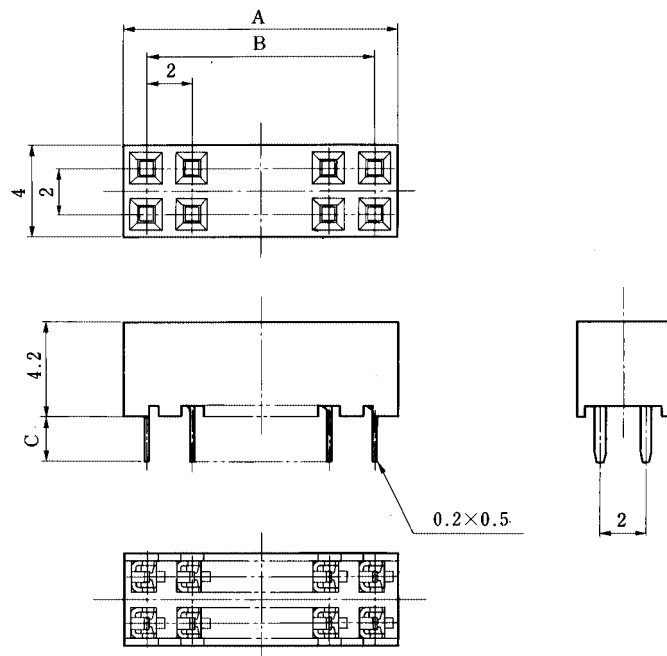
Unit: mm

| Part Number     | CL No.        | A  | B  | RoHS |
|-----------------|---------------|----|----|------|
| A3-44DA-2DS(71) | 621-0711-9-71 | 44 | 42 | YES  |
| A3-50DA-2DS(71) | 621-0714-7-71 | 50 | 48 |      |

Note: Please order the product per 100 pcs.

## ■Receptacle

### ●A3C Type



## ◆PCB mounting pattern

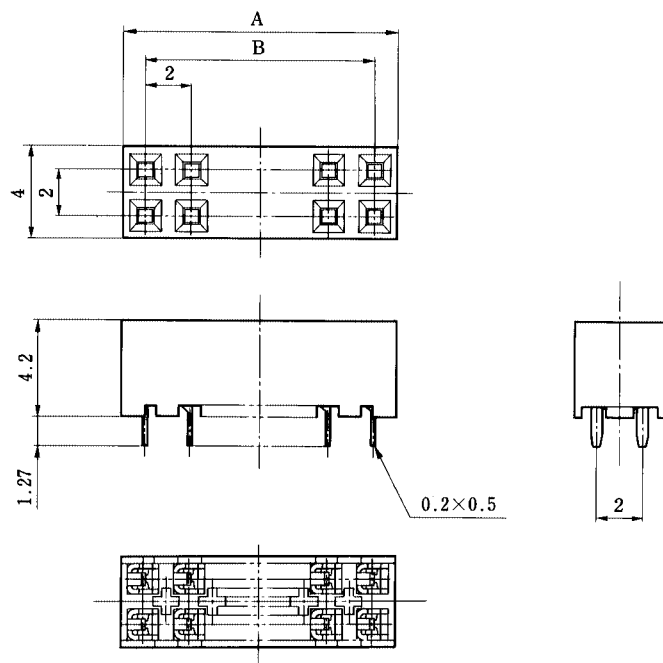
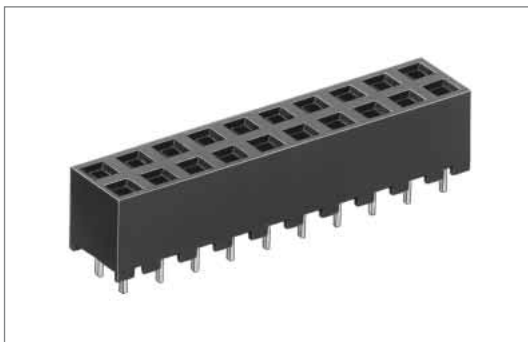


Unit: mm

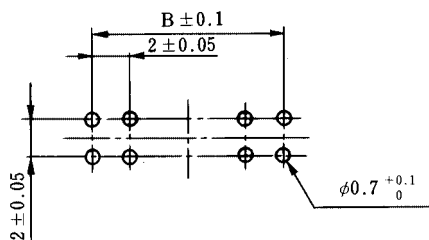
| Part Number       | CL No.        | Number of Contacts | A    | B    | C   | RoHS | Part Number       | CL No.        | Number of Contacts | A    | B    | C    | RoHS |
|-------------------|---------------|--------------------|------|------|-----|------|-------------------|---------------|--------------------|------|------|------|------|
| A3C- 4DA-2DSA(71) | 621-0501-6-71 | 4                  | 4.0  | 2.0  | 3.0 | YES  | A3C-20DA-2DSA(71) | 621-0509-8-71 | 20                 | 20.0 | 18.0 | 3.0  | YES  |
| A3C- 4DA-2DSC(71) | 621-0531-7-71 |                    |      |      | 2.0 |      | A3C-20DA-2DSC(71) | 621-0539-9-71 |                    |      |      | 2.0  |      |
| A3C- 6DA-2DSA(71) | 621-0502-9-71 | 6                  | 6.0  | 4.0  | 3.0 |      | A3C-24DA-2DSA(71) | 621-0511-0-71 | 24                 | 24.0 | 22.0 | 3.0  |      |
| A3C- 6DA-2DSC(71) | 621-0532-0-71 |                    |      |      | 2.0 |      | A3C-24DA-2DSC(71) | 621-0541-0-71 |                    |      |      | 2.0  |      |
| A3C- 8DA-2DSA(71) | 621-0503-1-71 | 8                  | 8.0  | 6.0  | 3.0 |      | A3C-24DA-2DSE(71) | 621-0571-1-71 | 28                 | 28.0 | 26.0 | 1.27 |      |
| A3C- 8DA-2DSC(71) | 621-0533-2-71 |                    |      |      | 2.0 |      | A3C-28DA-2DSA(71) | 621-0513-5-71 |                    |      |      | 3.0  |      |
| A3C-10DA-2DSA(71) | 621-0504-4-71 | 10                 | 10.0 | 8.0  | 3.0 |      | A3C-28DA-2DSC(71) | 621-0543-6-71 | 32                 | 32.0 | 30.0 | 2.0  |      |
| A3C-10DA-2DSC(71) | 621-0534-5-71 |                    |      |      | 2.0 |      | A3C-32DA-2DSA(71) | 621-0515-0-71 |                    |      |      | 3.0  |      |
| A3C-12DA-2DSA(71) | 621-0505-7-71 | 12                 | 12.0 | 10.0 | 3.0 |      | A3C-32DA-2DSC(71) | 621-0545-1-71 | 50                 | 50.0 | 48.0 | 2.0  |      |
| A3C-12DA-2DSC(71) | 621-0535-8-71 |                    |      |      | 2.0 |      | A3C-32DA-2DSE(71) | 621-0575-2-71 |                    |      |      | 1.27 |      |
| A3C-14DA-2DSA(71) | 621-0506-0-71 | 14                 | 14.0 | 12.0 | 3.0 |      | A3C-50DA-2DSA(71) | 621-0524-1-71 |                    |      |      | 3.0  |      |
| A3C-14DA-2DSC(71) | 621-0536-0-71 |                    |      |      | 2.0 |      | A3C-50DA-2DSC(71) | 621-0554-2-71 |                    |      |      | 2.0  |      |
| A3C-16DA-2DSA(71) | 621-0507-2-71 | 16                 | 16.0 | 14.0 | 3.0 |      | A3C-50DA-2DSE(71) | 621-0584-3-71 |                    |      |      | 1.27 |      |
| A3C-16DA-2DSC(71) | 621-0537-3-71 |                    |      |      | 2.0 |      |                   |               |                    |      |      |      |      |
| A3C-18DA-2DSA(71) | 621-0508-5-71 | 18                 | 18.0 | 16.0 | 3.0 |      |                   |               |                    |      |      |      |      |
| A3C-18DA-2DSC(71) | 621-0538-6-71 |                    |      |      | 2.0 |      |                   |               |                    |      |      |      |      |

## A3/A4 Series 2mm Pitch Miniature Connector

### ●A3D Type



### ◆PCB mounting pattern



Unit: mm

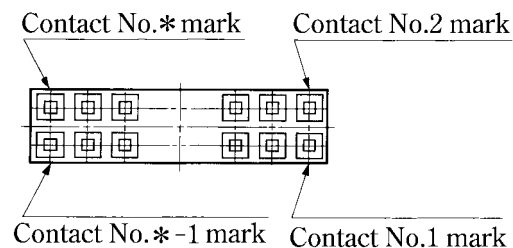
| Part Number       | CL No.        | Number of Contacts | A    | B    | RoHS |
|-------------------|---------------|--------------------|------|------|------|
| A3D- 4DA-2DSE(71) | 621-0751-3-71 | 4                  | 4.0  | 2.0  | YES  |
| A3D- 6DA-2DSE(71) | 621-0752-6-71 | 6                  | 6.0  | 4.0  |      |
| A3D- 8DA-2DSE(71) | 621-0753-9-71 | 8                  | 8.0  | 6.0  |      |
| A3D-10DA-2DSE(71) | 621-0754-1-71 | 10                 | 10.0 | 8.0  |      |
| A3D-12DA-2DSE(71) | 621-0755-4-71 | 12                 | 12.0 | 10.0 |      |
| A3D-14DA-2DSE(71) | 621-0756-7-71 | 14                 | 14.0 | 12.0 |      |
| A3D-16DA-2DSE(71) | 621-0757-0-71 | 16                 | 16.0 | 14.0 |      |
| A3D-18DA-2DSE(71) | 621-0758-2-71 | 18                 | 18.0 | 16.0 |      |
| A3D-20DA-2DSE(71) | 621-0759-5-71 | 20                 | 20.0 | 18.0 |      |
| A3D-28DA-2DSE(71) | 621-0763-2-71 | 28                 | 28.0 | 26.0 |      |
| A3D-44DA-2DSE(71) | 621-0766-0-71 | 44                 | 44.0 | 42.0 |      |

## ■Crimping Socket

### ●A3B-\*D-2C



| Part Number | CL No.     | Number of Contacts | A    | B    | RoHS |
|-------------|------------|--------------------|------|------|------|
| A3B- 4D-2C  | 621-0305-8 | 4                  | 4.0  | 2.0  | YES  |
| A3B- 6D-2C  | 621-0306-0 | 6                  | 6.0  | 4.0  |      |
| A3B- 8D-2C  | 621-0307-3 | 8                  | 8.0  | 6.0  |      |
| A3B-10D-2C  | 621-0308-6 | 10                 | 10.0 | 8.0  |      |
| A3B-12D-2C  | 621-0309-9 | 12                 | 12.0 | 10.0 |      |
| A3B-14D-2C  | 621-0310-8 | 14                 | 14.0 | 12.0 |      |
| A3B-18D-2C  | 621-0311-0 | 18                 | 18.0 | 16.0 |      |
| A3B-20D-2C  | 621-0312-3 | 20                 | 20.0 | 18.0 |      |
| A3B-24D-2C  | 621-0313-6 | 24                 | 24.0 | 22.0 |      |
| A3B-28D-2C  | 621-0314-9 | 28                 | 28.0 | 26.0 |      |
| A3B-44D-2C  | 621-0330-5 | 44                 | 44.0 | 42.0 |      |



Note 1. \* indicates the number of contacts.

Note 2. Please order the product per 100 pcs.

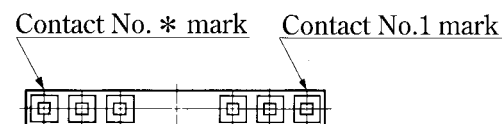
Note 3. Use other contacts in combination.

(Example: 50 contacts = 44 contacts + 6 contacts)

### ●A4B-\*S-2C



| Part Number | CL No.     | Number of Contacts | A    | B    | RoHS |
|-------------|------------|--------------------|------|------|------|
| A4B- 2S-2C  | 622-0301-3 | 2                  | 4.0  | 2.0  | YES  |
| A4B- 3S-2C  | 622-0302-6 | 3                  | 6.0  | 4.0  |      |
| A4B- 4S-2C  | 622-0303-9 | 4                  | 8.0  | 6.0  |      |
| A4B- 5S-2C  | 622-0304-1 | 5                  | 10.0 | 8.0  |      |
| A4B- 6S-2C  | 622-0305-4 | 6                  | 12.0 | 10.0 |      |
| A4B- 8S-2C  | 622-0306-7 | 8                  | 16.0 | 14.0 |      |
| A4B-10S-2C  | 622-0307-0 | 10                 | 20.0 | 18.0 |      |
| A4B-12S-2C  | 622-0308-2 | 12                 | 24.0 | 22.0 |      |
| A4B-15S-2C  | 622-0311-7 | 15                 | 30.0 | 28.0 |      |
| A4B-16S-2C  | 622-0310-4 | 16                 | 32.0 | 30.0 |      |
| A4B-18S-2C  | 622-0309-5 | 18                 | 36.0 | 34.0 |      |



Note 1. \* indicates the number of contacts.

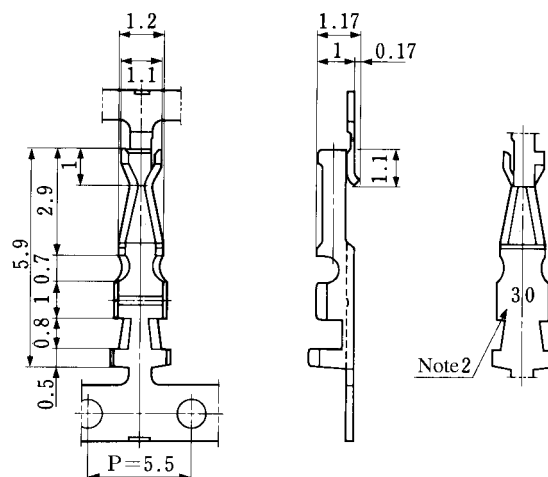
Note 2. Please, order the product per 100 pcs.

## ■Crimping Contact

SCC contact



SCFC contact



Note 1. The plating specification is shown as follows:

(Contact area) : Gold plating

(Others): Nickel plating

Note 2. "30" is stamped on A3B-2630SCFC(SCC),

and "36" is stamped on A3B-3236SCFC(SCC).

| Part Number  | CL No.     | Applicable Cable | Type | Quantity | Crimping Tool                            | RoHS |
|--------------|------------|------------------|------|----------|------------------------------------------|------|
| A3B-2630SCFC | 621-0301-7 | AWG#26 to #30    | Reel | 10000    | Automatic crimper CM-105-AP 105-A3B-2630 | YES  |
| A3B-2630SCC  | 621-0302-0 | AWG#26 to #30    | Bag  | 100      | A3B-TA2630HC                             |      |
| A3B-3236SCFC | 621-0303-2 | AWG#32 to #36    | Reel | 10000    | Automatic crimper CM-105-AP 105-A3B-3236 |      |

## ◆Crimping Tool

Manual crimping tool

A3B-TA2630HC



Automatic crimping machine

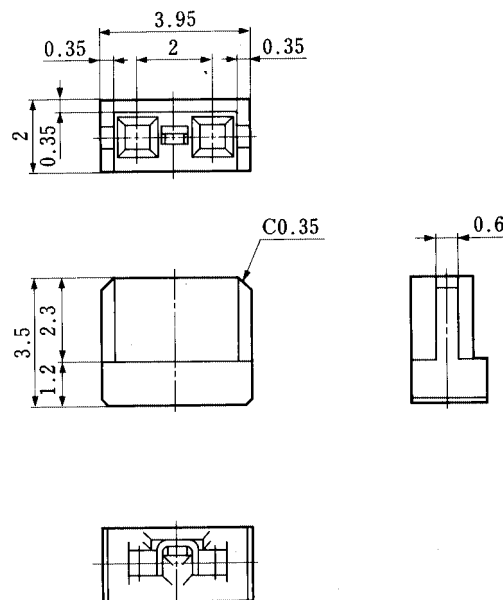
CM-105



| Specification   |                                                          |
|-----------------|----------------------------------------------------------|
| Power supply    | 100V AC, single phase 200W                               |
| Gross weight    | 75kg                                                     |
| Machining range | 2000 to 4000 contacts/hour                               |
| Remarks         | Crimping of various contacts by replacing the applicator |

| Type      | Item                       | Part Number     | CL No.     | Applicable Contact | Applicable Cable |
|-----------|----------------------------|-----------------|------------|--------------------|------------------|
| Manual    | Manual crimping tool       | A3B-TA2630HC    | 550-0200-7 | A3B-2630SCC        | AWG#26 to #30    |
| Automatic | Automatic crimping machine | CM-105          | 901-0005-4 | —                  | —                |
|           | Applicator                 | AP105-A3B-2630S | 901-4016-2 | A3B-2630SCFC       | AWG#26 to #30    |
|           |                            | AP105-A3B-3236S | 901-4017-5 | A3B-3236SCFC       | AWG#32 to #36    |

## ◆ Short Pin



Please, order the product per 1000 pcs.

| Part Number | CL No.     | Material |                 | Finish                 | RoHS |
|-------------|------------|----------|-----------------|------------------------|------|
| A3-SP(A)    | 621-0180-4 | Housing  | PBT             | Black (UL94V-0)        | YES  |
|             |            | Contact  | Phosphor bronze | Selective gold plating |      |

## ◆ Polarizing Key

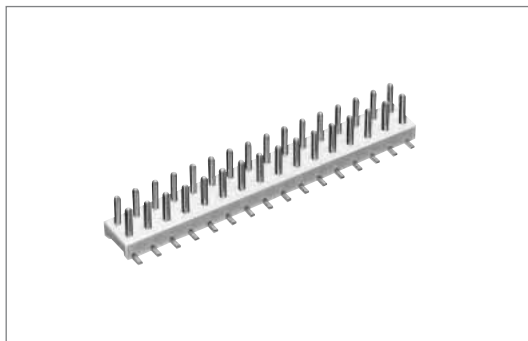
A3-GPIN(A)



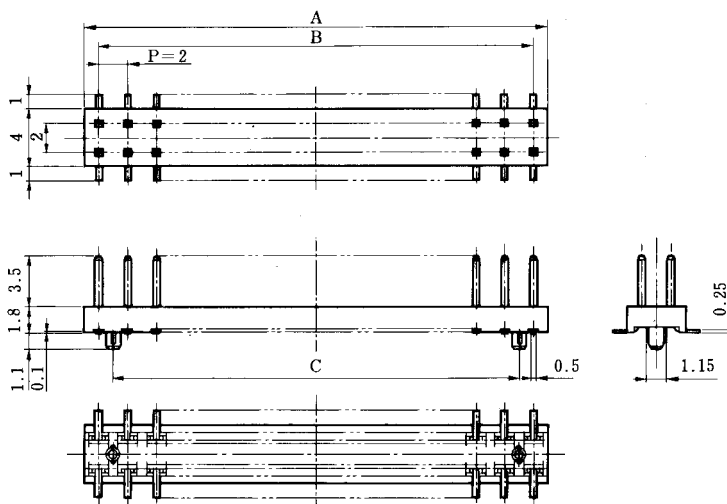
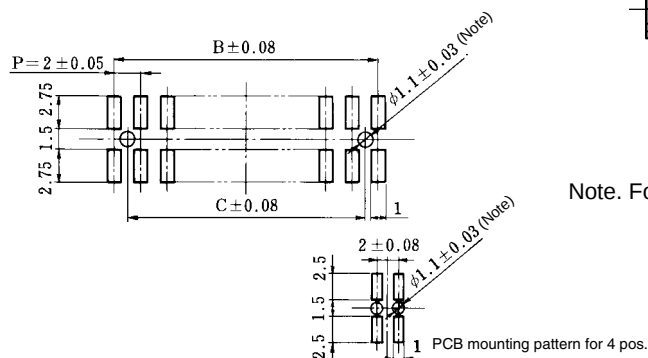
Note: This product is provided in a set of 10 pieces in conjunction with a runner.  
 The unit for sale consists of 10 sets, which are included in one pack.

| Part Number | CL No.     | Material            | RoHS |
|-------------|------------|---------------------|------|
| A3-GPIN(A)  | 621-0178-2 | Poly acetal (white) | YES  |

## Pin Header



## PCB mounting pattern



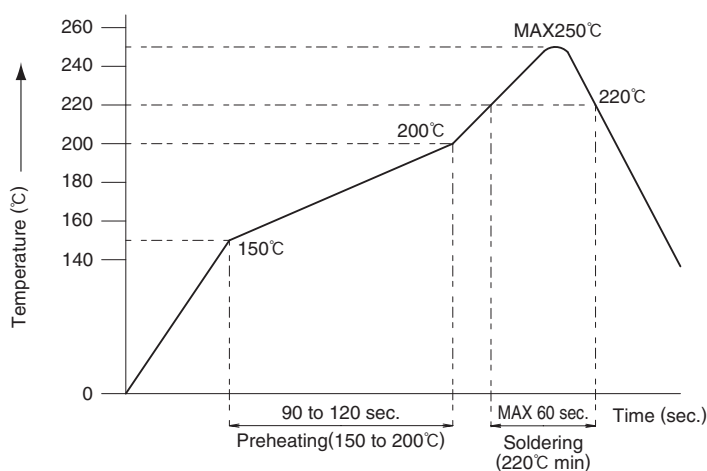
Note. For automatic board placement, recommended boss dia. is  $1.2^{+0.1}_{-0}$ .

Unit: mm

| Part Number      | CL No.        | Number of Contacts | A    | B    | C    | RoHS |
|------------------|---------------|--------------------|------|------|------|------|
| A3 - 4PA-2SV(71) | 621-1000-6-71 | 4                  | 4.0  | 2.0  | —    | YES  |
| A3A- 4PA-2SV(71) | 621-1040-0-71 |                    |      |      | 2.0  |      |
| A3 - 6PA-2SV(71) | 621-1001-9-71 | 6                  | 6.0  | 4.0  | —    |      |
| A3A- 6PA-2SV(71) | 621-1041-3-71 |                    |      |      | 2.0  |      |
| A3 - 8PA-2SV(71) | 621-1002-1-71 | 8                  | 8.0  | 6.0  | —    |      |
| A3A- 8PA-2SV(71) | 621-1042-6-71 |                    |      |      | 4.0  |      |
| A3 -10PA-2SV(71) | 621-1003-4-71 | 10                 | 10.0 | 8.0  | —    |      |
| A3A-10PA-2SV(71) | 621-1043-9-71 |                    |      |      | 6.0  |      |
| A3 -12PA-2SV(71) | 621-1004-7-71 | 12                 | 12.0 | 10.0 | —    |      |
| A3A-12PA-2SV(71) | 621-1044-1-71 |                    |      |      | 8.0  |      |
| A3 -14PA-2SV(71) | 621-1005-0-71 | 14                 | 14.0 | 12.0 | —    |      |
| A3A-14PA-2SV(71) | 621-1045-4-71 |                    |      |      | 10.0 |      |
| A3 -16PA-2SV(71) | 621-1006-2-71 | 16                 | 16.0 | 14.0 | —    |      |
| A3A-16PA-2SV(71) | 621-1046-7-71 |                    |      |      | 12.0 |      |
| A3 -20PA-2SV(71) | 621-1008-8-71 | 20                 | 20.0 | 18.0 | —    |      |
| A3A-20PA-2SV(71) | 621-1048-2-71 |                    |      |      | 16.0 |      |
| A3 -24PA-2SV(71) | 621-1010-0-71 | 24                 | 24.0 | 22.0 | —    |      |
| A3A-24PA-2SV(71) | 621-1050-4-71 |                    |      |      | 20.0 |      |
| A3 -28PA-2SV(71) | 621-1012-5-71 | 28                 | 28.0 | 26.0 | —    |      |
| A3A-28PA-2SV(71) | 621-1052-0-71 |                    |      |      | 24.0 |      |
| A3 -32PA-2SV(71) | 621-1014-0-71 | 32                 | 32.0 | 30.0 | —    |      |
| A3A-32PA-2SV(71) | 621-1054-5-71 |                    |      |      | 28.0 |      |
| A3 -44PA-2SV(71) | 621-1015-3-71 | 44                 | 44.0 | 42.0 | —    |      |
| A3A-44PA-2SV(71) | 621-1055-8-71 |                    |      |      | 40.0 |      |
| A3 -50PA-2SV(71) | 621-1016-6-71 | 50                 | 50.0 | 48.0 | —    |      |
| A3A-50PA-2SV(71) | 621-1056-0-71 |                    |      |      | 46.0 |      |



## ◆ Recommended Temperature Profile

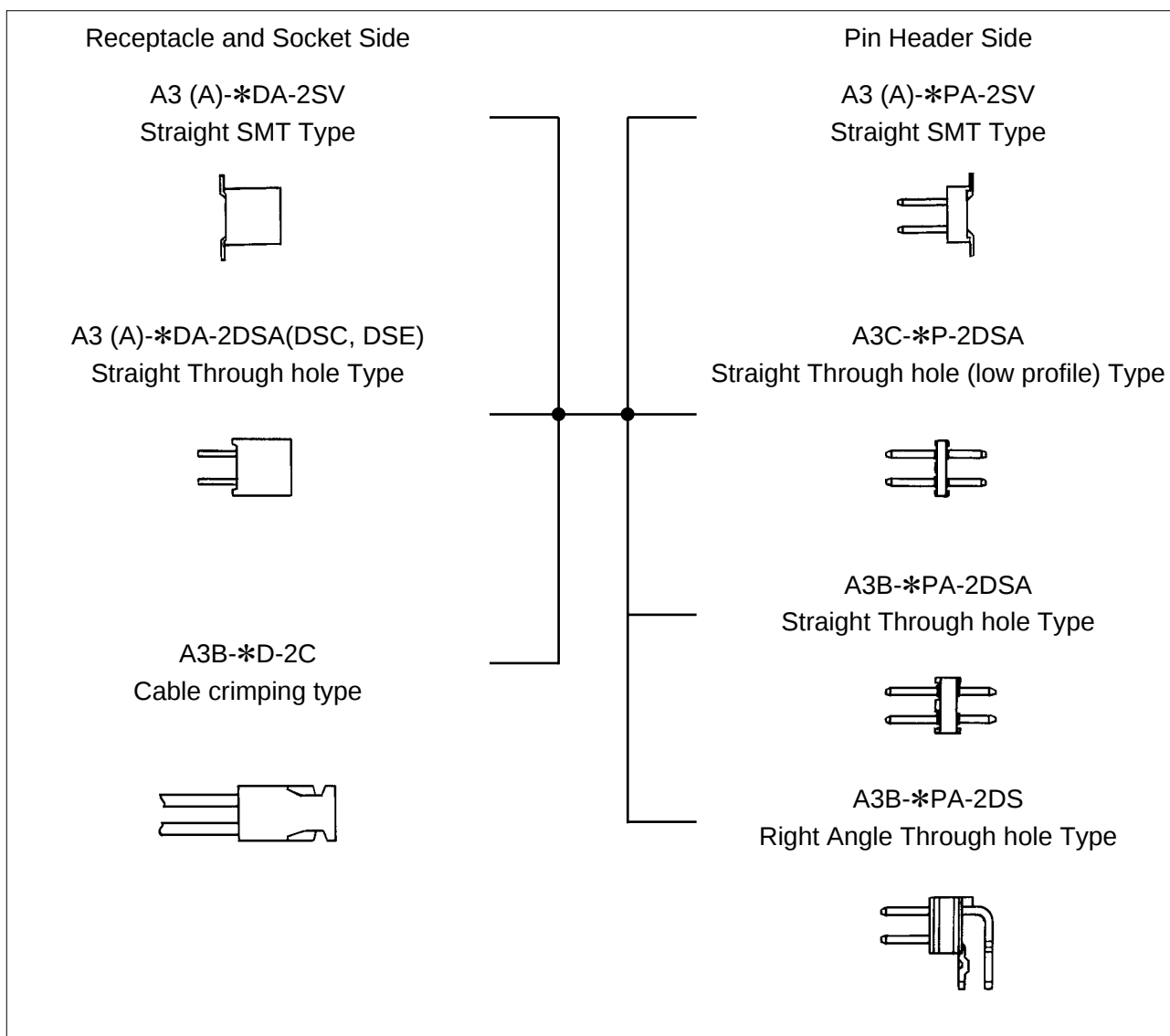


### HRS test conditions

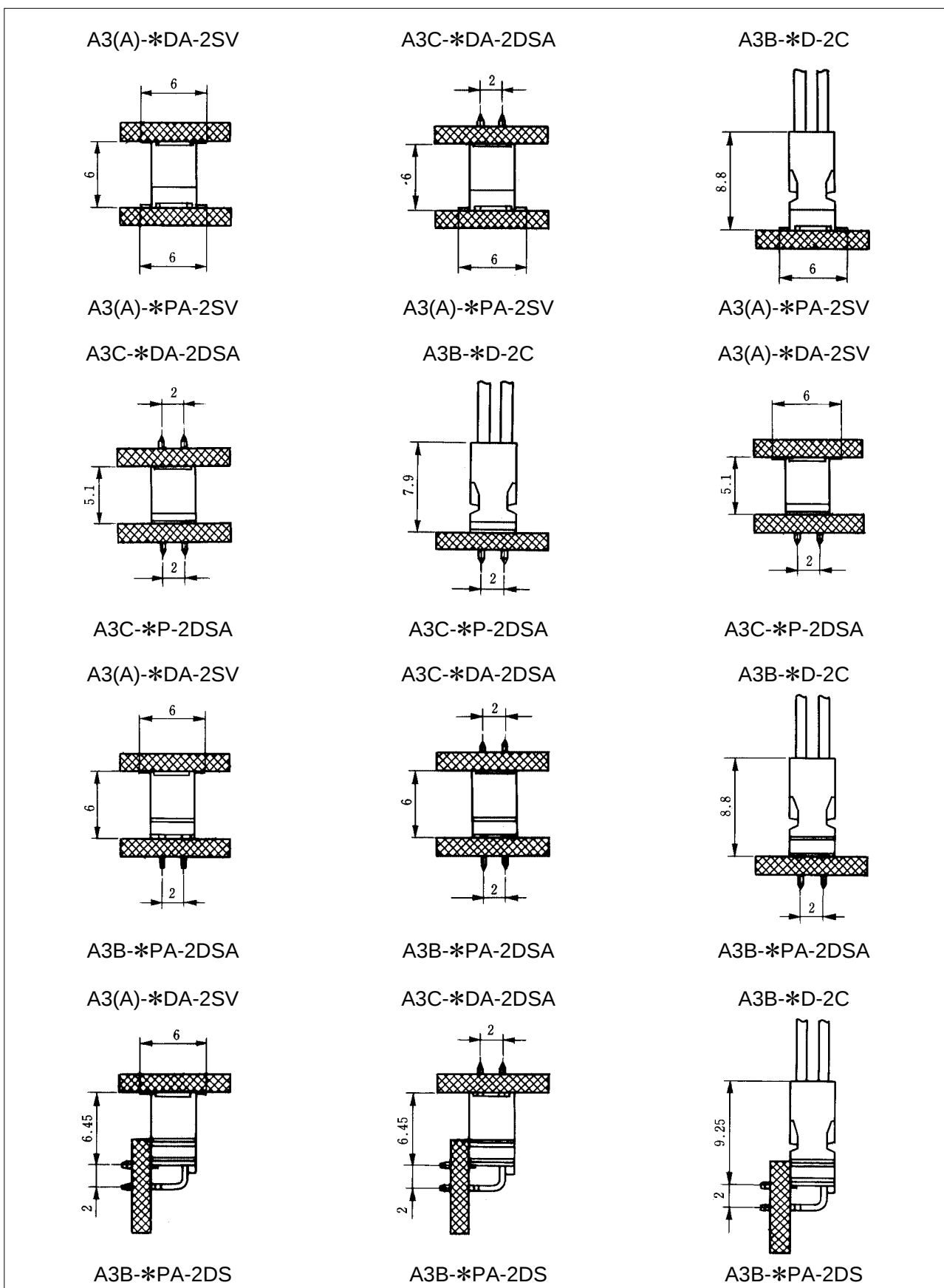
Test board Glass epoxy 85mm×60mm×1.6mm thick  
 Solder method : Reflow  
 Solder composition : Paste,  
 96.5%Sn/3%Ag/0.5%Cu  
 Metal mask : 0.2mm thick  
 Reflow cycles : 2 cycles

The temperature profile is based on the above conditions.  
 In individual applications the actual temperature may vary, depending on solder paste type, volume/thickness and board size/thickness. Consult your solder paste and equipment manufacturer for specific recommendations.

## ◆ Functional Block Chart



## ◆ Application Pattern (A3 series)



Note. When the connector is mounted on the board surface, the mounting height is a size designed in single connector. Solder paste used for installation will slightly change according to solder thickness.

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