

## **D-3000 Series** (Continued)

### **D-3200S** (High-Voltage Version of Standard D-3100S) (Continued)

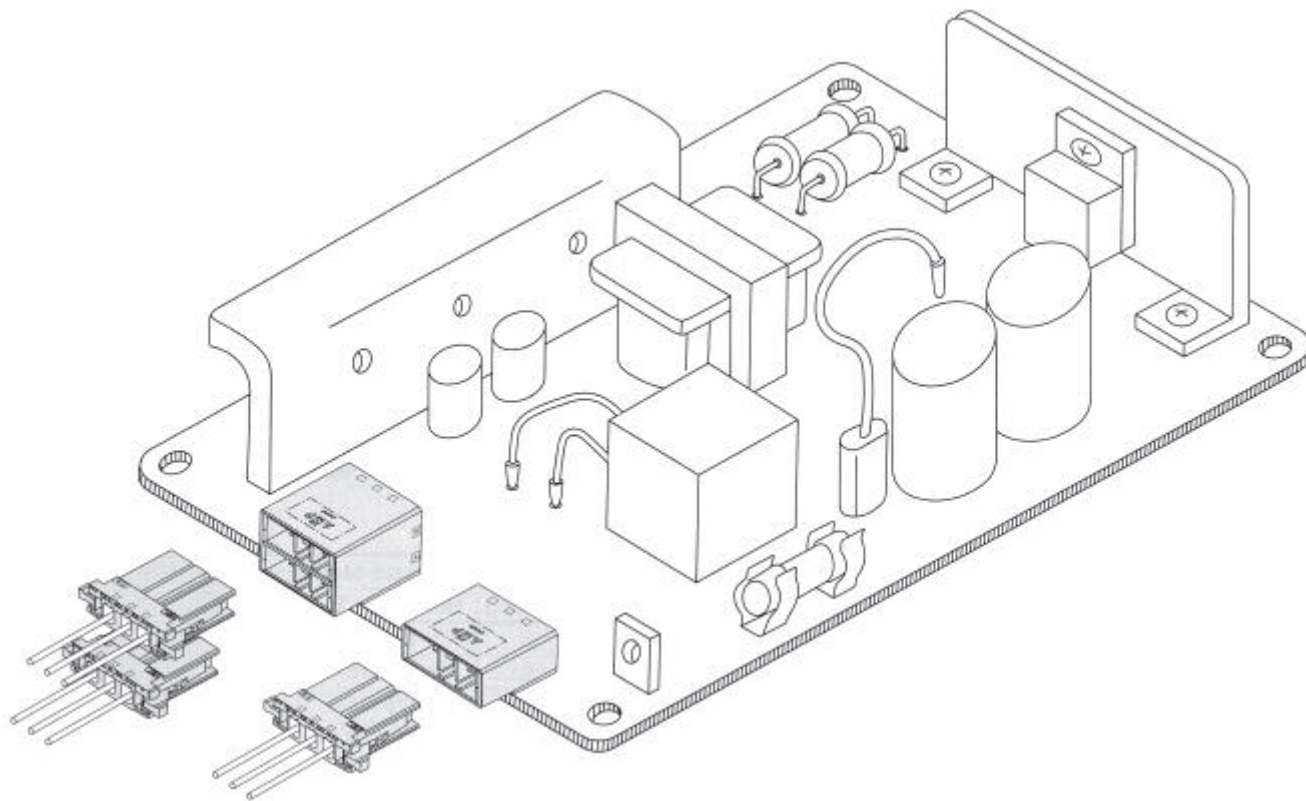
#### **Keying**

This product (D-3200S) is provided with keying to help prevent mismatching of the connector halves. Keying is available in two types – X Type and Y Type. (Shown below is the mating surface of Tab Header.)



#### **Applications**

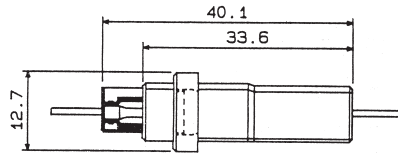
Switching regulator-Typical Applications



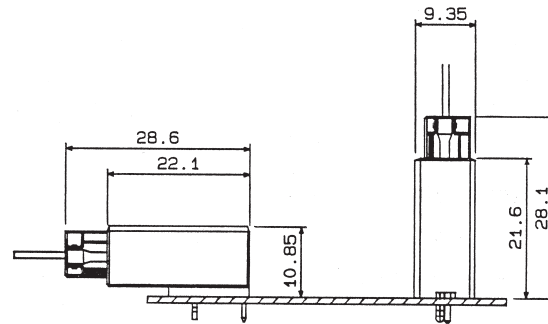
## D-3000 Series (Continued)

### D-3200S (High-Voltage Version of Standard D-3100S) (Continued)

#### Mating Dimensions

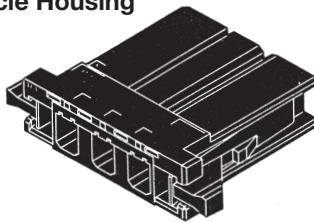


Panel/Free-Hanging Type



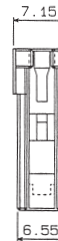
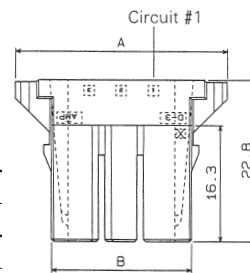
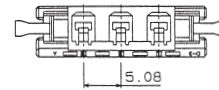
Horizontal/Vertical Type

#### External Dimensions Receptacle Housing



#### Mating Tab Connector Part Number:

- |            |            |
|------------|------------|
| □-179553-□ | □-316131-□ |
| □-179552-□ | □-917337-□ |
| □-179276-□ | □-178136-□ |
| □-178138-□ | □-917338-□ |
| □-179277-□ | □-316132-□ |
| □-316130-□ | □-316133-□ |



5-and 6-position receptacle housings differ slightly in shape with each other. Check with diagram.

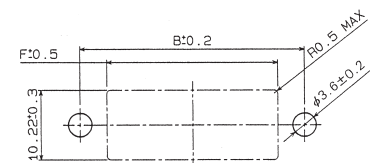
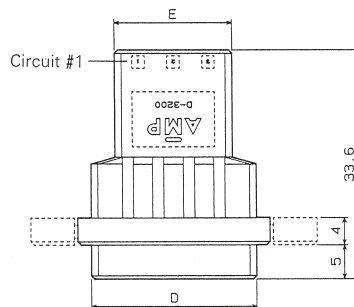
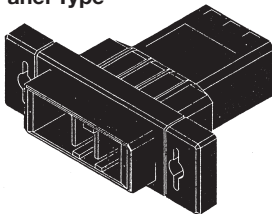
| No. of Pos. | Part Number | Dimensions |       |
|-------------|-------------|------------|-------|
|             |             | A          | B     |
| 2           | □-178128-2  | 24.62      | 14.16 |
| 3           | □-178128-3  | 29.7       | 19.24 |
| 4           | □-178128-4  | 34.78      | 24.32 |
| 5           | □-178128-5  | 39.86      | 29.4  |
| 6           | □-178128-6  | 44.94      | 34.48 |

#### Tab Housing

#### Mating Receptacle Housing Part Number:

□-178128-□

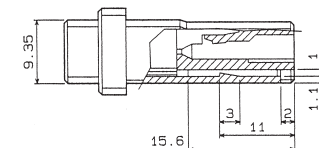
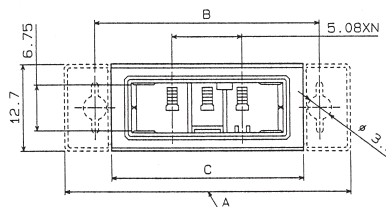
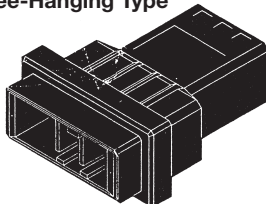
#### Panel Type



#### Panel Cutout

When mounting panel from the front, apply clamping torque of less than 49N [11 lbf].

#### Free-Hanging Type



| No. of Pos. | Part Number |                   | Dimensions |    |       |       |       |    |
|-------------|-------------|-------------------|------------|----|-------|-------|-------|----|
|             | Panel Type  | Free-Hanging Type | A          | B  | C     | D     | E     | F  |
| 2           | □-179553-2  | □-179552-2        | 36.83      | 28 | 23.03 | 19.08 | 12.08 | 20 |
| 3           | □-179553-3  | □-179552-3        | 41.91      | 33 | 28.11 | 24.16 | 17.16 | 25 |
| 4           | □-179553-4  | □-179552-4        | 46.99      | 38 | 33.19 | 29.24 | 22.24 | 30 |

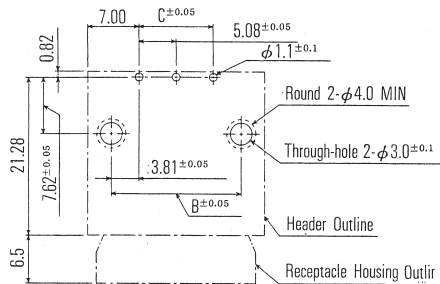
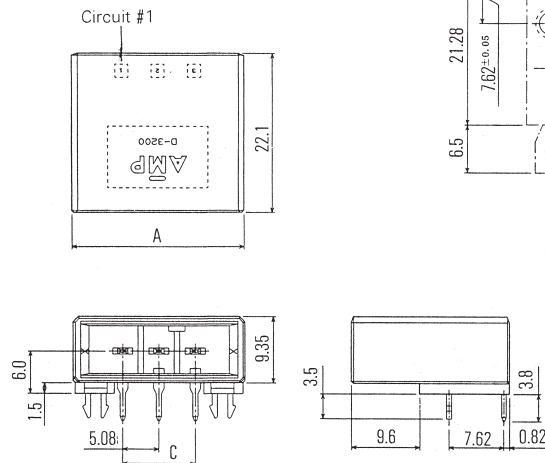
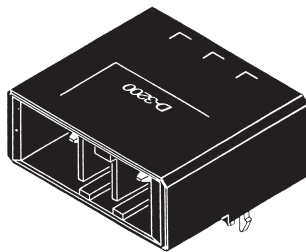
## D-3000 Series (Continued)

### D-3200S (High-Voltage Version of Standard D-3100S) (Continued)

#### Board-mounting Tab Header (Horizontal Type)

Mating Receptacle Housing  
Part Number:

□-178128-□



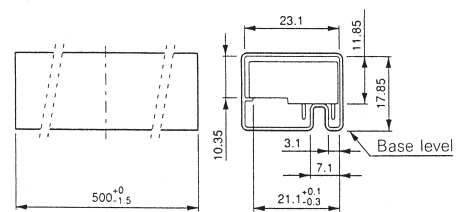
#### PC Board Layout

Acceptable Board Thickness:  
1.6-2.4±0.1

Solder time section is 0.64 sq.

| No. of Pos. | Part Number | Dimensions |       |       |
|-------------|-------------|------------|-------|-------|
|             |             | A          | B     | C     |
| 2           | □-179276-□  | 19.08      | 12.7  | 5.08  |
| 3           | □-178138-□  | 24.16      | 17.78 | 10.16 |
| 4           | □-179277-□  | 29.24      | 22.86 | 15.24 |
| 5           | □-316130-□  | 34.32      | 27.84 | 20.32 |
| 6           | □-316131-□  | 39.4       | 33.02 | 25.4  |

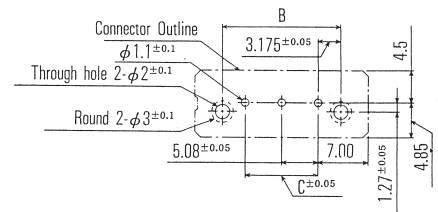
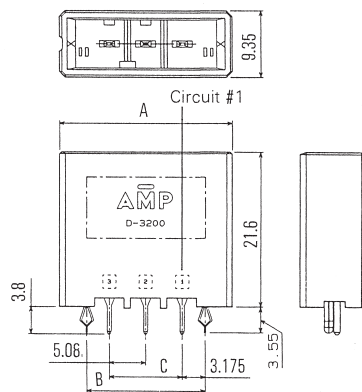
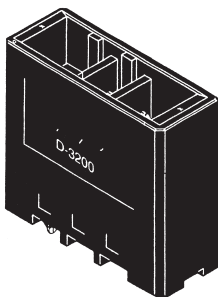
#### Tube Package Dimensions (Ref.)



#### Board-mounting Tab Header (Vertical Type)

Mating Receptacle Housing  
Part Number:

□-178128-□



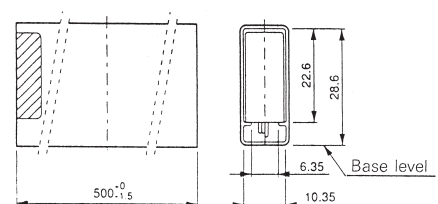
#### PC Board Layout

Acceptable Board Thickness:  
1.6-2.4±0.1

Solder time section is 0.64 sq.

| No. of Pos. | Part Number | Dimensions |       |       |
|-------------|-------------|------------|-------|-------|
|             |             | A          | B     | C     |
| 2           | □-917337-□  | 19.08      | 11.43 | 5.08  |
| 3           | □-178136-□  | 24.16      | 16.51 | 10.16 |
| 4           | □-917338-□  | 29.24      | 21.59 | 15.24 |
| 5           | □-316132-□  | 34.32      | 26.67 | 20.32 |
| 6           | □-316133-□  | 39.4       | 31.75 | 25.4  |

#### Tube Package Dimensions (Ref.)



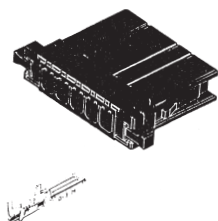
## D-3000 Series (Continued)

### D-3200S SMT Type

#### Receptacle Housing and Board Mount Tab Header

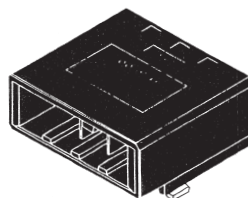
**Appearance** Dielectric Withstanding Voltage: 2,200 V (1 min.)  
Voltage Rating: 600 V (when one connector is used)

Receptacle Housing



Board-Mounting Tab Header

(Horizontal Type)



Receptacle Contact.....For each line of contacts, refer to the appropriate page.

| No. of Positions | Keying | Part Number of Receptacle Housing* | Part Number of Board-Mount Tab Header |
|------------------|--------|------------------------------------|---------------------------------------|
|                  |        |                                    | Horizontal Type                       |
| 2                | X      | <b>1-178128-2</b>                  | —                                     |
| 3                | X      | <b>1-178128-3</b>                  | <b>1-917389-□</b>                     |
| 4                | X      | <b>1-178128-4</b>                  | —                                     |
| 5                | X      | <b>1-178128-5</b>                  | —                                     |
| 6                | X      | <b>1-178128-6</b>                  | —                                     |

Note: Enter the following plating codes in Part Number suffix-□. Gold plating only for SMT Type.

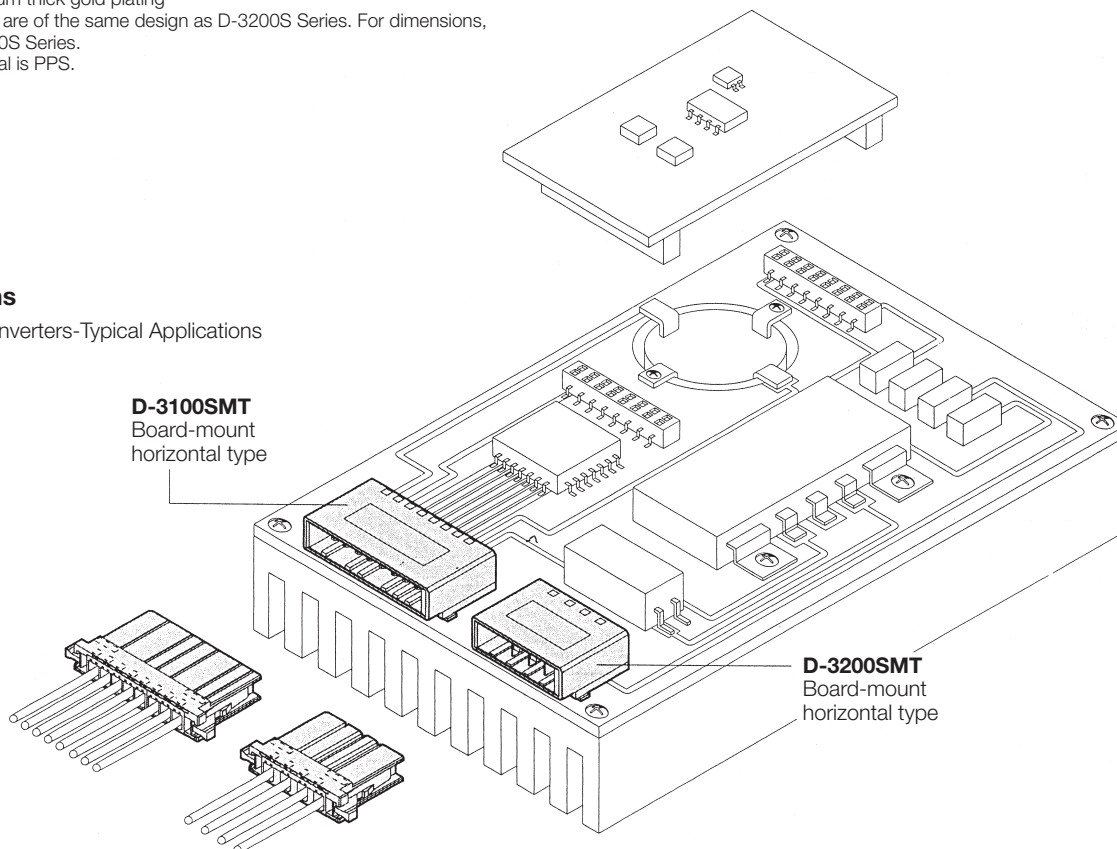
-2 = 0.38μm thick gold plating,

-3 = 0.76μm thick gold plating

\*Part Numbers are of the same design as D-3200S Series. For dimensions, refer to D-3200S Series.  
Header material is PPS.

### Applications

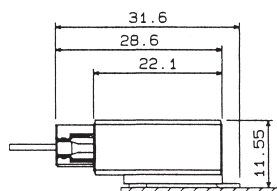
Servomotors/Inverters-Typical Applications



## D-3000 Series (Continued)

### D-3200S SMT Type (Continued)

### Mating Dimensions

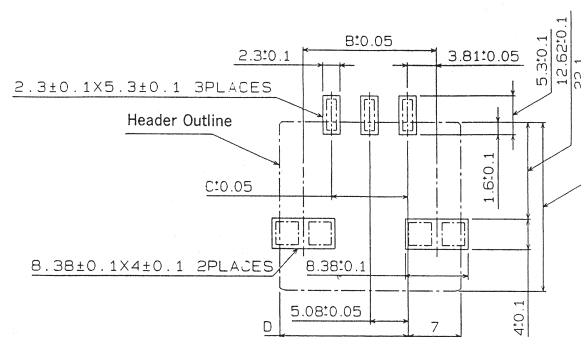
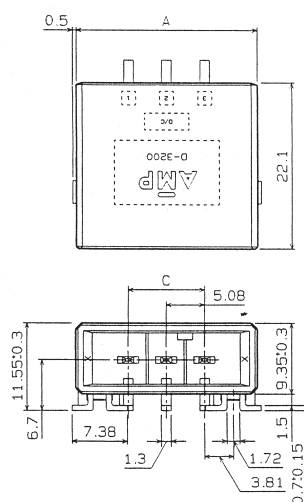
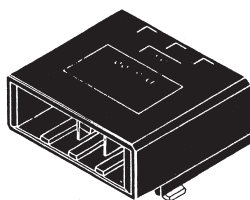


Horizontal Type

### External Dimensions

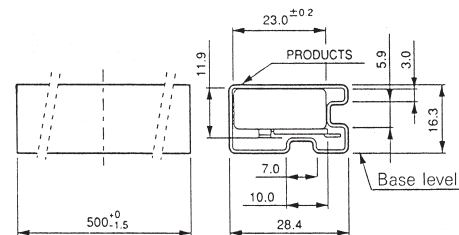
#### Board-mount Tab Header (Horizontal Type)

Mating Receptacle Housing  
Part Number:  
1-178128-3



PC Board Layout

#### Tube Package Dimensions (Ref.)



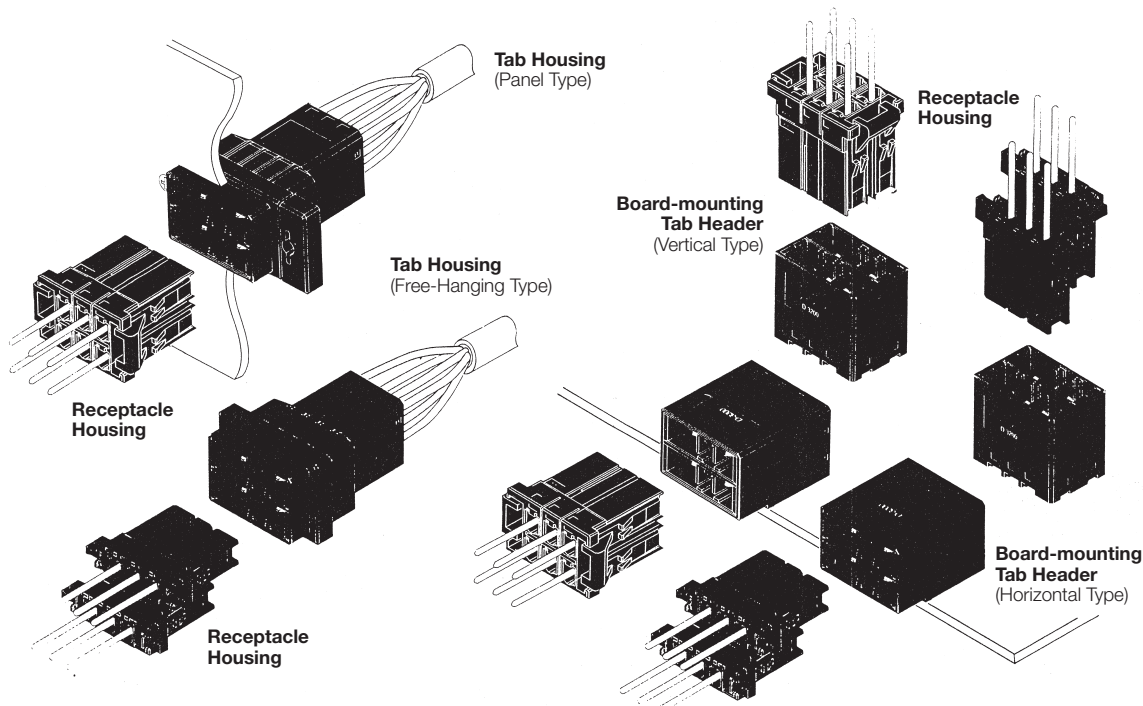
| No. of Pos. | Part Number of Tab Header | Dimensions |       |       |       |
|-------------|---------------------------|------------|-------|-------|-------|
|             |                           | A          | B     | C     | D     |
| 3           | 1-917389-□                | 24.16      | 17.78 | 10.16 | 17.16 |

## D-3000 Series (Continued)

### D-3200M — Modular Type

#### Appearance

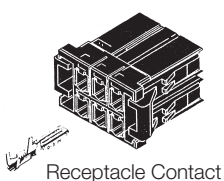
Connectors can be used in modular configurations in combination with D-3200S. Ideally suited for allocation of power circuits.  
Board mounting pitch: Horizontal Type 200 x 200 mils (5.08 x 5.08 mm)  
Vertical Type 200 x 300 mils (5.08 x 7.62 mm)  
Dielectric Withstanding Voltage: 2,200 V (for one minute)  
Voltage Rating: 600 V (per connector)



Receptacle Housing

Tab Housing

Board-mounting Tab Header



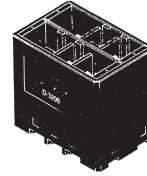
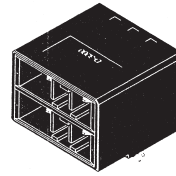
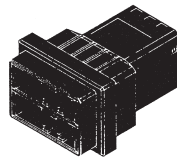
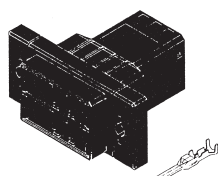
Receptacle Contact

(Panel Type)

(Free-Hanging Type)

(Horizontal Type)

(Vertical Type)



Tab Contact.....For each line of contacts, refer to the appropriate page.

#### Part Number Chart

| No. of Pos. | Keying | Receptacle Housing | Tab Housing* |                   |           | Board-Mounting Tab Header* |               |
|-------------|--------|--------------------|--------------|-------------------|-----------|----------------------------|---------------|
|             |        |                    | Panel Type   | Free-Hanging Type | L Fitting | Horizontal Type            | Vertical Type |
| 6           | XX     | 1-178129-6         | 1-179555-3   | 1-179554-3        | S         | 1-178139-□                 | 1-178140-□    |
|             | YY     | 2-178129-6         | 2-179555-3   | 2-179554-3        | S         | 2-178139-□                 | 2-178140-□    |
|             | XY     | 3-178129-6         | 3-179555-3   | 3-179554-3        | S         | 3-178139-□                 | 3-178140-□    |
|             | ZZ     | —                  | —            | —                 | S         | 5-178139-5**               | —             |
|             | ZX     | —                  | —            | —                 | S         | 6-178139-5**               | —             |
| 10          | XX     | 1-917659-5         | —            | —                 | —         | 1-316080-□                 | 1-917657-□    |
|             | YY     | 2-917659-5         | —            | —                 | —         | 2-316080-□                 | 2-917657-□    |
|             | XY     | 3-917659-5         | —            | —                 | —         | 3-316080-□                 | 3-917657-□    |
| 12          | XX     | 1-917659-6         | 1-179555-6   | 1-179554-6        | —         | 1-316081-□                 | 1-917658-□    |
|             | YY     | 2-917659-6         | 2-179555-6   | 2-179554-6        | —         | 2-316081-□                 | 2-917658-□    |
|             | XY     | 3-917659-6         | 3-179555-6   | 3-179554-6        | —         | 3-316081-□                 | 3-917658-□    |
| 20          | XX     | 1-917659-8         | 1-179555-8   | —                 | —         | —                          | —             |

Note: Enter the following plating codes in -□ after Part Numbers: -2 = 0.38μm thick gold plating, -3 = 0.76μm thick gold plating, -5 = Tin plating

\*Can also be used in Drawer connector in combination with D-3200M Drawer Type.

\*\*Receptacle shall be used in combination of X keying and Z keying of 3 pos. D-3200S.

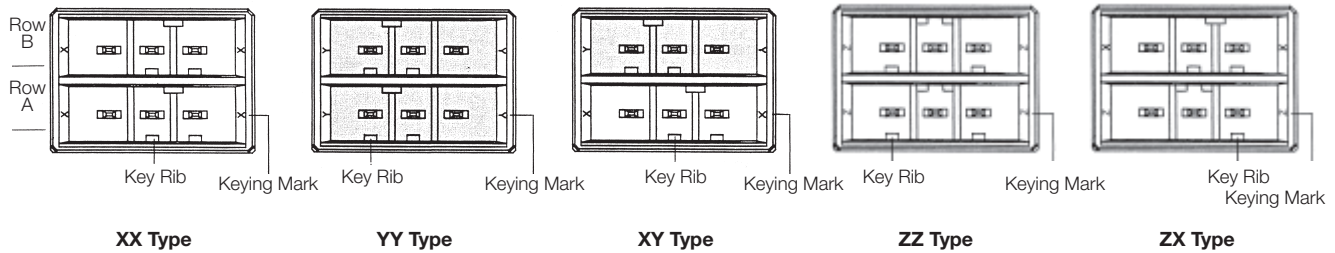
## D-3000 Series (Continued)

### D-3200M — Modular Type

(Continued)

#### Keying

This product (D-3200M) is provided with keying to help prevent mismatching of the connector halves. Keying is available in three types —XX Type, YY Type and XY Type. (Shown below is the mating surface of Tab Header.) ZZ type and ZX type keying are also available for 6 pos.



### Table of Mating Combinations

| Receptacle Housing                     |         | Tab Housing |                                                             | Board-mounting Tab Header                  |                                                              |
|----------------------------------------|---------|-------------|-------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------|
| 1 Row<br>3 Positions<br>(D-3200S)<br>* | X Type  |             | 1 Row,<br>(D-3200S)<br>Panel Type<br>*<br>Free-Hanging Type | X Type<br>Panel Type<br>Free-Hanging Type  | 1 Row,<br>(D-3200S)<br>Horizontal Type<br>*<br>Vertical Type |
|                                        | Y Type  |             | Y Type<br>Panel Type<br>Free-Hanging Type<br>*              | Y Type<br>Panel Type<br>Free-Hanging Type  | Vertical Type<br>*<br>Vertical Type                          |
| 2 Rows<br>6 Positions                  | XX Type |             | 2 Rows<br>Panel Type<br>Free-Hanging Type                   | XX Type<br>Panel Type<br>Free-Hanging Type | 2 Rows<br>Horizontal Type<br>Vertical Type                   |
|                                        | YY Type |             | YY Type<br>Panel Type<br>Free-Hanging Type                  | YY Type<br>Panel Type<br>Free-Hanging Type | YY Type<br>Horizontal Type<br>Vertical Type                  |
|                                        | XY Type |             | XY Type<br>Panel Type<br>Free-Hanging Type                  | XY Type<br>Panel Type<br>Free-Hanging Type | XY Type<br>Horizontal Type<br>Vertical Type                  |

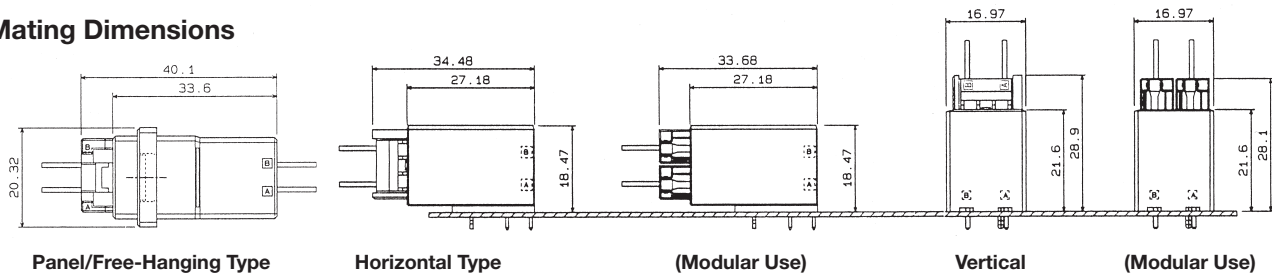
The housing with asterisk (\*) same as D-3200S Series.

## D-3000 Series (Continued)

### D-3200M — Modular Type

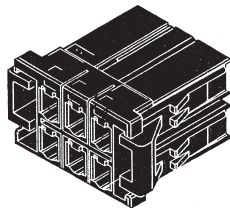
(Continued)

#### Mating Dimensions



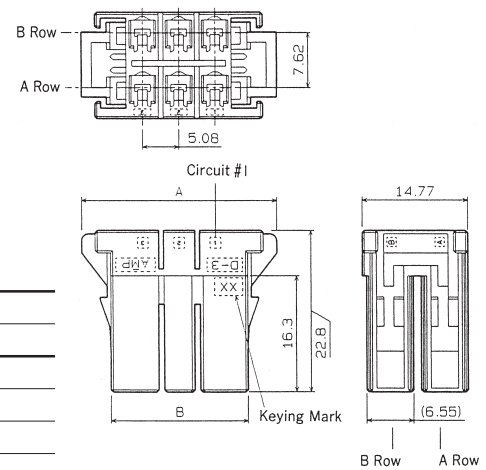
#### External Dimensions

##### Receptacle Housing



##### Mating Receptacle Housing Part Number:

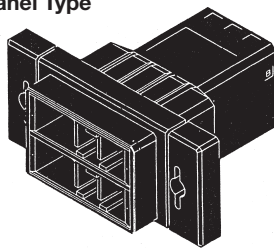
- 178139-□ □-917657-□
- 316080-□ □-917658-□
- 316081-□ □-179555-□
- 178140-□ □-179554-□



| No. of Pos. | Part Number | Dimensions |       |
|-------------|-------------|------------|-------|
|             |             | A          | B     |
| 6           | □-178129-6  | 27.3       | 19.24 |
| 10          | □-917659-5  | 37.46      | 29.4  |
| 12          | □-917659-6  | 42.54      | 34.48 |
| 20          | □-917659-8  | 62.86      | 54.8  |

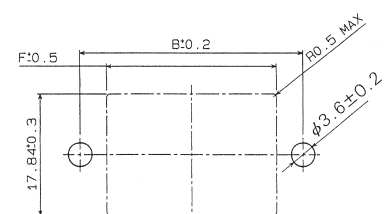
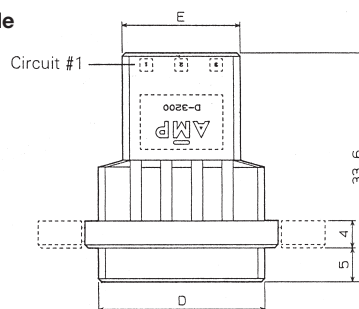
#### Tab Housing

##### Panel Type



##### Mating Receptacle Housing Part Number:

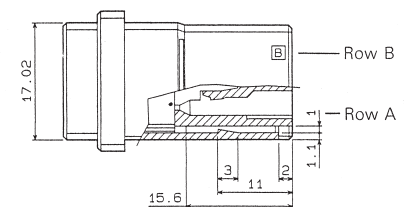
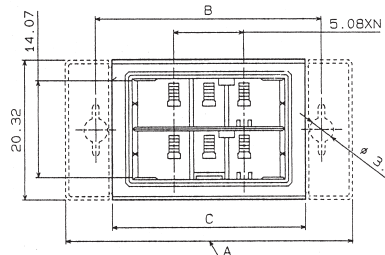
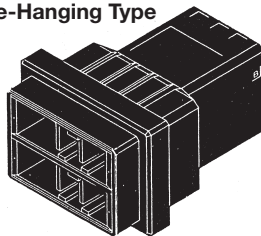
- 178129-□
- 917659-□



##### Panel Cutout

When mounting panel from the front, apply clamping torque of less than 49N [11 lbf].

##### Free-Hanging Type



| No. of Pos. | Part Number |                   | Dimensions |    |       |       |       |    |
|-------------|-------------|-------------------|------------|----|-------|-------|-------|----|
|             | Panel Type  | Free-Hanging Type | A          | B  | C     | D     | E     | F  |
| 6           | □-179555-3  | □-179554-3        | 41.91      | 33 | 28.11 | 24.16 | 17.16 | 25 |
| 12          | □-179555-6  | □-179554-6        | 57.91      | 49 | 43.35 | 39.4  | 32.4  | 41 |
| 20          | □-179555-8  | —                 | 78.23      | 70 | —     | 59.72 | 52.72 | 61 |

## D-3000 Series (Continued)

### D-3200M — Modular Type

(Continued)

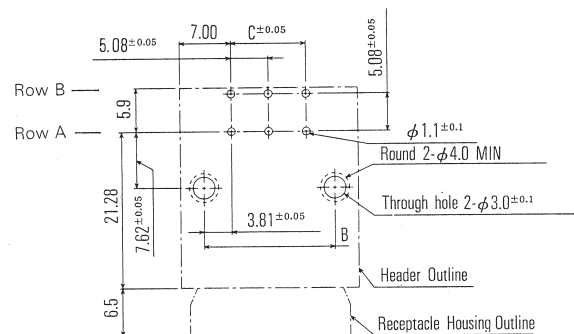
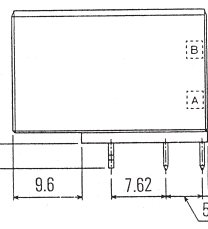
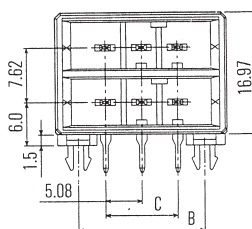
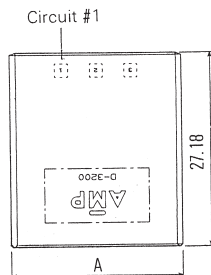
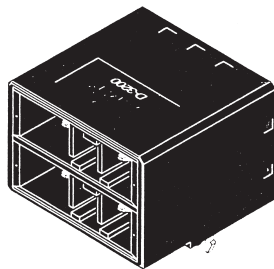
#### Board-mounting Tab Header (Horizontal Type)

##### Mating Receptacle Housing

Part Number:

□-178129-□

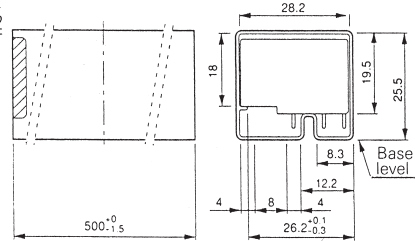
□-917659-□



##### PC Board Layout

Acceptable Board Thickness:  
1.6-2.4±0.1

##### Tube Package Dimensions (Ref.)



| No. of Pos. | Part Number | Dimensions |       |       |
|-------------|-------------|------------|-------|-------|
|             |             | A          | B     | C     |
| 6           | □-178139-□  | 24.16      | 17.78 | 10.16 |
| 10          | □-316080-□  | 34.32      | 27.94 | 20.32 |
| 12          | □-316081-□  | 39.4       | 33.02 | 25.4  |

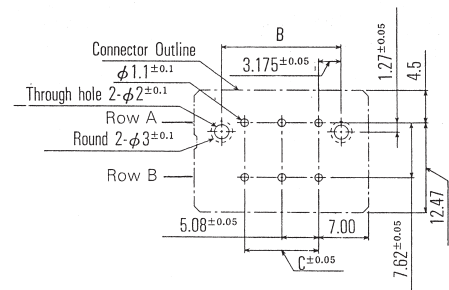
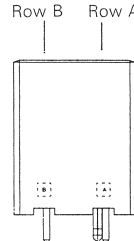
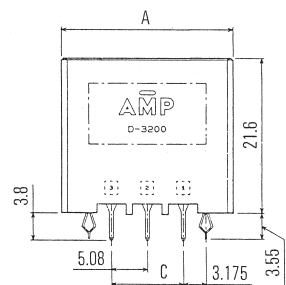
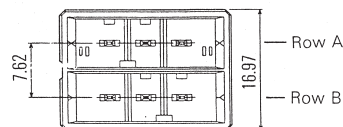
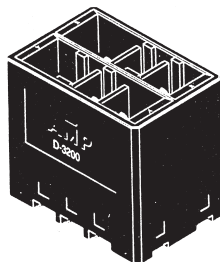
#### Board-mounting Tab Header (Vertical Type)

##### Mating Receptacle Housing

Part Number:

□-178129-□

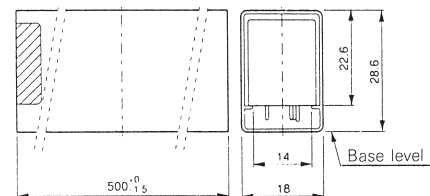
□-917659-□



##### PC Board Layout

Acceptable Board Thickness:  
1.6-2.4±0.1

##### Tube Package Dimensions (Ref.)

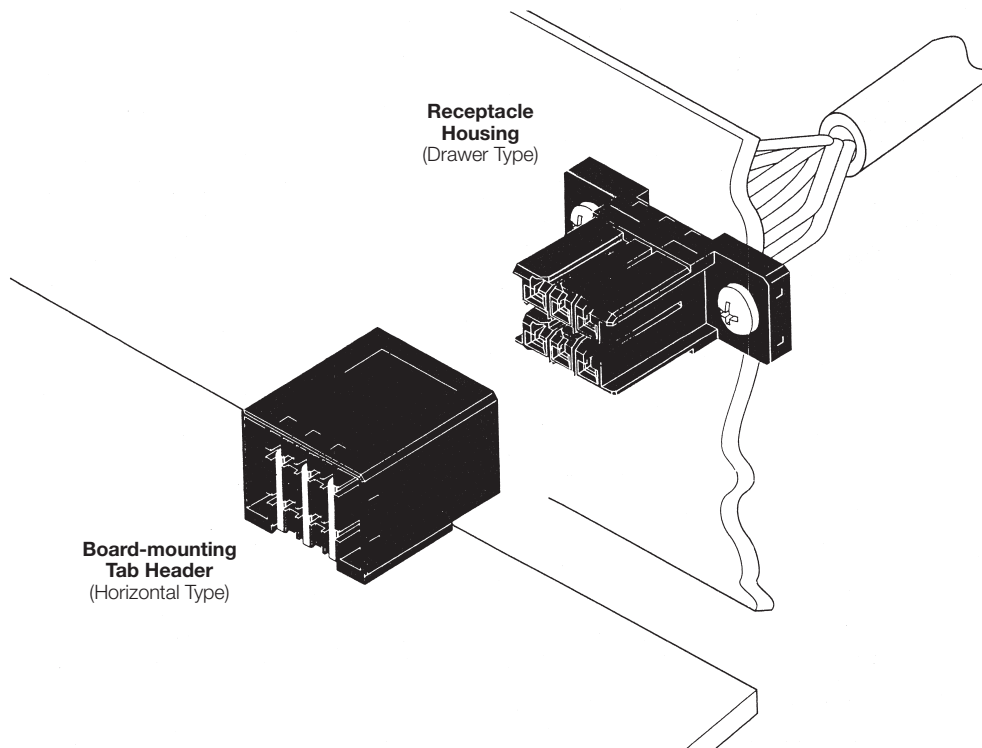


| No. of Pos. | Part Number | Dimensions |       |       |
|-------------|-------------|------------|-------|-------|
|             |             | A          | B     | C     |
| 6           | □-178140-□  | 24.16      | 16.51 | 10.16 |
| 10          | □-917657-□  | 34.32      | 26.67 | 20.32 |
| 12          | □-917658-□  | 39.4       | 31.75 | 25.4  |

## D-3000 Series (Continued)

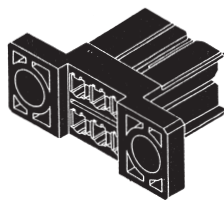
### D-3200M — Drawer Type

**Appearance** Board mounting pitch: Horizontal Type 200 x 200 mils (5.08 x 5.08 mm)  
Vertical Type 200 x 300 mils (5.08 x 7.62 mm)  
Dielectric Withstanding Voltage: 2,200 V (for one minute) Voltage Rating: 600 V (per connector)



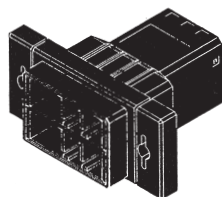
#### Receptacle Housing

(Drawer Type)

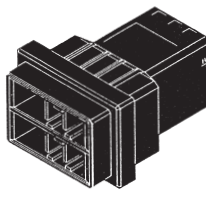


#### Tab Housing

(Panel Type)

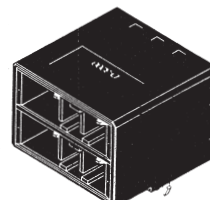


(Free-hanging Type)

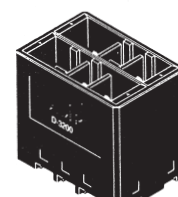


#### Board-mounting Tab Header

(Horizontal Type)



(Vertical Type)



#### Part Number Chart

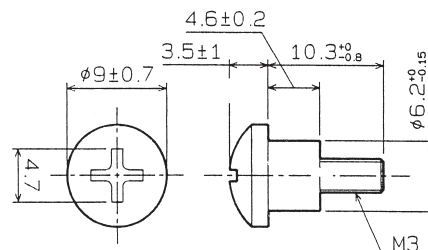
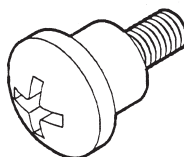
| No. of Pos. | Keying | Receptacle Housing (Drawer Type) | Tab Housing* |                   | Board-mounting Tab Header* |               |
|-------------|--------|----------------------------------|--------------|-------------------|----------------------------|---------------|
|             |        |                                  | Panel Type   | Free-Hanging Type | Horizontal Type            | Vertical Type |
| 6           | XX     | 1-917266-3                       | 1-179555-3   | 1-179554-3        | 1-178139-□                 | 1-178140-□    |
|             | YY     | —                                | 2-179555-3   | 2-179554-3        | 2-178139-□                 | 2-178140-□    |
|             | XY     | —                                | 3-179555-3   | 3-179554-3        | 3-178139-□                 | 3-178140-□    |

Note: Enter the following plating codes in -□ after Part Numbers:  
-2 = 0.38µm thick gold plating, -3 = 0.76µm thick gold plating,  
-5 = Tin plating

#### Panel Mounting Screw

Part Number

900167-1

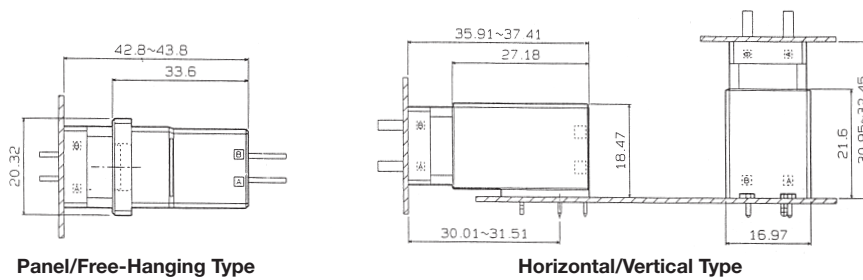


## D-3000 Series (Continued)

### D-3200M — Drawer Type

(Continued)

#### Mating Dimensions



#### External Dimensions

##### Receptacle Housing

##### Mating Tab Connector

Part Number:

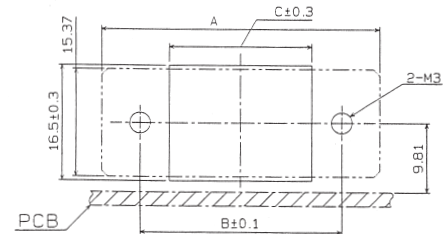
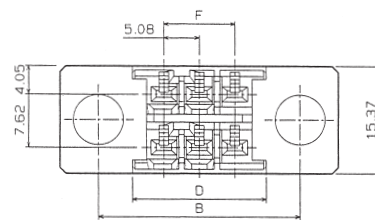
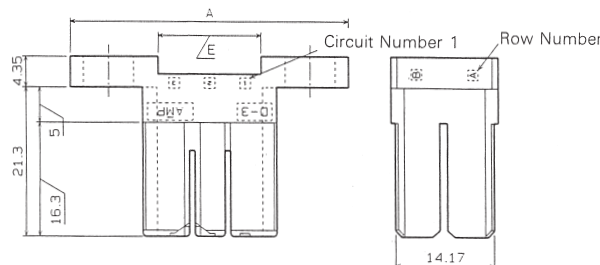
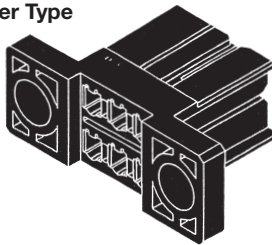
□-179555-□

□-179554-□

□-178139-□

□-178140-□

##### Drawer Type



| No. of Pos. | Part Number | Dimensions |    |      |       |       |       |
|-------------|-------------|------------|----|------|-------|-------|-------|
|             |             | A          | B  | C    | D     | E     | F     |
| 6           | □-917266-3  | 40         | 29 | 20.5 | 19.24 | 14.76 | 10.16 |

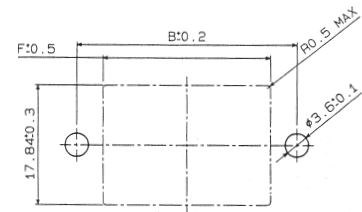
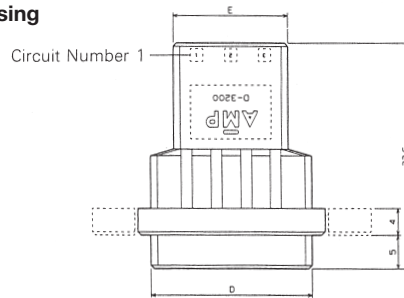
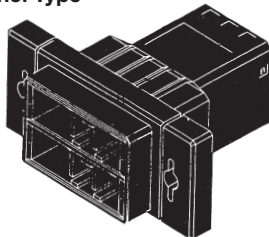
##### Tab Housing

##### Mating Receptacle Housing

Part Number:

□-917266-□

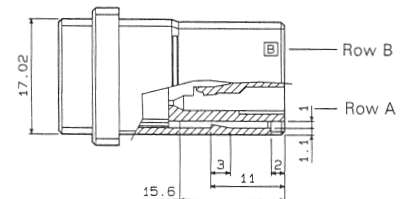
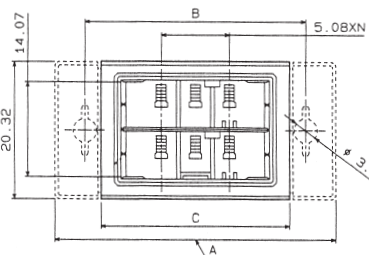
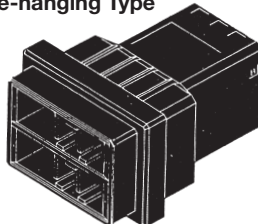
##### Panel Type



##### Panel Cutout

When mounting panel from the front, apply clamping torque of less than 49N [11 lbf].

##### Free-hanging Type



| No. of Pos. | Part Number |                   | Dimensions |    |       |       |       |    |
|-------------|-------------|-------------------|------------|----|-------|-------|-------|----|
|             | Panel Type  | Free-hanging Type | A          | B  | C     | D     | E     | F  |
| 6           | □-179555-3  | □-179554-3        | 41.91      | 33 | 28.11 | 24.16 | 17.16 | 25 |

**D-3000 Series** (Continued)

**D-3200M — Drawer Type**

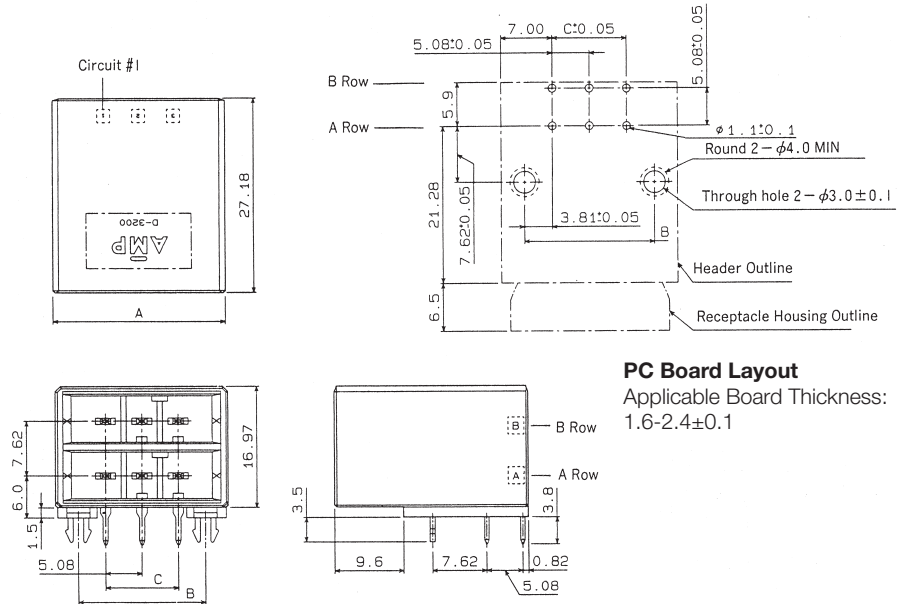
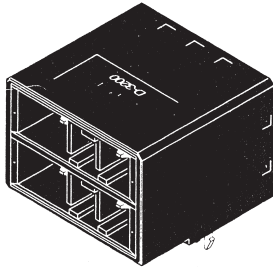
(Continued)

**Board-mounting Tab Header (Horizontal Type)**

**Mating Receptacle Housing**

**Part Number:**

□-917266-□



**PC Board Layout**

Applicable Board Thickness:  
1.6-2.4±0.1

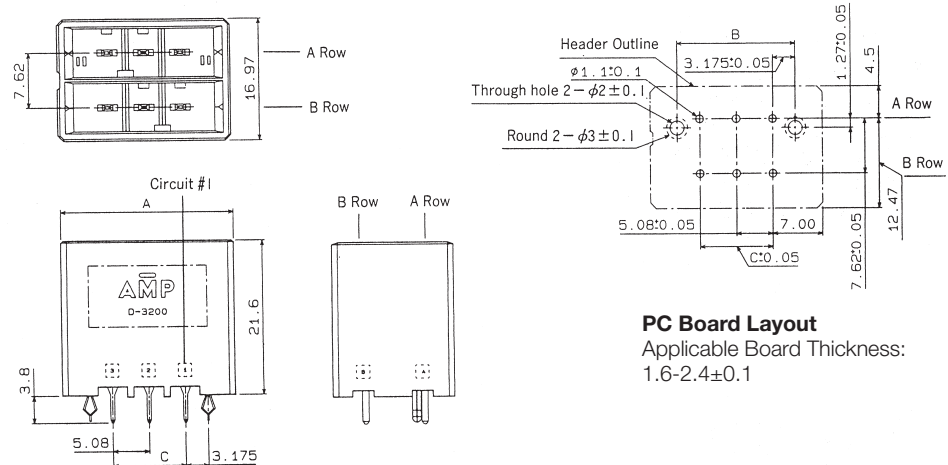
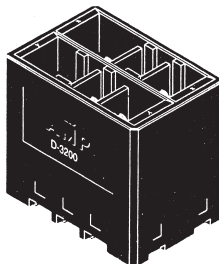
| No. of Pos. | Part Number | Dimensions |       |       |
|-------------|-------------|------------|-------|-------|
|             |             | A          | B     | C     |
| 6           | □-178139-□  | 24.16      | 17.78 | 10.16 |

**Board-mounting Tab Header (Vertical Type)**

**Mating Receptacle Housing**

**Part Number:**

□-917266-□



**PC Board Layout**

Applicable Board Thickness:  
1.6-2.4±0.1

| No. of Pos. | Part Number | Dimensions |       |       |
|-------------|-------------|------------|-------|-------|
|             |             | A          | B     | C     |
| 6           | □-178140-□  | 24.16      | 16.51 | 10.16 |

## D-3000 Series (Continued)

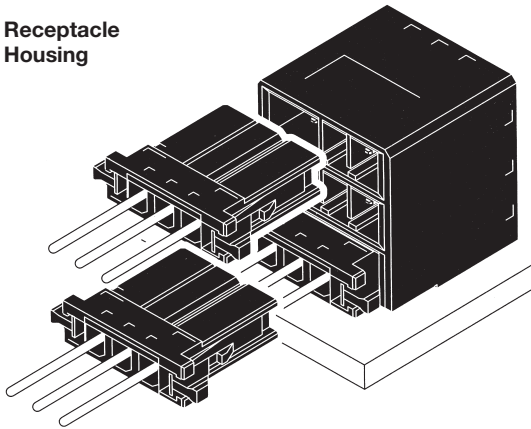
### D-3200T — 3-Row Type

#### Appearance

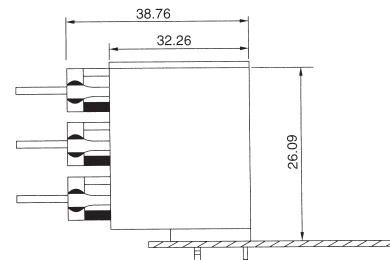
Board-mounting pitch: Horizontal Type 200 x 200mils (5.08 x 5.08mm)

Dielectric Withstanding Voltage: 2,200 V (for one minute) Voltage Rating: 600 V (per connector)

**Receptacle Housing**



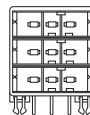
**Mating Dimensions**



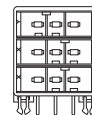
**Horizontal Type**

#### Keying

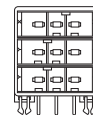
This product (D-3200T) is provided with keying to help prevent mismatching of the connector halves. Keying is available in four types-XXX Type, XXY Type, YYX Type and YXX Type. (Shown below is the mating surface of Tab Header.)



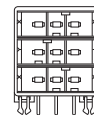
**XXX Type**



**XXY Type**



**YYX Type**



**YXX Type**

#### Part Number Chart

| No. of Pos. | Keying | Board-mounting Tab Header |
|-------------|--------|---------------------------|
|             |        | Horizontal Type           |
| 9           | XXX    | 1-1123624-□               |
|             | XXY    | 3-1123624-□               |
|             | YYX    | 4-1123624-□               |
|             | YXX    | 5-1123624-□               |

Note: Enter following plating codes in-□ after Part Numbers:

-2 : 0.38μm thick gold plating

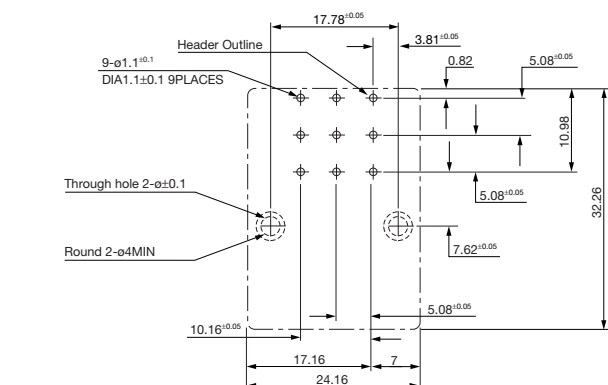
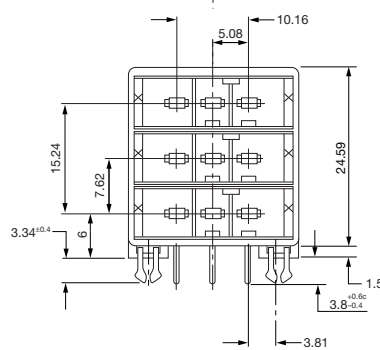
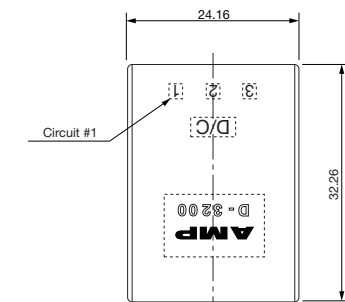
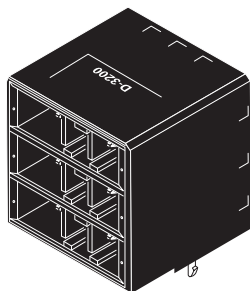
-5 : Tin plating

### Board-mount Tab Header (Horizontal Type)

#### Mating Receptacle Housing

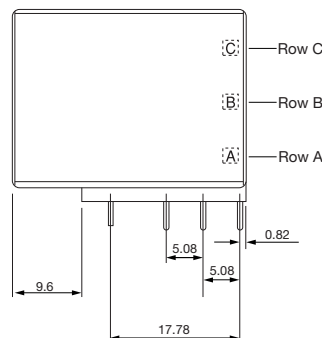
##### Part Number:

□-178128-3



#### PC Board Layout

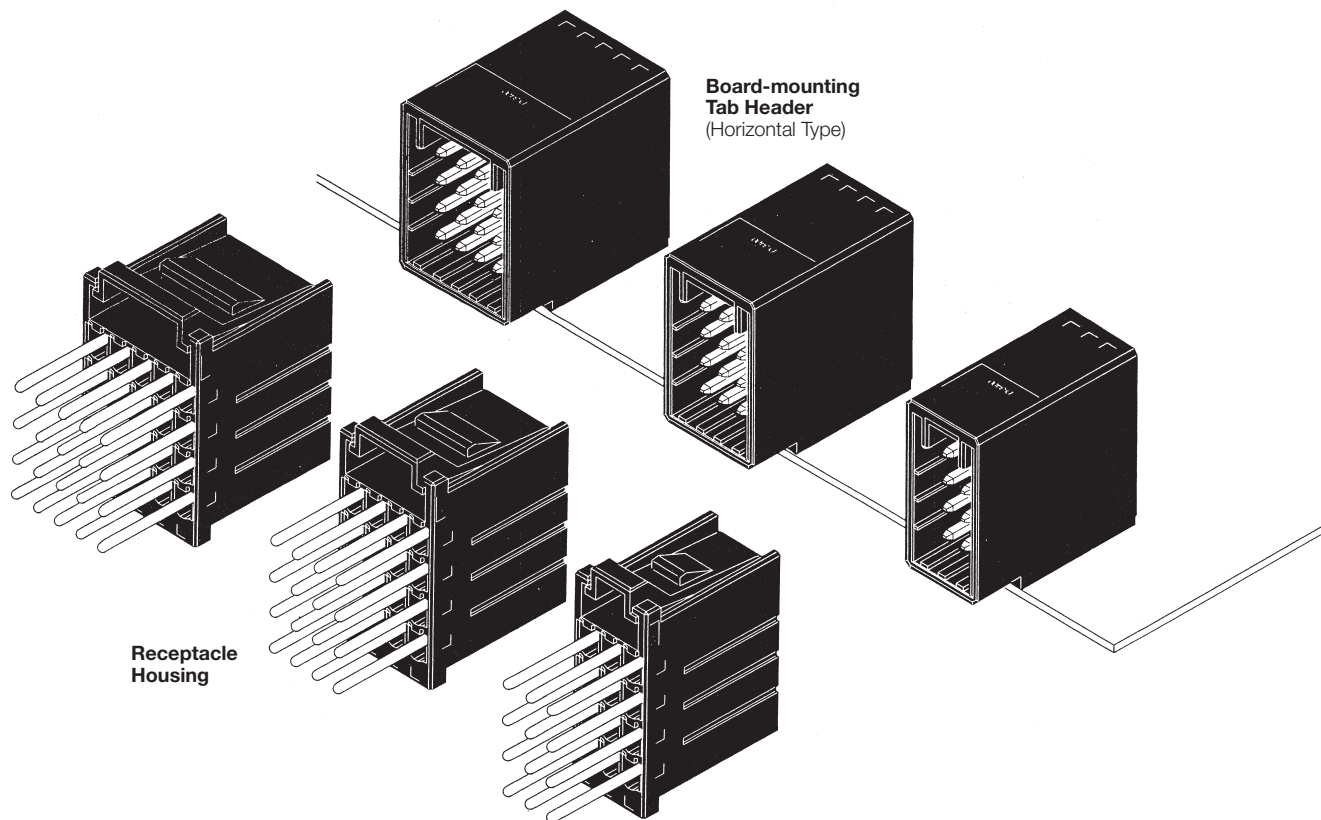
Applicable Board Thickness: 1.6±0.1



## D-3000 Series (Continued)

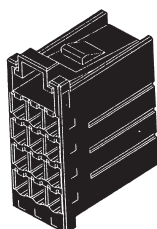
### D-3400F — Skyscraper Connectors

**Appearance** Board-mounting width reduced through increased heights. Compatible with increased I/Os.  
Board-mounting pitch: Horizontal Type 150 x 150 mils (3.81 x 3.81 mm)  
Dielectric Withstanding Voltage: 1,500 V (for one minute) Voltage Rating: 250 V



Receptacle Housing

Board-mounting Tab Header  
(Horizontal Type)



#### Part Number Chart

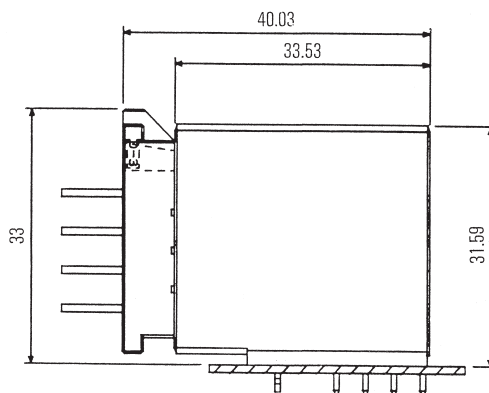
| No. of Pos. | Receptacle Housing | Board-mounting Tab Header (Horizontal Type) |
|-------------|--------------------|---------------------------------------------|
| 12          | 178214-1           | 178216-□                                    |
| 16          | —                  | —                                           |
| 20          | 917249-1           | 917251-□                                    |

Note: Enter the following plating codes in -□ after Part Numbers:  
-2 = 0.38µm thick gold plating, -3 = 0.76µm thick gold plating,  
-5 = Tin plating

## D-3000 Series (Continued)

### D-3400F — Skyscraper Connectors (Continued)

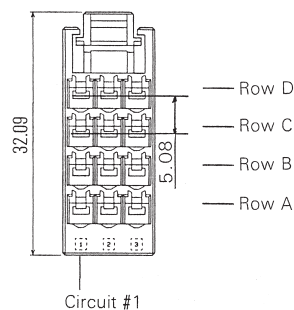
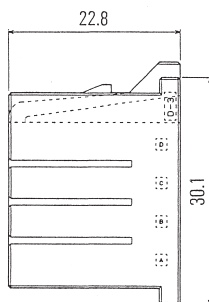
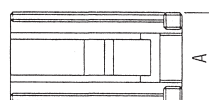
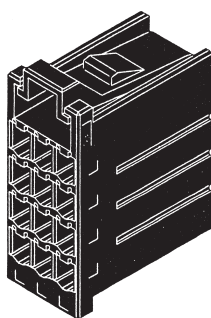
#### Mating Dimensions



Horizontal Type

D-3000 Series

#### Receptacle Housing

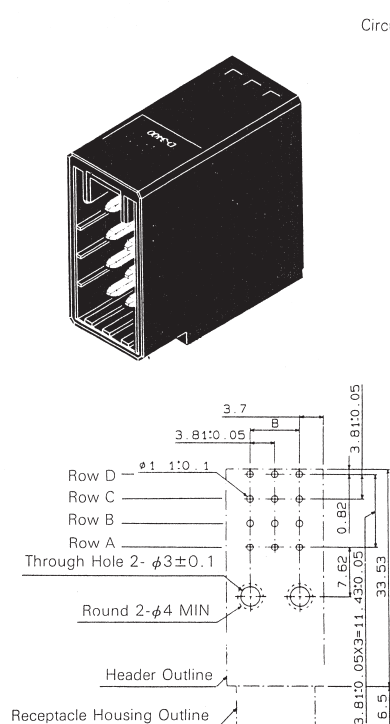


| No. of Pos. | Part Number | Dimensions | Mating Tab Header Part Number |
|-------------|-------------|------------|-------------------------------|
|             |             | A          |                               |
| 12          | 178214-1    | 12.22      | 178216-□                      |
| 16          | —           | —          | —                             |
| 20          | 917249-1    | 19.84      | 917251-□                      |

## D-3000 Series (Continued)

### D-3400F — Skyscraper Connectors (Continued)

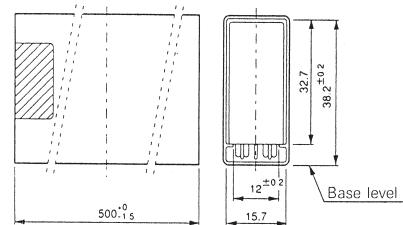
#### Board-mounting Tab Header (Horizontal Type)



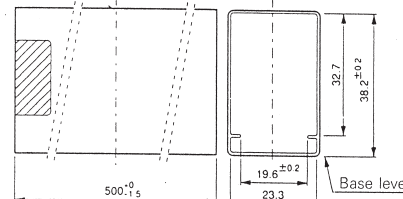
#### PC Board Layout

Acceptable Board Thickness:  
1.6-2.4±0.1

#### Tube Package Dimensions For 12 Pos.



#### For 20 Pos.



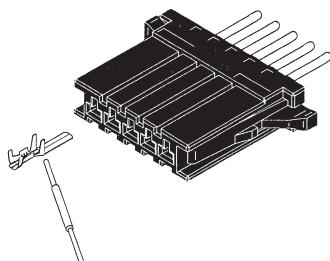
| No. of Pos. | Part Number | Dimensions |       | Mating Receptacle Housing Part Number |
|-------------|-------------|------------|-------|---------------------------------------|
|             |             | A          | B     |                                       |
| 12          | 178216-□    | 15.02      | 7.62  | 178214-1                              |
| 16          | —           | —          | —     | —                                     |
| 20          | 917251-□    | 22.64      | 15.24 | 917249-1                              |

#### Testing Advice

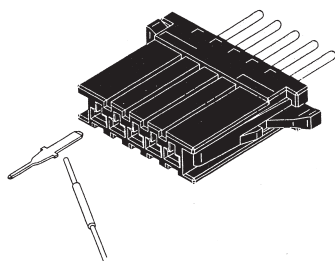
There are two major causes for faulty contact of the connector. They are:

- (1) Scooping of contacts at mating/unmating
  - With this Dynamic Series, each connector is designed to protect contacts against scooping very effectively.
- (2) Widening of contact gap by forcing tester bar, etc., into receptacle contacts when making continuity check.
  - Test bars that are commercially available (2 mm) cannot be pushed in from the entry port of housing. Never do continuity check by inserting clips, etc. Failure may also be caused by mis-insertion of the extraction tool. Be careful when you use the tool.

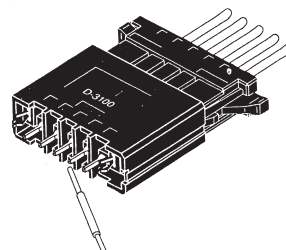
#### (Recommended methods of continuity check)



① Utilize tab contacts.



② Extract contacts from Board-mounting Vertical Type connector and insert them for testing.



③ The best method is to use Board-mounting Vertical type connector.

## D-3000 Series (Continued)

### D-3500D — Sensor Connectors

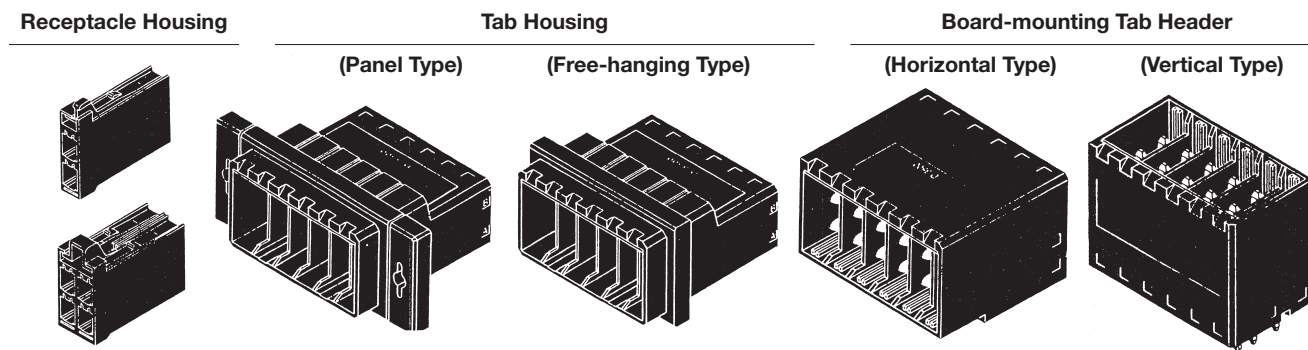
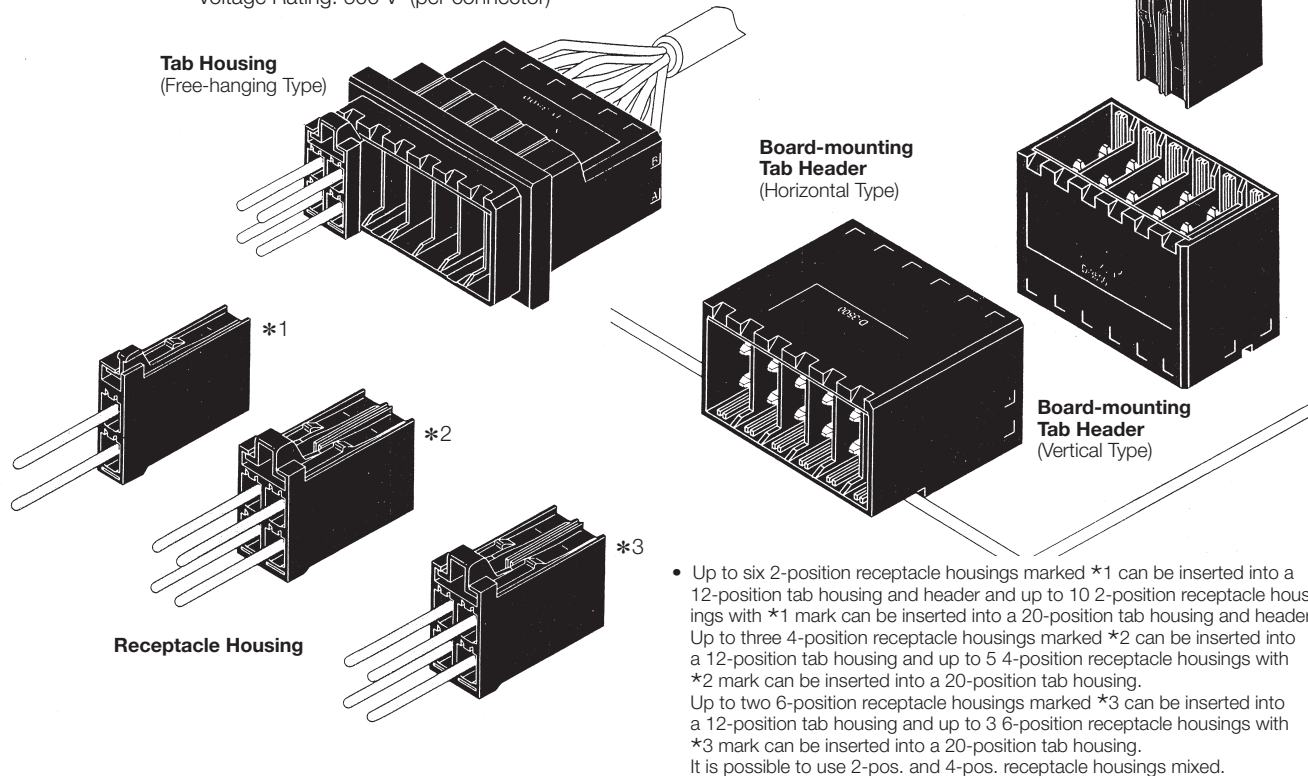
#### Appearance

Ideally suited for sensors used in robotics and machine tools. Also used for power distribution.

Board mounting pitch: 200 x 200 mils (5.08 x 5.08 mm)

Dielectric Withstanding Voltage: 2,200 V (for one minute)

Voltage Rating: 600 V (per connector)



| No. of Pos. | Receptacle Housing | Tab Housing |                   | L Fitting | Board-mounting Tab Header |               |
|-------------|--------------------|-------------|-------------------|-----------|---------------------------|---------------|
|             |                    | Panel Type  | Free-hanging Type |           | Horizontal Type           | Vertical Type |
| 2           | 175362-□           | —           | —                 | —         | —                         | —             |
| 4           | 175363-□           | —           | —                 | —         | 1376133-□                 | —             |
| 6           | 1318095-□          | —           | —                 | —         | —                         | —             |
| 12          | —                  | □-917241-6  | □-917242-6        | S         | 177555-□                  | 316516-□      |
| 20          | —                  | □-917241-8  | □-917242-8        | S         | 175365-□                  | 316517-□      |

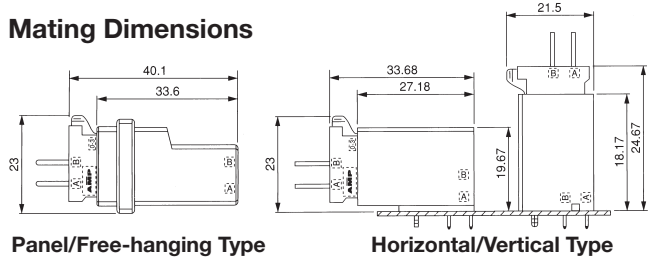
Note : In the □ after Part Numbers of PC board mount tab headers, please enter the following plating code numbers:  
 -2 = 0.38μm thick gold plating, -3 = 0.76μm thick gold plating,  
 -5 = Tin plating

The codes for the □ after receptacle housing part numbers and before tab housing part numbers, please refer to the next page.

## D-3000 Series (Continued)

### D-3500D — Sensor Connectors (Continued)

#### Mating Dimensions



Panel/Free-hanging Type

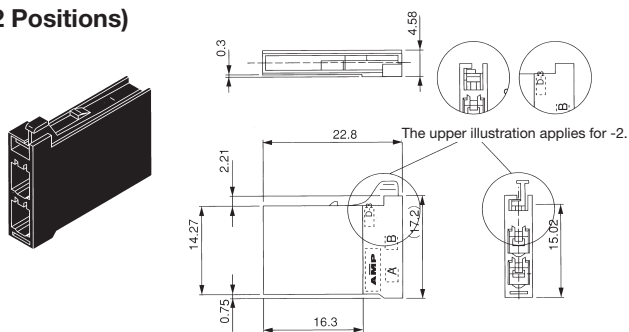
Horizontal/Vertical Type

#### Receptacle Housing

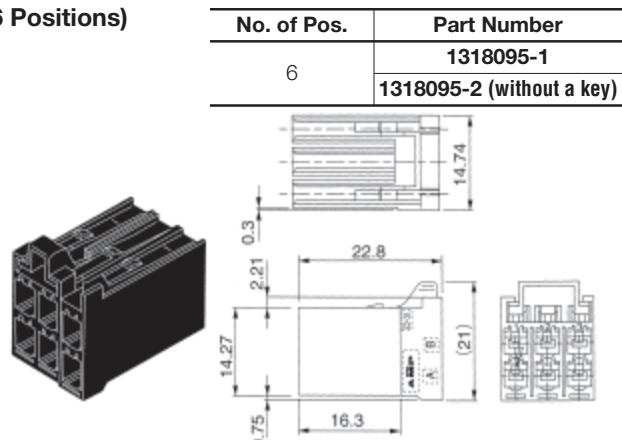
##### Mating Tab Housing Part Number:

□-917241-□ 1376133-□ 175365-□ 316517-□  
□-917242-□ 177555-□ 316516-□

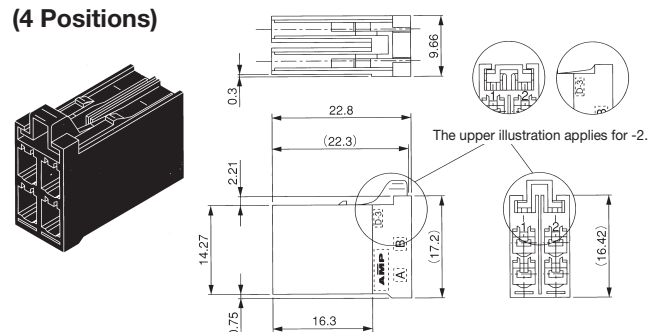
#### (2 Positions)



#### (6 Positions)



#### (4 Positions)



| No. of Pos. | Part Number |
|-------------|-------------|
| 2           | 175362-1    |
|             | 175362-2    |

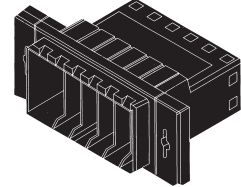
The illustrations show -1 type.  
(-2 type does not have the locking lever.)

| No. of Pos. | Part Number |
|-------------|-------------|
| 4           | 175363-1    |
|             | 175363-2    |

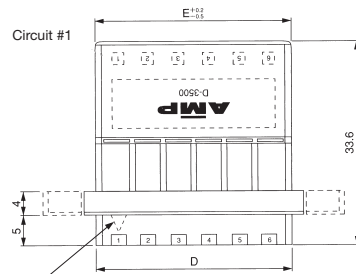
\*-2 type has no locking lever in order not to hinder the adjacent receptacle when removing the receptacle.  
When removing -2 type receptacle, please use a screwdriver.

#### Tab Housing

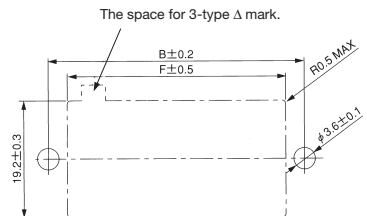
##### Panel Type



**Mating Receptacle Housing Part Number:**  
175362-□  
175363-□  
1318095-□



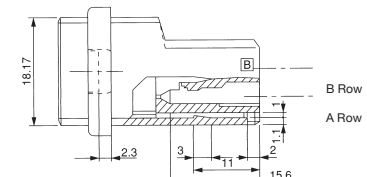
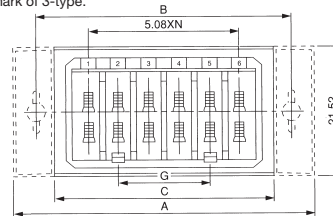
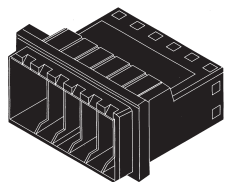
The location of ∇ mark of 3-type.



Panel Cutout

When mounting panel from the front,  
apply clamping torque of less than 49N [11 lbf].

##### Free-Hanging Type



| No. of Pos. | Part Number |                   | Dimensions |    |       |       |       |      |       |
|-------------|-------------|-------------------|------------|----|-------|-------|-------|------|-------|
|             | Panel Type  | Free-Hanging Type | A          | B  | C     | D     | E     | F    | G     |
| 12          | 917241-6    | 917242-6          | 52         | 43 | 36.43 | 32.48 | 32.48 | 33.4 | 15.24 |
|             | 3-917241-6  | 3-917242-6        |            |    |       |       |       |      |       |
| 20          | 917241-8    | 917242-8          | 72         | 63 | 56.75 | 52.8  | 52.8  | 53.8 | 35.56 |
|             | 3-917241-8  | 3-917242-8        |            |    |       |       |       |      |       |

\*3- type has ∇ mark on top of the circuit No.1 in order to enhance visibility.

### D-3000 Series (Continued)

## D-3500D — Sensor Connectors (Continued)

### Board-mounting Tab Header (Horizontal Type)

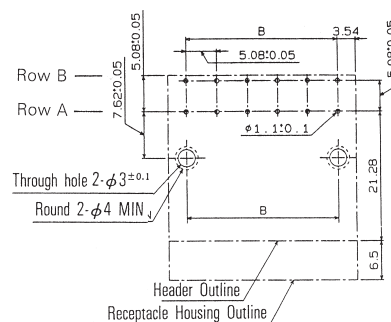
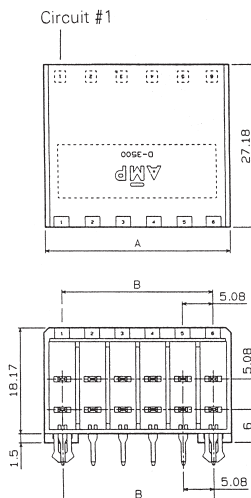
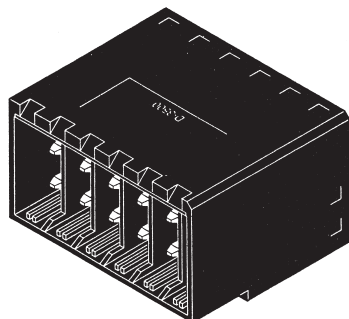
## Mating Receptacle Housing

Part Number:

175362-□

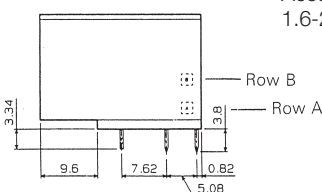
175363-

1318095-□



## PC Board Layout

Acceptable Board Thickness:  
1.6-2.4±0.1



| No. of Pos. | Part Number | Dimensions |       |
|-------------|-------------|------------|-------|
|             |             | A          | B     |
| 4           | 1376133-□   | 12.16      | 5.08  |
| 12          | 177555-□    | 32.48      | 25.4  |
| 20          | 175365-□    | 52.8       | 45.72 |

### Board-mounting Tab Header (Vertical Type)

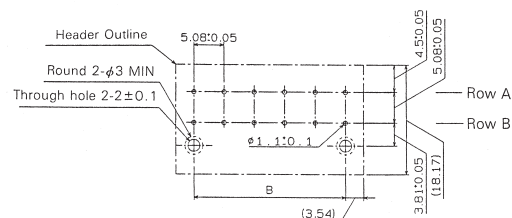
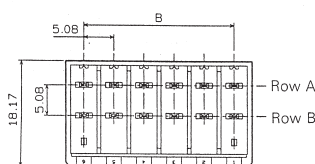
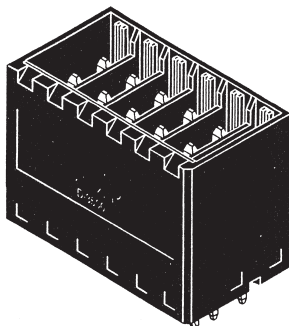
## Mating Receptacle Housing

Part Number:

175362-□

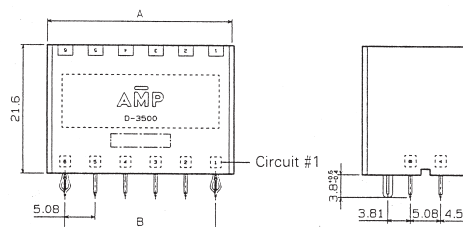
175363-□

1318095-□

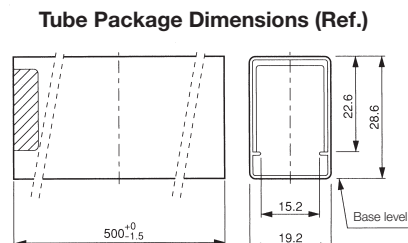


## PC Board Layout

Acceptable Board Thickness:  
1.6-2.4±0.1



| No. of Pos. | Part Number | Dimensions |       |
|-------------|-------------|------------|-------|
|             |             | A          | B     |
| 12          | 316516-□    | 32.48      | 25.4  |
| 20          | 316517-□    | 52.8       | 45.72 |

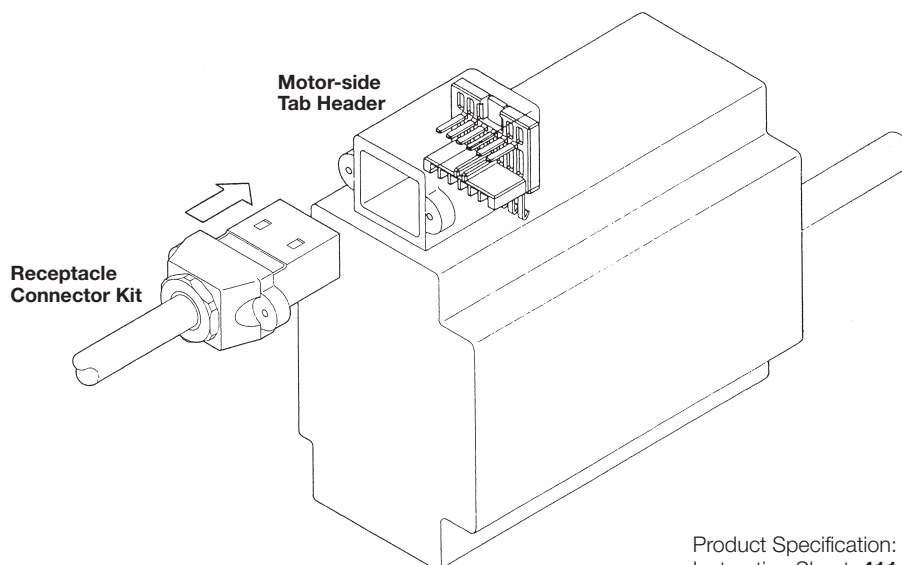


## D-3000 Series (Continued)

### D-3700 — Connectors for Exclusive Use with Servomotor

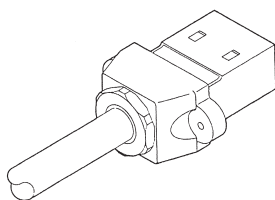
#### Appearance

Dielectric Withstanding Voltage: 1,500 V (for one minute)  
Voltage Rating: 250 V



Product Specification: **108-5324**  
Instruction Sheet: **411-5747**

#### Receptacle Connector Kit

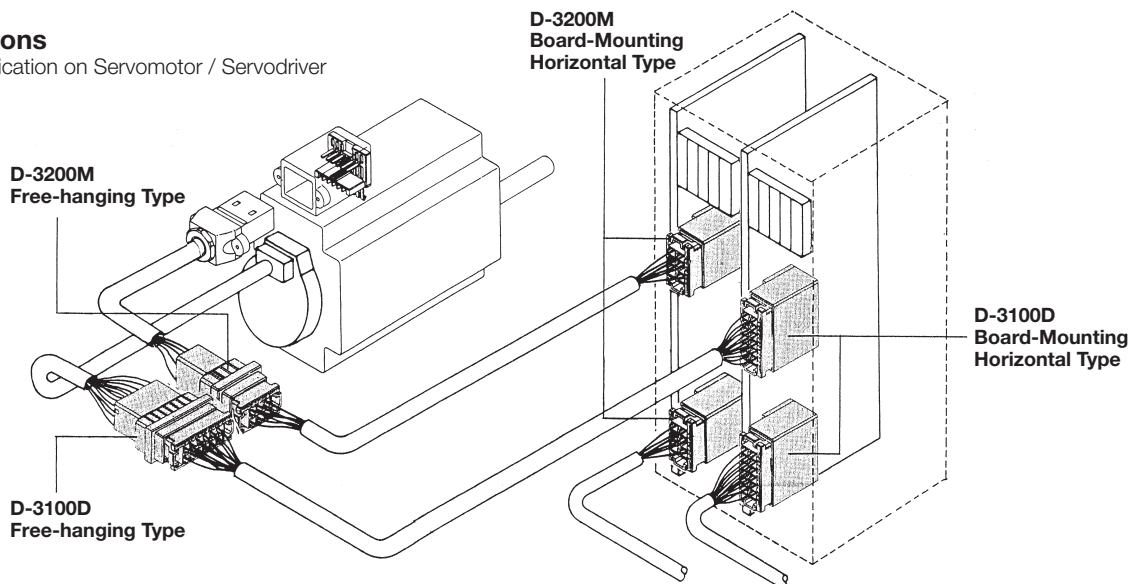


#### Part Number Chart

| No. of Pos. | W/O Contact | Contact (P/N 1-175218-2) including 6 contacts | Remarks           |
|-------------|-------------|-----------------------------------------------|-------------------|
| 6           | 176346-7    | 176346-8                                      | Products with TÜV |
|             | 1-176346-7  | 1-176346-8                                    | —                 |

### Applications

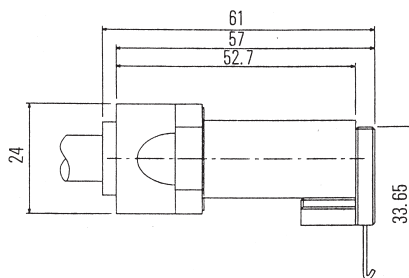
Typical Application on Servomotor / Servodriver



## D-3000 Series (Continued)

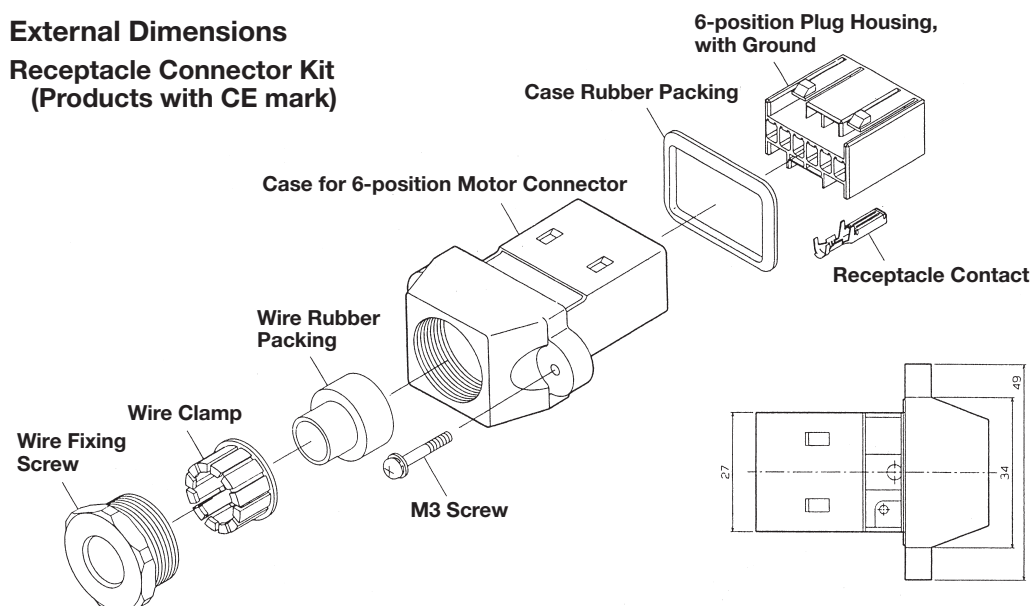
### D-3700 — Connectors for Exclusive Use with Servomotor (Continued)

#### Mating Dimensions



#### External Dimensions

##### Receptacle Connector Kit (Products with CE mark)



| No. of Pos. |
|-------------|
| 176346-□    |

##### Motor-side Tab Header (Offered for limited usage)

