

**HIGH DENSITY, MULTIPIN CONNECTOR  
50mil(1.27mm) PITCH 2 PIECE CONNECTOR**

# **8806/8807** SERIES





## FEATURES

- Highly reliable 2 point connection
- Insulator designed to insure smooth mating
- Design prevents miss-insertion
- 2 types ; with flanges (without hooks) and without flanges (with hooks)
- 5 sizes, from 120 to 200 pins
- Low insertion and withdrawal force, 13.7kg and 6.6kg 200 pin connector respectively
- RoHS compliance

## SPECIFICATIONS

- Insulator : Glass-filled Nylon 66 (UL 94V-0), Black
- Contact : Phosphor Bronze
- Plating :
  - Contact area ; Gold over Nickel
  - (1) Standard : 0.05 $\mu$ m min. Gold
  - (2) Upon request : 0.25 $\mu$ m min. Gold
- Terminal area ; 2 $\mu$ m min. Tin copper over Nickel
- Current rating : 0.5A per contact
- Contact resistance : 25m $\Omega$  max.
- Dielectric withstanding voltage : 650V AC for 1 minute
- Insulation resistance : 1,000M $\Omega$  min. at 500V DC
- Operating temperature : -55°C to +85°C

Attention : High pin count connectors require additional mechanical reinforcement.

\* The flexing of boards in vertical and stacked mating can occur. Boards must be reinforced sufficiently to prevent gaps from occurring between mated connectors, such gaps can occur near the center of a mated pair of long connectors and can effect connector reliability. Please take measures to address this and contact our local sales office for more information.

### ORDER CODE

88  -  - 170  - F

- F : RoHS Compliance
- Plating of contact area
  - Omit : Au 0.05 $\mu$ m (Standard)
  - D : Au 0.25 $\mu$ m (Upon request)
- Contact tail style
  - L : Right angle
  - S : Straight
- Contact name  
170
- Number of contacts
  - 120 : 120 pin
  - 140 : 140 pin
  - 160 : 160 pin
  - 180 : 180 pin
  - 200 : 200 pin
- Series name
  - 8806 : Receptacle, With flanges and Without hooks
  - 8807 : Receptacle, Without flanges and With hooks
  - 8816 : Plug, With flanges and Without hooks
  - 8817 : Plug, Without flanges and With hooks

### MATING VARIATIONS

#### Horizontal Mating

8816/8817-□□□-170L□-F    8806/8807-□□□-170L□-F

Mated distance  
17.91(0.705)

#### Vertical Mating

8816/8817-□□□-170L□-F    8806/8807-□□□-170S□-F

Mated distance  
17.505(0.689)

#### Stacked Mating

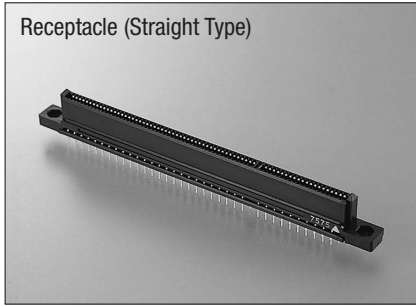
8816/8817-□□□-170S□-F    8806/8807-□□□-170S□-F

Mated distance  
17.10(0.673)

Mated distance  
17.505(0.689)

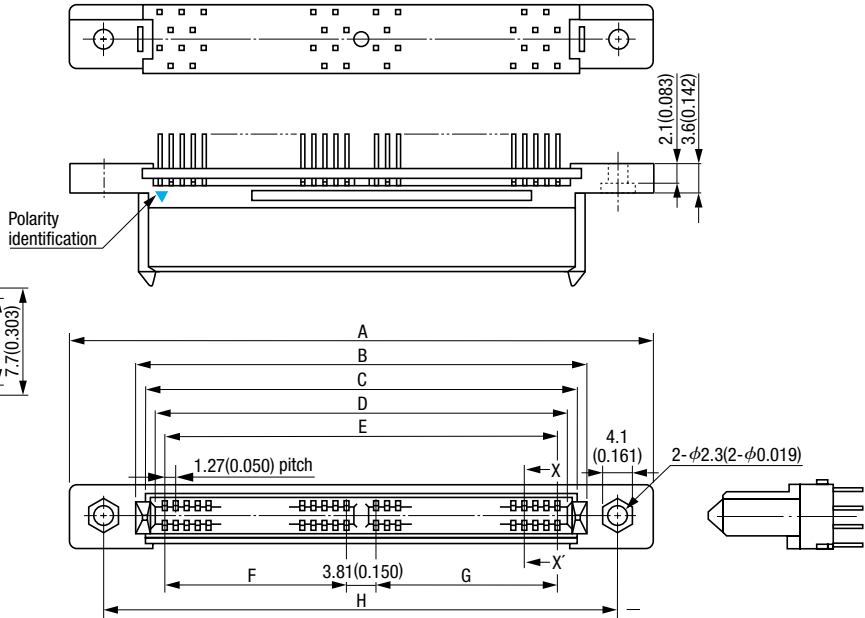
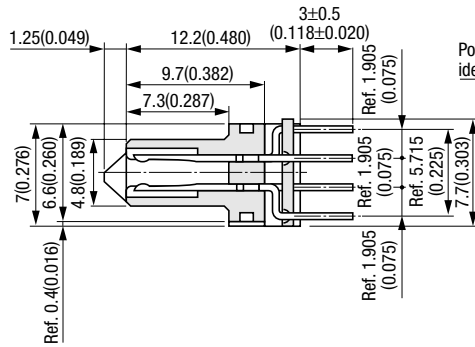
8806-□□□-170S□-F (Receptacle, With flanges, Without hooks)

Receptacle (Straight Type)

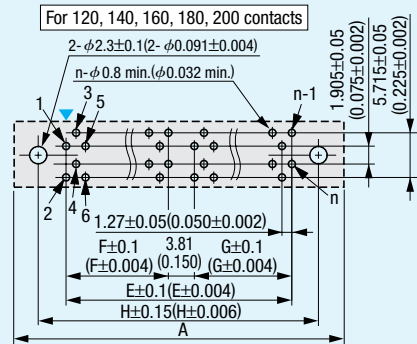


Unit:mm(inch)

X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



▼=Polarity identification  
 Recommended PCB Thickness  $t=1.6\pm0.19(0.063\pm0.007)$   
 "n" is number of contacts.

Packaging style
Pipe

Product Table / Dimensions

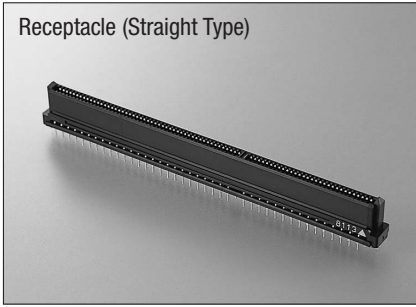
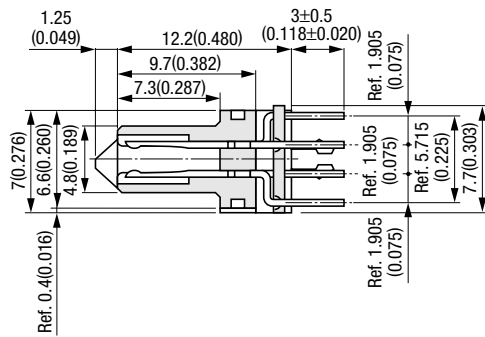
No. of contacts	Part Number	A	B	C	D	E	F	G	H	Number of packaging
120	8806-120-170S□-F	99.2 (3.906)	84.1 (3.311)	81.47 (3.207)	79.47 (3.129)	77.47 (3.050)	24.13 (0.950)	49.53 (1.950)	91.44 (3.600)	5
140	8806-140-170S□-F	111.9 (4.406)	96.8 (3.811)	94.17 (3.707)	92.17 (3.629)	90.17 (3.550)	24.13 (0.950)	62.23 (2.450)	104.14 (4.100)	4
160	8806-160-170S□-F	124.6 (4.906)	109.5 (4.311)	106.87 (4.207)	104.87 (4.129)	102.87 (4.050)	36.83 (1.450)	62.23 (2.450)	116.84 (4.600)	4
180	8806-180-170S□-F	137.3 (5.406)	122.2 (4.811)	119.57 (4.707)	117.57 (4.629)	115.57 (4.550)	49.53 (1.950)	62.23 (2.450)	129.54 (5.100)	3
200	8806-200-170S□-F	150.0 (5.906)	134.9 (5.311)	132.27 (5.207)	130.27 (5.129)	128.27 (5.050)	62.23 (2.450)	62.23 (2.450)	142.24 (5.600)	3

These connectors do not have a symmetrical board layout pattern. The 120 pin connectors have 80 pins on one side and 40 pins on the other. All other pin counts have 100 pins on one side and the balance on the other side.

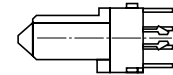
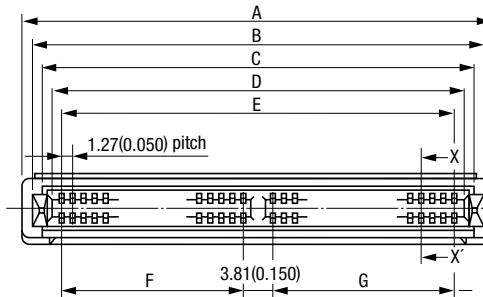
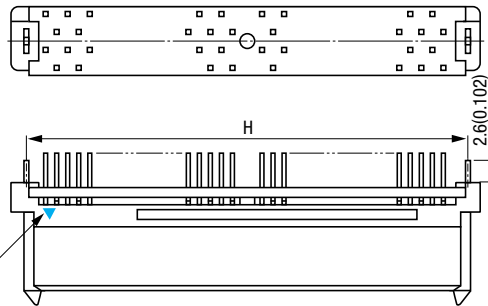
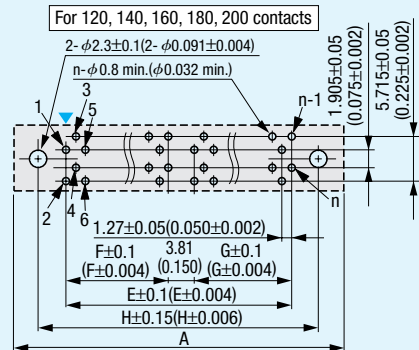
**8807-□□□-170S□-F (Receptacle, Without flanges, With hooks)**

Unit:mm(inch)

Receptacle (Straight Type)


**X-X' Cross Section**


Polarity identification


**Printed Circuit Board Layout (Component Side View)**


▼=Polarity identification

 Recommended PCB Thickness  $t=1.6\pm 0.19(0.063\pm 0.007)$ 

"n" is number of contacts.

Packaging style
Pipe

**Product Table / Dimensions**

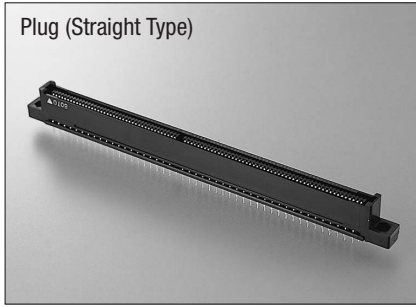
No. of contacts	Part Number	A	B	C	D	E	F	G	H	Number of packaging
120	8807-120-170S□-F	86.5 (3.406)	84.1 (3.311)	81.47 (3.207)	79.47 (3.129)	77.47 (3.050)	24.13 (0.950)	49.53 (1.950)	83.82 (3.300)	5
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160	8807-160-170S□-F	111.9 (4.406)	109.5 (4.311)	106.87 (4.207)	104.87 (4.129)	102.87 (4.050)	36.83 (1.450)	62.23 (2.450)	109.22 (4.300)	4
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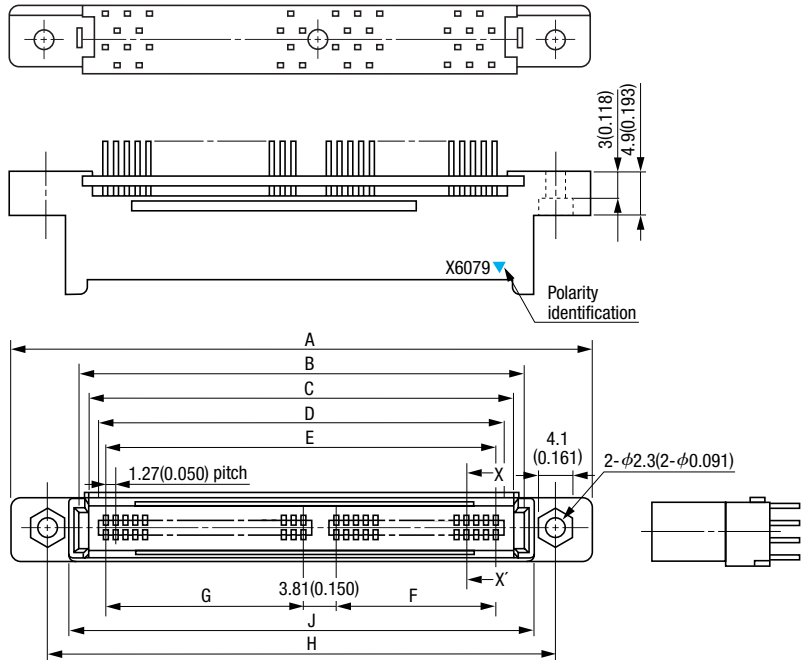
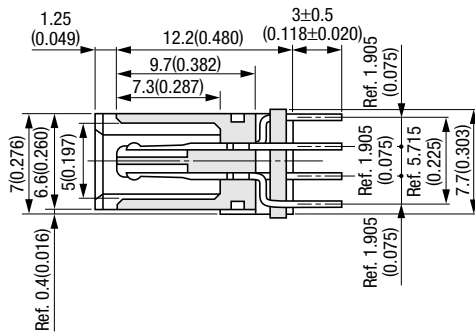
8816-□□□-170S□-F (Plug, With flanges, Without hooks)

Unit:mm(inch)

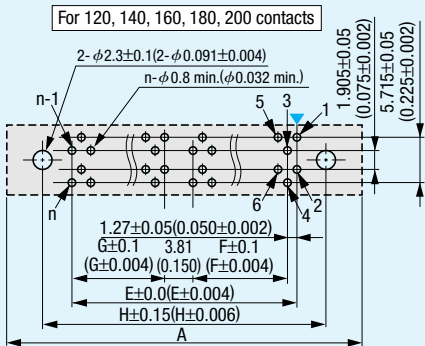
Plug (Straight Type)



X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



▼=Polarity identification  
 Recommended PCB Thickness  $t=1.6\pm0.19(0.063\pm0.007)$   
 "n" is number of contacts.

Packaging style
Pipe

Product Table / Dimensions

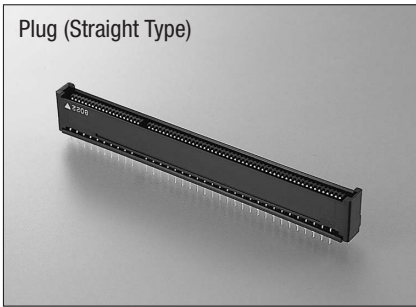
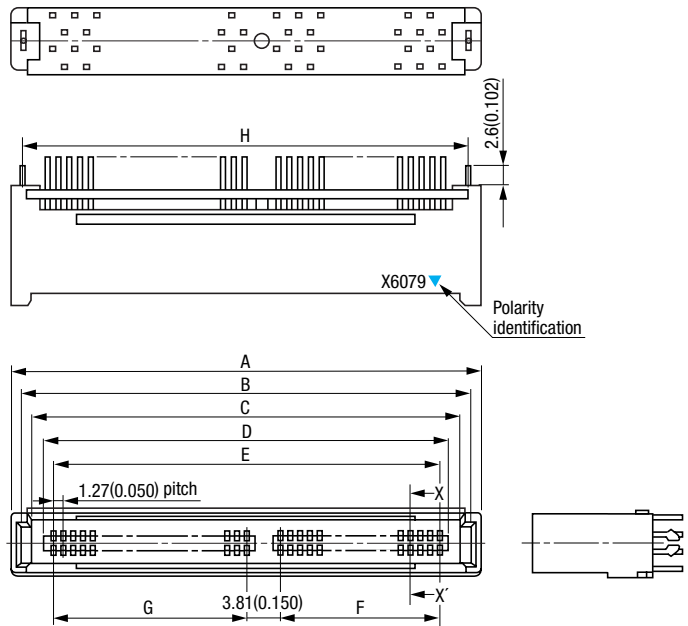
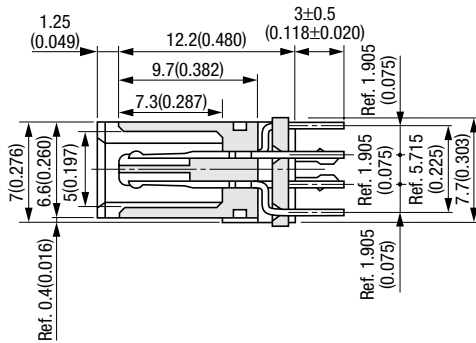
No. of contacts	Part Number	A	B	C	D	E	F	G	H	J	Number of packaging
120	8816-120-170S□-F	99.2 (3.906)	84.5 (3.327)	81.87 (3.223)	79.17 (3.117)	77.47 (3.050)	24.13 (0.950)	49.53 (1.950)	91.44 (3.600)	86.5 (3.406)	5
140	8816-140-170S□-F	111.9 (4.406)	97.2 (3.827)	94.57 (3.723)	91.87 (3.617)	90.17 (3.550)	24.13 (0.950)	62.23 (2.450)	104.14 (4.100)	99.2 (3.906)	4
160	8816-160-170S□-F	124.6 (4.906)	109.9 (4.327)	107.27 (4.223)	104.57 (4.117)	102.87 (4.050)	36.83 (1.450)	62.23 (2.450)	116.84 (4.600)	111.9 (4.406)	4
180	8816-180-170S□-F	137.3 (5.406)	122.6 (4.827)	119.97 (4.723)	117.27 (4.617)	115.57 (4.550)	49.53 (1.950)	62.23 (2.450)	129.54 (5.100)	124.6 (4.906)	3
200	8816-200-170S□-F	150.0 (5.906)	135.3 (5.327)	132.67 (5.223)	129.97 (5.117)	128.27 (5.050)	62.23 (2.450)	62.23 (2.450)	142.24 (5.600)	137.3 (5.406)	3

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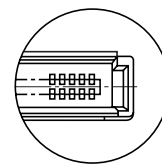
**8817-□□□-170S□-F (Plug, Without flanges, With hooks)**

Unit:mm(inch)

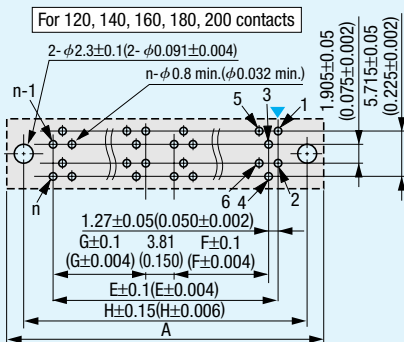
Plug (Straight Type)


**X-X' Cross Section**


For 160, 180, 200 contacts



For 120, 140 contacts

**Printed Circuit Board Layout (Component Side View)**


▼=Polarity identification  
 Recommended PCB Thickness  $t=1.6\pm 0.19(0.063\pm 0.007)$   
 "n" is number of contacts.

Packaging style
Pipe

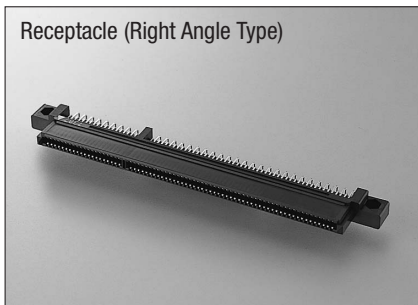
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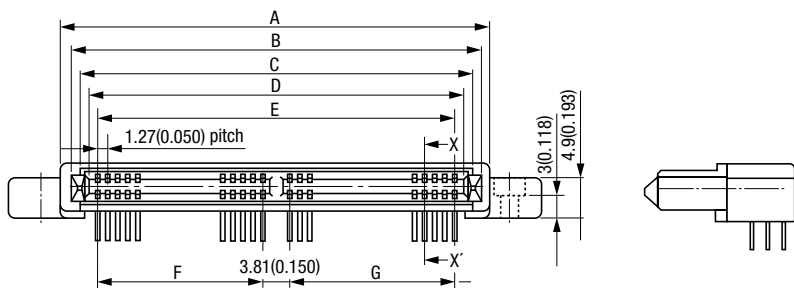
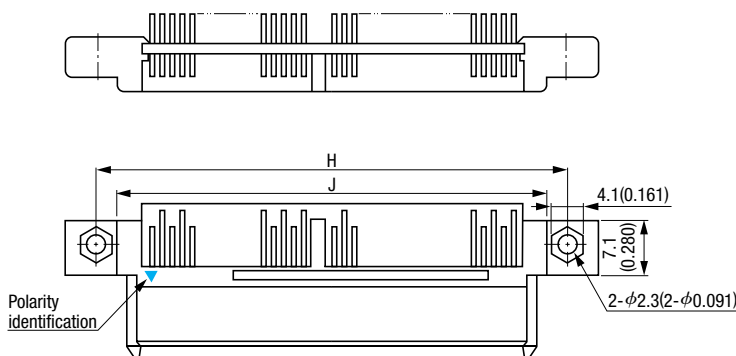
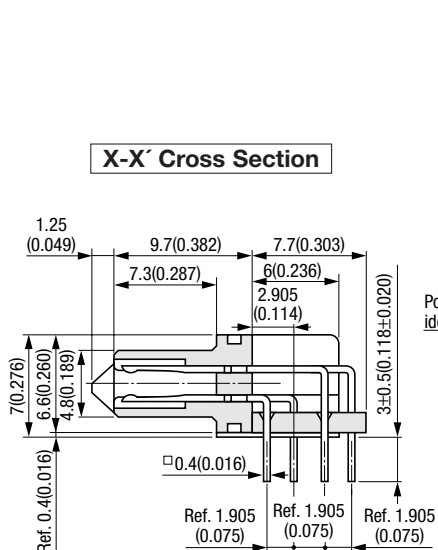
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8806-□□□-170L□-F (Receptacle, With flanges, Without hooks)

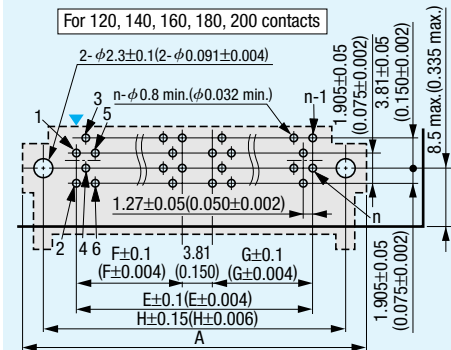
Receptacle (Right Angle Type)



Unit:mm(inch)



Printed Circuit Board Layout (Component Side View)



▼=Polarity identification  
Recommended PCB Thickness  $t=1.6\pm0.19(0.063\pm0.007)$   
"n" is number of contacts.

Packaging style
Pipe

Product Table / Dimensions

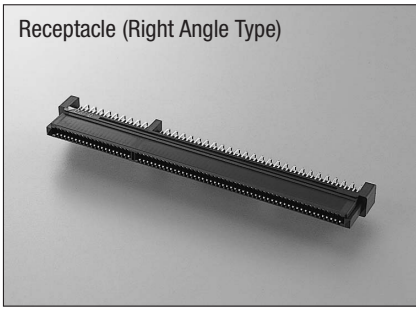
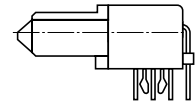
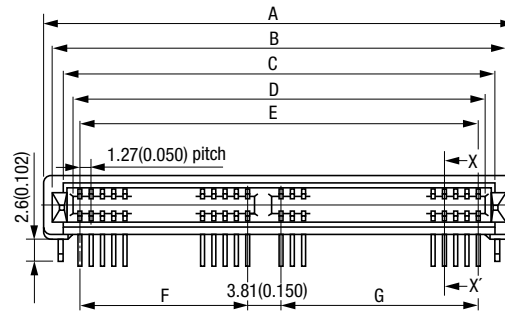
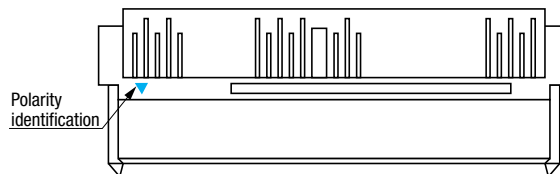
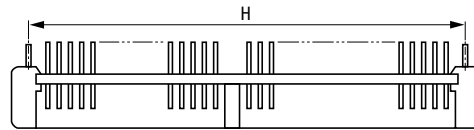
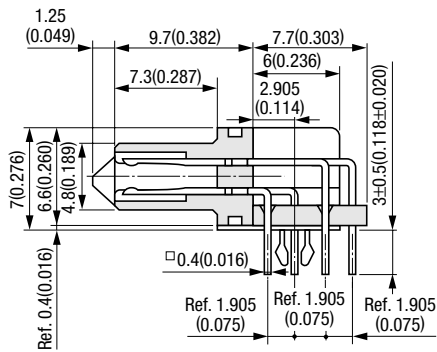
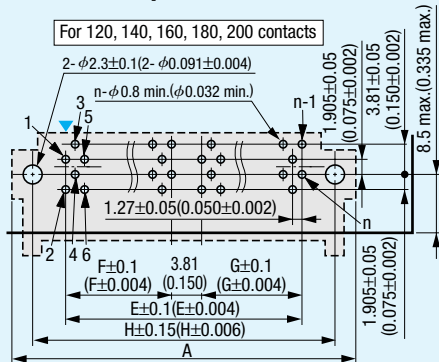
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**8807-□□□-170L□-F (Receptacle, Without flanges, With hooks)**

Unit:mm(inch)

Receptacle (Right Angle Type)


**X-X' Cross Section**

**Printed Circuit Board Layout (Component Side View)**


▼Polarity identification  
 Recommended PCB Thickness  $t=1.6\pm0.19(0.063\pm0.007)$   
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Packaging style
Pipe

**Product Table / Dimensions**

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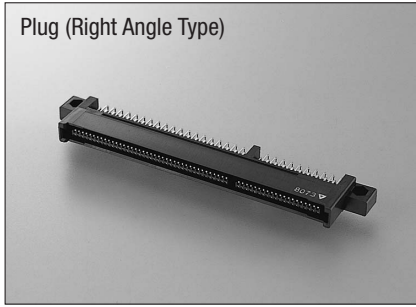
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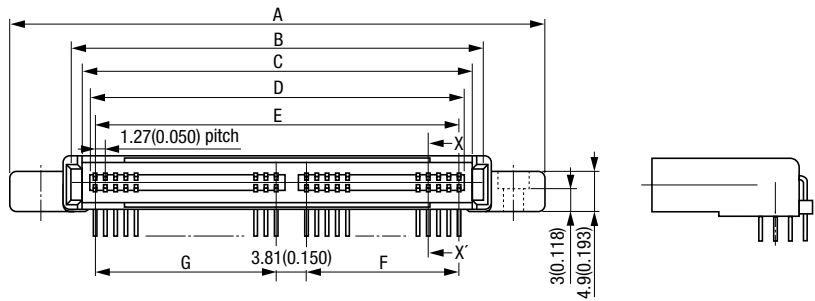
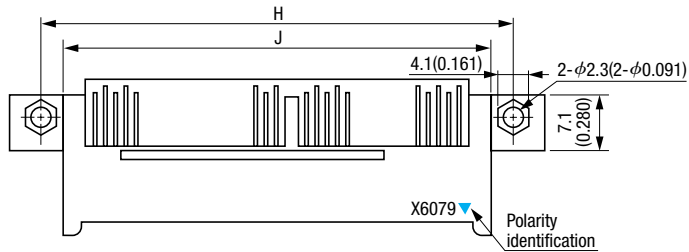
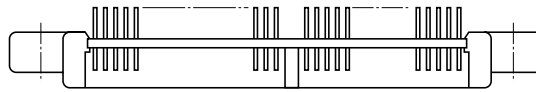
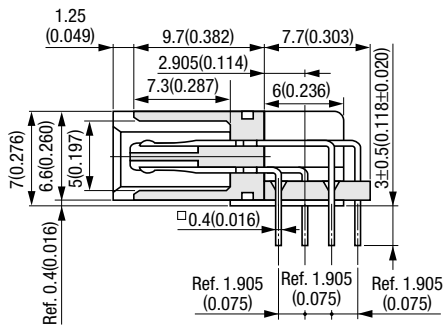
8816-□□□-170L□-F (Plug, With flanges, Without hooks)

Unit:mm(inch)

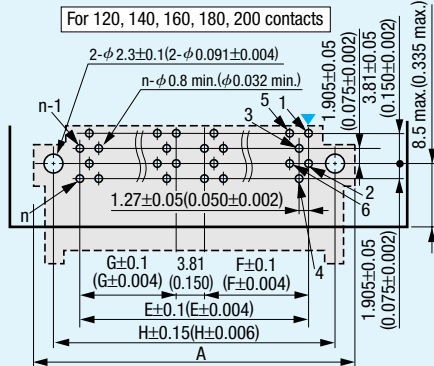
Plug (Right Angle Type)



X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



▼ = Polarity identification  
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Pipe

Product Table / Dimensions

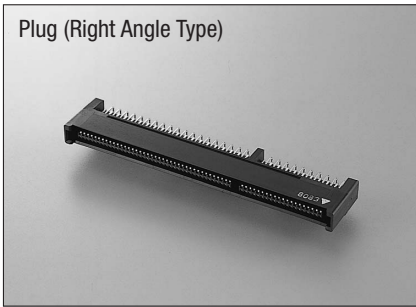
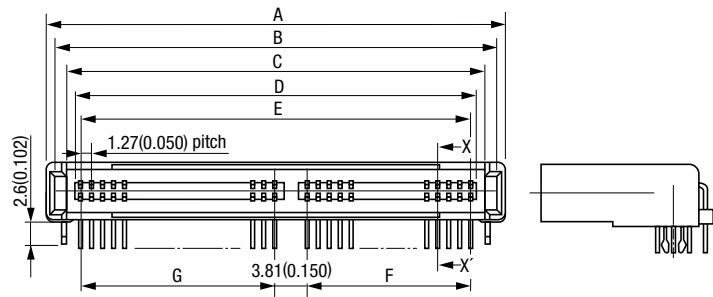
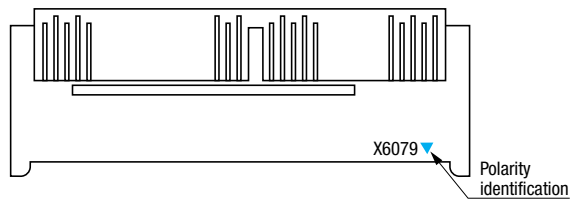
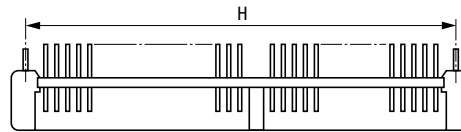
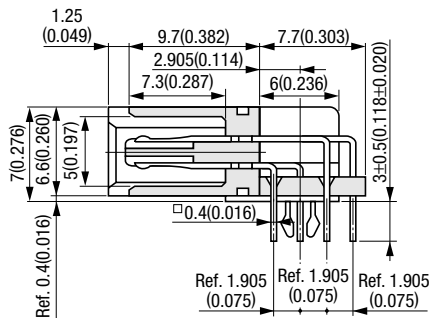
No. of contacts	Part Number	A	B	C	D	E	F	G	H	J	Number of packaging
120	8816-120-170L□-F	99.2 (3.906)	84.5 (3.327)	81.87 (3.223)	79.17 (3.117)	77.47 (3.050)	24.13 (0.950)	49.53 (1.950)	91.44 (3.600)	86.5 (3.406)	5
140	8816-140-170L□-F	111.9 (4.406)	97.2 (3.827)	94.57 (3.723)	91.87 (3.617)	90.17 (3.550)	24.13 (0.950)	62.23 (2.450)	104.14 (4.100)	99.2 (3.906)	4
160	8816-160-170L□-F	124.6 (4.906)	109.9 (4.327)	107.27 (4.223)	104.57 (4.117)	102.87 (4.050)	36.83 (1.450)	62.23 (2.450)	116.84 (4.600)	111.9 (4.406)	4
180	8816-180-170L□-F	137.3 (5.406)	122.6 (4.827)	119.97 (4.723)	117.27 (4.617)	115.57 (4.550)	49.53 (1.950)	62.23 (2.450)	129.54 (5.100)	124.6 (4.906)	3
200	8816-200-170L□-F	150.0 (5.906)	135.3 (5.327)	132.67 (5.223)	129.97 (5.117)	128.27 (5.050)	62.23 (2.450)	62.23 (2.450)	142.24 (5.600)	137.3 (5.406)	3

These connectors do not have a symmetrical board layout pattern. The 120 pin connectors have 80 pins on one side and 40 pins on the other. All other pin counts have 100 pins on one side and the balance on the other side.

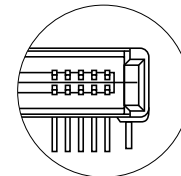
**8817-□□□-170L□-F (Plug, Without flanges, With hooks)**

Unit:mm(inch)

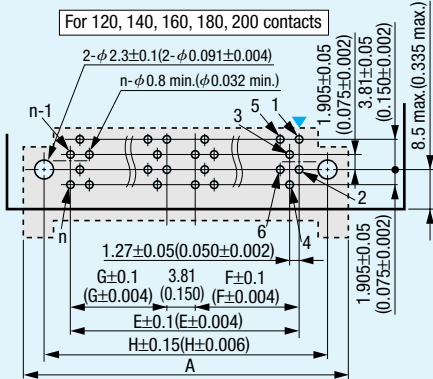
Plug (Right Angle Type)


**X-X' Cross Section**


For 160, 180, 200 contacts



For 120, 140 contacts

**Printed Circuit Board Layout (Component Side View)**


▼=Polarity identification  
 Recommended PCB Thickness  $t=1.6\pm 0.19(0.063\pm 0.007)$   
 "n" is number of contacts.

Packaging style
Pipe

**Product Table / Dimensions**

No. of contacts	Part Number	A	B	C	D	E	F	G	H	Number of packaging
120	8817-120-170L□-F	86.5 (3.406)	84.5 (3.327)	81.87 (3.223)	79.17 (3.117)	77.47 (3.050)	24.13 (0.950)	49.53 (1.950)	83.82 (3.300)	5
140	8817-140-170L□-F	99.2 (3.906)	97.2 (3.827)	94.57 (3.723)	91.87 (3.617)	90.17 (3.550)	24.13 (0.950)	62.23 (2.450)	96.52 (3.800)	5
160	8817-160-170L□-F	111.9 (4.406)	109.9 (4.327)	107.27 (4.223)	104.57 (4.117)	102.87 (4.050)	36.83 (1.450)	62.23 (2.450)	109.22 (4.300)	4
180	8817-180-170L□-F	124.6 (4.906)	122.6 (4.827)	119.97 (4.723)	117.27 (4.617)	115.57 (4.550)	49.53 (1.950)	62.23 (2.450)	121.92 (4.800)	4
200	8817-200-170L□-F	137.3 (5.406)	135.3 (5.327)	132.67 (5.223)	129.97 (5.117)	128.27 (5.050)	62.23 (2.450)	62.23 (2.450)	134.62 (5.300)	3

These connectors do not have a symmetrical board layout pattern. The 120 pin connectors have 80 pins on one side and 40 pins on the other. All other pin counts have 100 pins on one side and the balance on the other side.