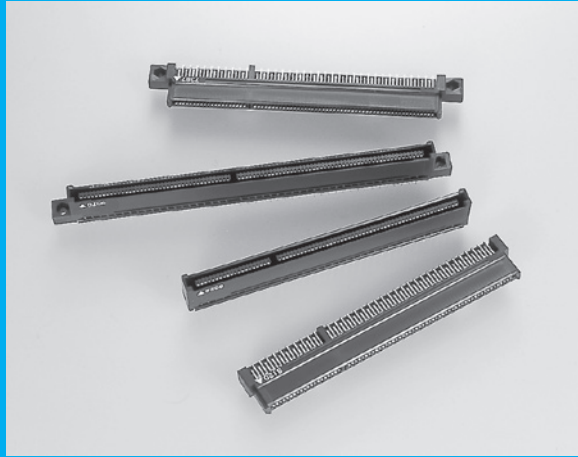


8806 / 8807 SERIES

1.27mm PITCH CONNECTOR / MULTI-PIN TYPE

RoHS
Compliant



FEATURES

- ▶ With a completely-independent two-point contact system, a stable contact pressure is maintained at all times.
- ▶ Low insertion force and withdrawal force.
- ▶ With a guide mechanism, smooth mating can be achieved.
- ▶ Wide variations in the number of contacts (120, 140, 160, 180 and 200 pins) are available.
- ▶ For 200 pin connector, both insertion and withdrawal force are low at 134.4N and 64.7N respectively.

ORDER CODE

880 - - **170** - **F**

① ② ③ ④ ⑤ ⑥

*Please order in multiples of the quantity per package.

- ① **[Type]** Receptacle **8806**: With flanges and without hooks **8807**: Without flanges and with hooks
- ② **[Number of contacts]** **120**: 120pin **140**: 140pin **160**: 160pin **180**: 180pin **200**: 200pin
- ③ **[Contact name]** **170**
- ④ **[Contact tail style]** **S**: Straight **L**: Right angle
- ⑤ **[Plating of contact area]** **Omit**: Au 0.05 μm (Standard) **D**: Au 0.25 μm (Upon request)
- ⑥ **[RoHS]** **F**: RoHS Compliant

If you would like semi-customized products, please contact your local KEL sales office.

ORDER CODE

881 - - **170** - **F**

① ② ③ ④ ⑤ ⑥

*Please order in multiples of the quantity per package.

- ① **[Type]** Plug **8816**: With flanges and without hooks **8817**: Without flanges and with hooks
- ② **[Number of contacts]** **120**: 120pin **140**: 140pin **160**: 160pin **180**: 180pin **200**: 200pin
- ③ **[Contact name]** **170**
- ④ **[Contact tail style]** **S**: Straight **L**: Right angle
- ⑤ **[Plating of contact area]** **Omit**: Au 0.05 μm (Standard) **D**: Au 0.25 μm (Upon request)
- ⑥ **[RoHS]** **F**: RoHS Compliant

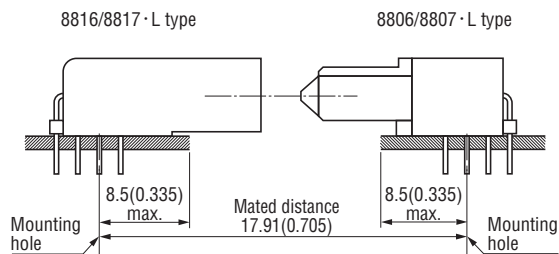
If you would like semi-customized products, please contact your local KEL sales office.

SPECIFICATIONS

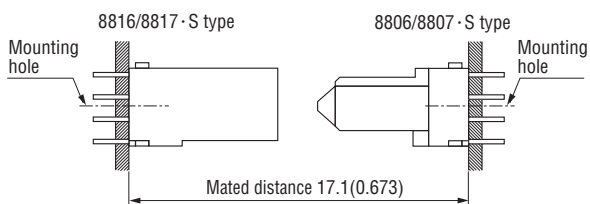
Material and plating		Electrical Characteristics	
Insulator material	Glass-filled Nylon 66 (UL94V-0), Black	Current rating	0.5A per contact
Contact material	Copper alloy	Contact resistance	25mΩ max.
Contact plating	(Contact area) Gold over Nickel (Terminal area) Tin copper over Nickel	Dielectric withstanding voltage	650V AC for 1 minute
Retention clip material	Copper alloy	Insulation resistance	1,000MΩ min. at 500V DC
Retention clip plating	Tin copper over Nickel	Operating temperature	-55°C to +85°C

*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 your local KEL sales office for more information.

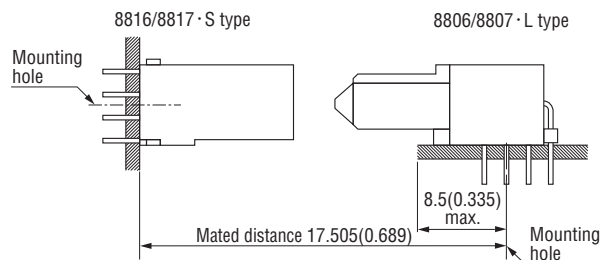
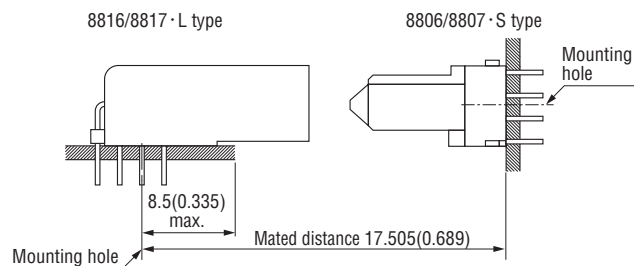
◆ Horizontal Mating

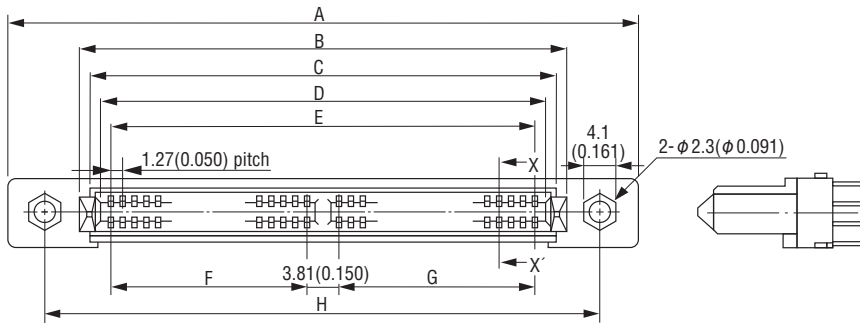
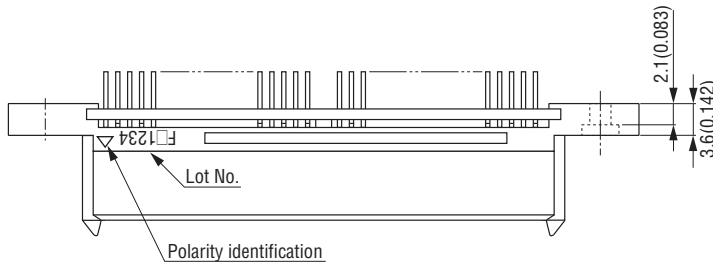
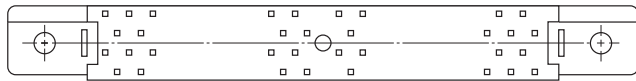
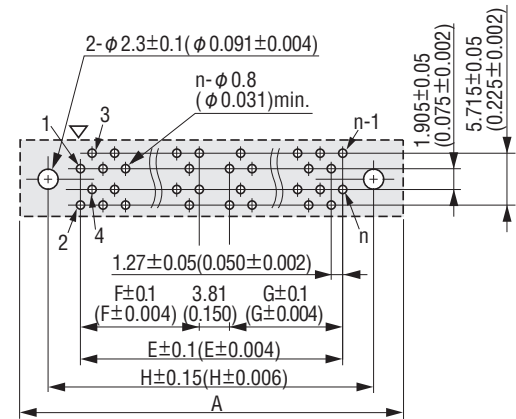


◆ Stacked Mating

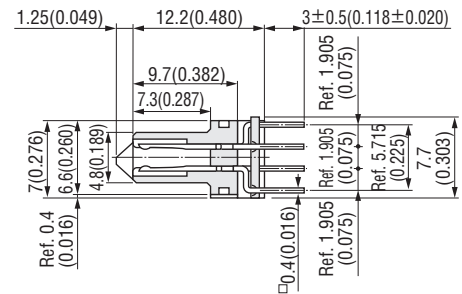


◆ Vertical Mating




Printed Circuit Board Layout (Component Side View)

 Recommended PCB Thickness $t = 1.6 \pm_{-0.1}^{+0.2}$ (0.063 $^{+0.008}_{-0.004}$)

▽=Polarity identification "n" is number of contacts.

X-X' Cross Section


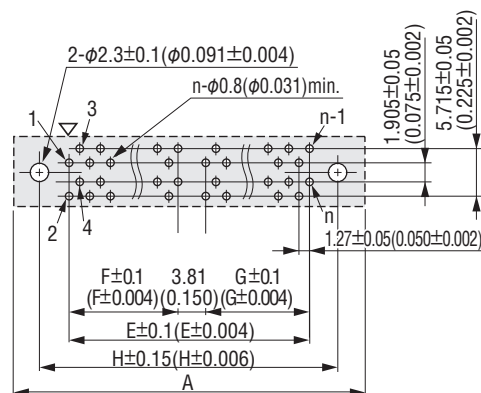
Packing style

Pipe

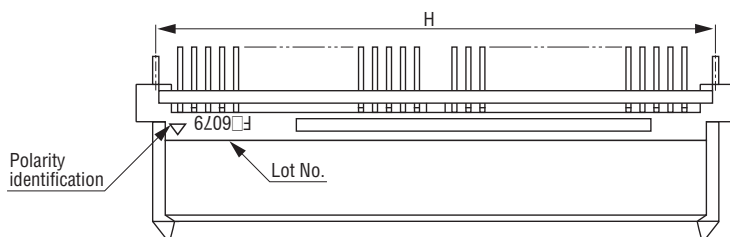
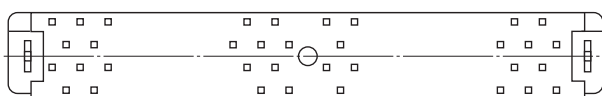
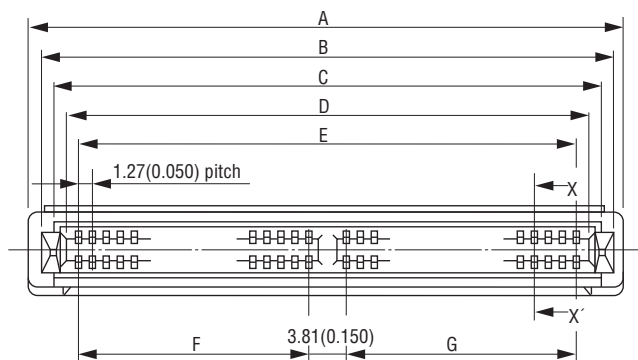
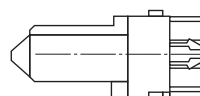
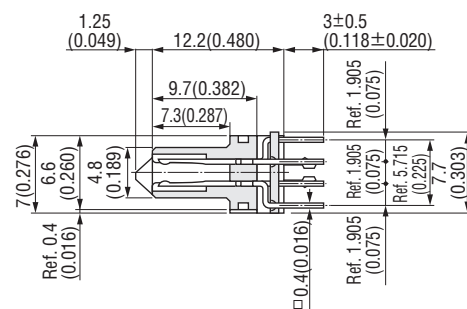
Product Table / Dimensions

No. of contact	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.

▶ Printed Circuit Board Layout (Component Side View)

 Recommended PCB Thickness $t = 1.6 \pm 0.2 (0.063 \pm 0.008)$

▽=Polarity identification "n" is number of contacts.


X-X' Cross Section


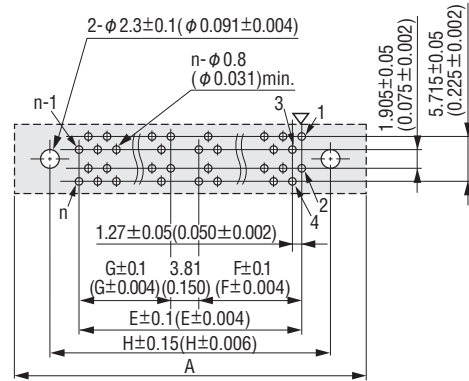
Packing style

Pipe

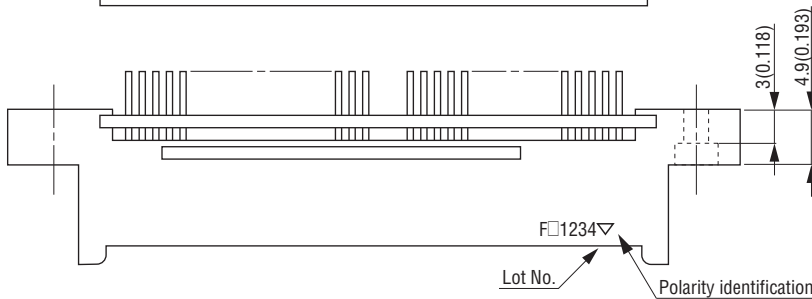
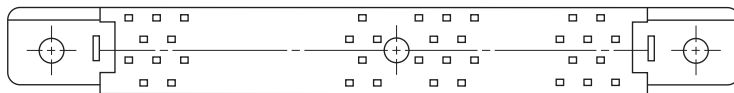
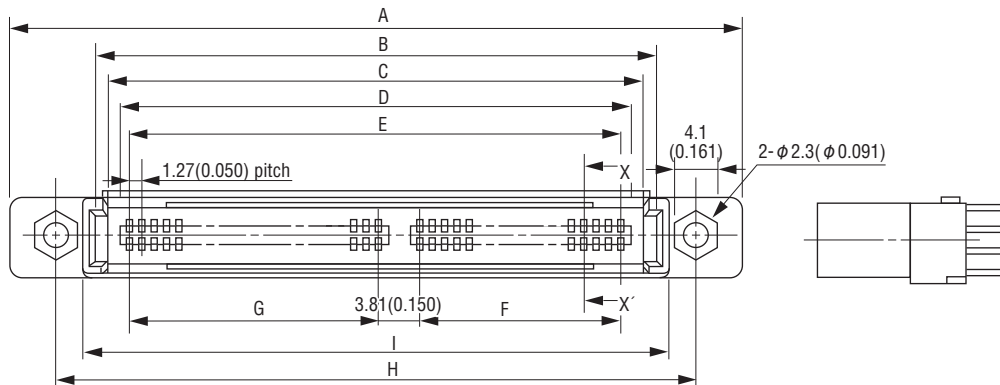
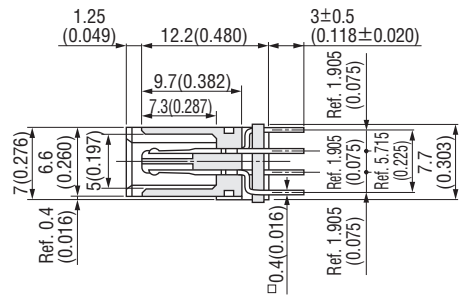
▶ Product Table / Dimensions

No. of contact	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
140	8807-140-170S□-F	99.2 (3.906)	96.8 (3.811)	94.17 (3.707)	92.17 (3.629)	90.17 (3.550)	24.13 (0.950)	62.23 (2.450)	96.52 (3.800)	5
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
180	8807-180-170S□-F	124.6 (4.906)	122.2 (4.811)	119.57 (4.707)	117.57 (4.629)	115.57 (4.550)	49.53 (1.950)	62.23 (2.450)	121.92 (4.800)	4
200	8807-200-170S□-F	137.3 (5.406)	134.9 (5.311)	132.27 (5.207)	130.27 (5.129)	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.

▶ Printed Circuit Board Layout (Component Side View)


Recommended PCB Thickness $t = 1.6^{+0.2}_{-0.1}$ (0.063 $^{+0.008}_{-0.004}$)
 ▽=Polarity identification "n" is number of contacts.


X-X' Cross Section


Packing style

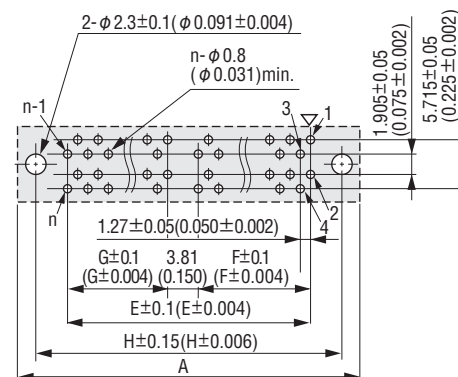
Pipe

▶ Product Table / Dimensions

No. of contact	Part Number	A	B	C	D	E	F	G	H	I	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

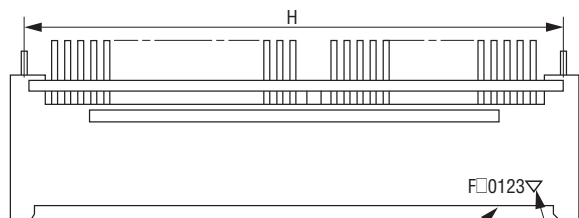
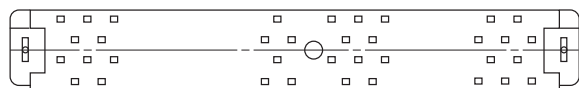
These connectors do not have a symmetrical board layout pattern. The 120 pin connectors have 80 pins on one side and 40 pins on the other. All other pin counts have 100 pins on one side and the balance on the other side.

Printed Circuit Board Layout (Component Side View)

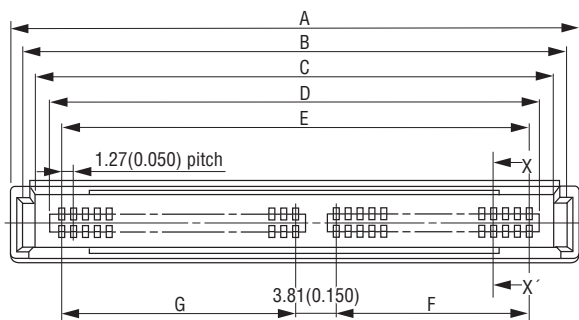


Recommended PCB Thickness $t = 1.6^{+0.2}_{-0.1}$ (0.063^{+0.008}_{-0.004})

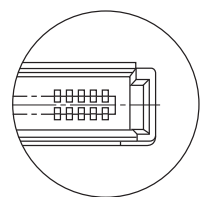
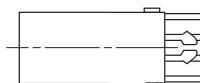
▽=Polarity identification "n" is number of contacts.



Lot No. → Polarity identification

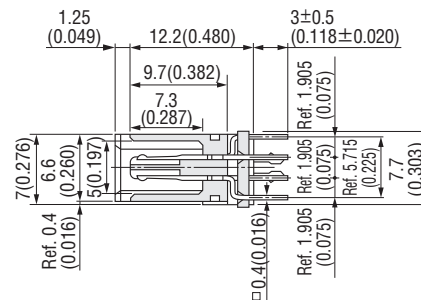


For 160, 180, 200 pins



For 120, 140 pins

X-X' Cross Section



Packing style

Pipe

Product Table / Dimensions

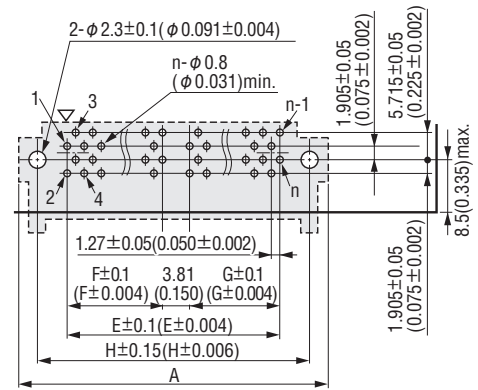
No. of contact	Part Number	A	B	C	D	E	F	G	H	Number of packaging
120	8817-120-170S□-F	86.5 (3.406)	84.5 (3.327)	81.87 (3.223)	79.17 (3.117)	77.47 (3.050)	24.13 (0.950)	49.53 (1.950)	83.82 (3.300)	5
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160	8817-160-170S□-F	111.9 (4.406)	109.9 (4.327)	107.27 (4.223)	104.57 (4.117)	102.87 (4.050)	36.83 (1.450)	62.23 (2.450)	109.22 (4.300)	4
180	8817-180-170S□-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	8817-200-170S□-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.

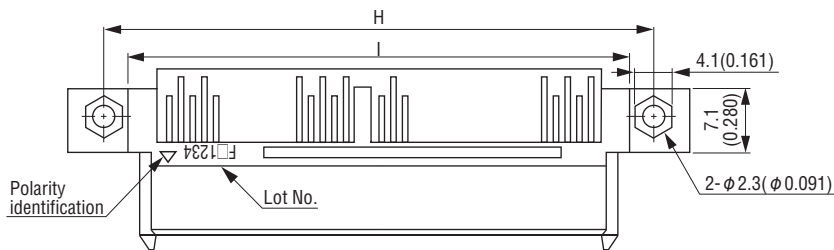
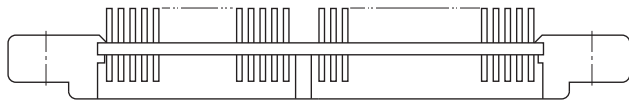
8806-□□□-170L□-F (Receptacle, With flanges, Right angle)

Unit : mm(inch)

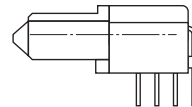
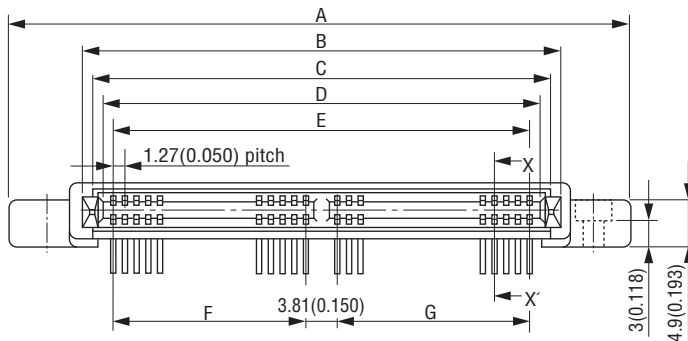
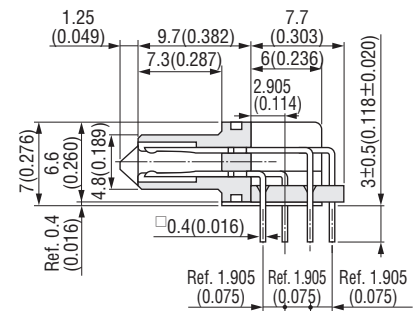
Printed Circuit Board Layout (Component Side View)



Recommended PCB Thickness $t = 1.6^{+0.2}_{-0.1}$ (0.063 $^{+0.008}_{-0.004}$)
 ▽=Polarity identification "n" is number of contacts.



X-X' Cross Section



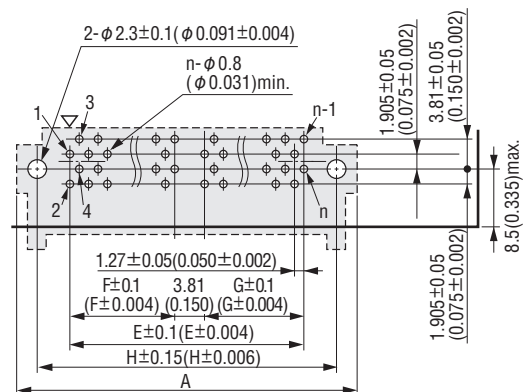
Packing style

Pipe

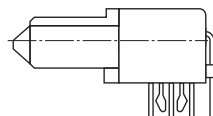
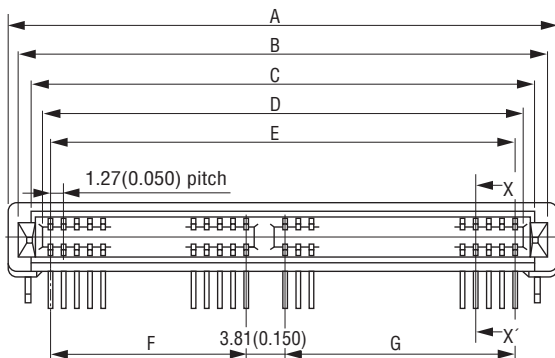
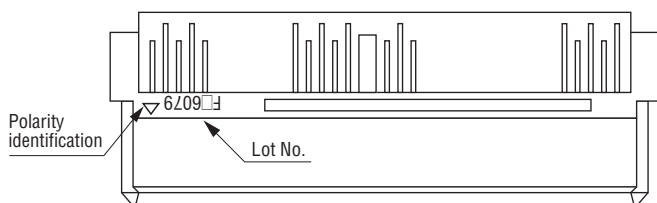
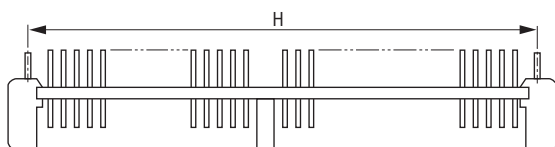
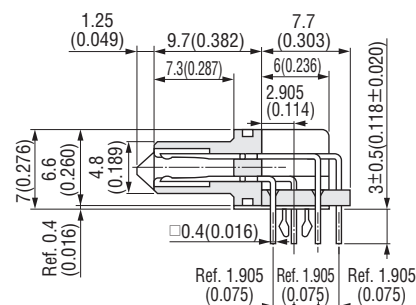
Product Table / Dimensions

No. of contact	Part Number	A	B	C	D	E	F	G	H	I	Number of packaging
120	8806-120-170L□-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)	86.5 (3.406)	5
140	8806-140-170L□-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)	99.2 (3.906)	4
160	8806-160-170L□-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)	111.9 (4.406)	4
180	8806-180-170L□-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)	124.6 (4.906)	3
200	8806-200-170L□-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)	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.

Printed Circuit Board Layout (Component Side View)

 Recommended PCB Thickness $t = 1.6 \pm 0.2 (0.063 \pm 0.008)$

▽=Polarity identification "n" is number of contacts.


X-X' Cross Section


Packing style

Pipe

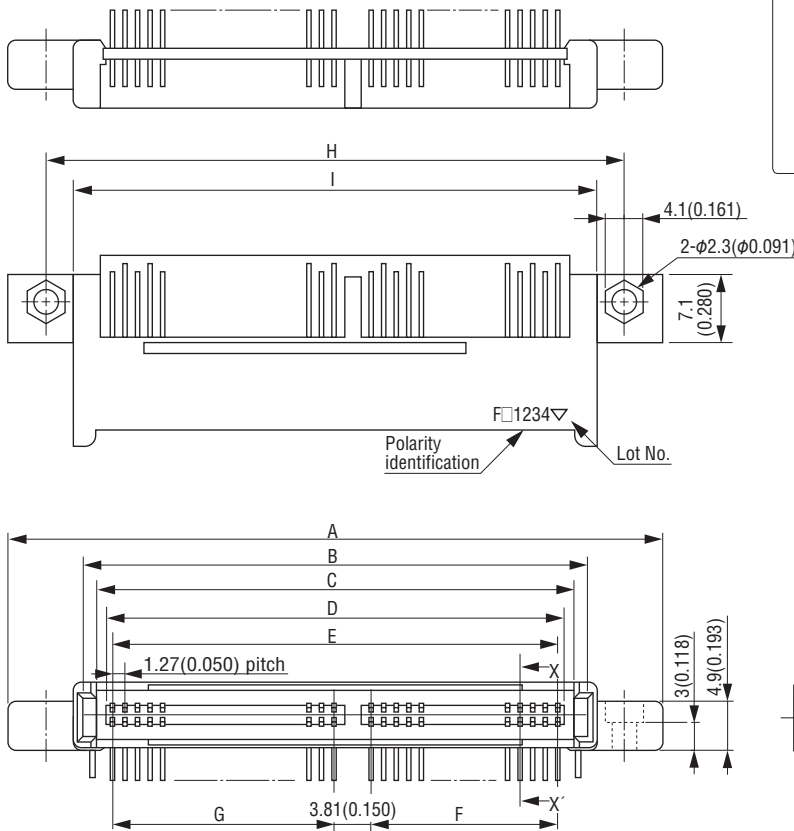
Product Table / Dimensions

No. of contact	Part Number	A	B	C	D	E	F	G	H	Number of packaging
120	8807-120-170L□-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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180	8807-180-170L□-F	124.6 (4.906)	122.2 (4.811)	119.57 (4.707)	117.57 (4.629)	115.57 (4.550)	49.53 (1.950)	62.23 (2.450)	121.92 (4.800)	3
200	8807-200-170L□-F	137.3 (5.406)	134.9 (5.311)	132.27 (5.207)	130.27 (5.129)	128.27 (5.050)	62.23 (2.450)	62.23 (2.450)	134.62 (5.300)	3

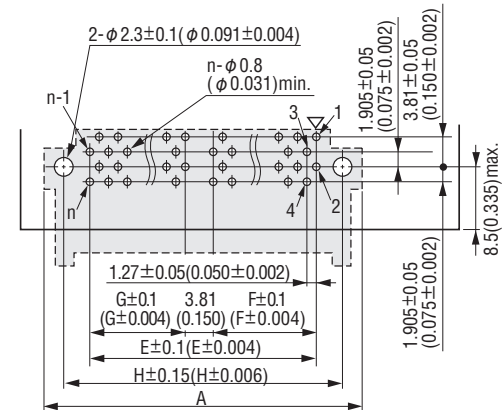
These connectors do not have a symmetrical board layout pattern. The 120 pin connectors have 80 pins on one side and 40 pins on the other. All other pin counts have 100 pins on one side and the balance on the other side.

8816-□□□-170L□-F (Plug, With flanges, Right angle)

Unit : mm(inch)

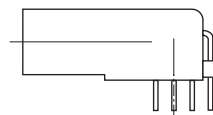
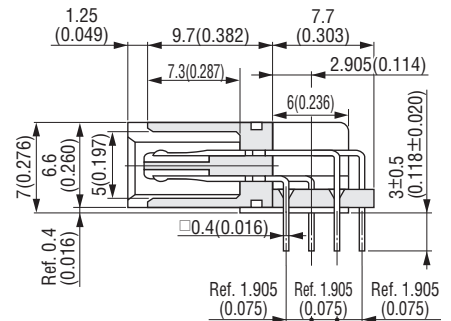


Printed Circuit Board Layout (Component Side View)



Recommended PCB Thickness $t = 1.6^{+0.2}_{-0.1}$ (0.063 $^{+0.008}_{-0.004}$)
 ▽=Polarity identification "n" is number of contacts.

X-X' Cross Section



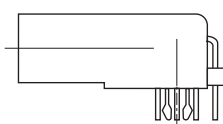
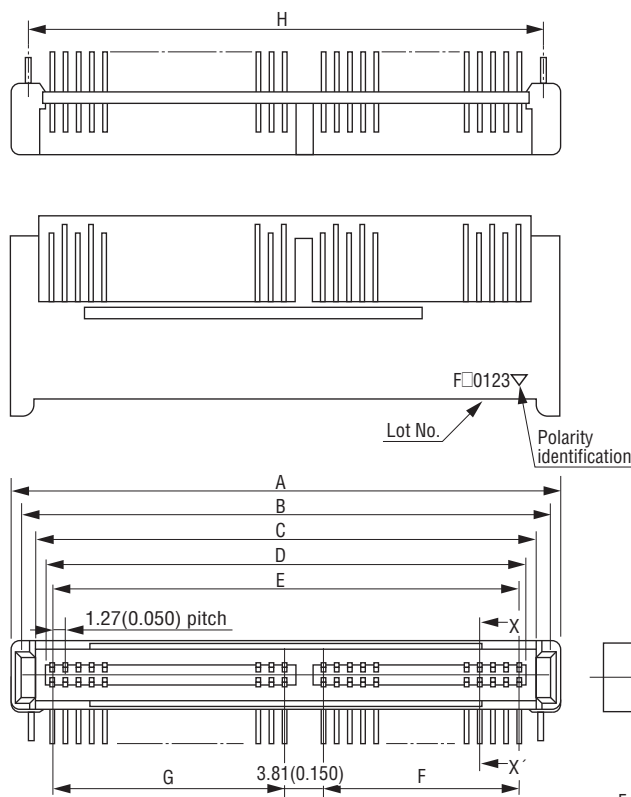
Packing style

Pipe

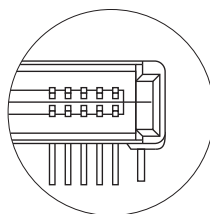
Product Table / Dimensions

No. of contact	Part Number	A	B	C	D	E	F	G	H	I	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

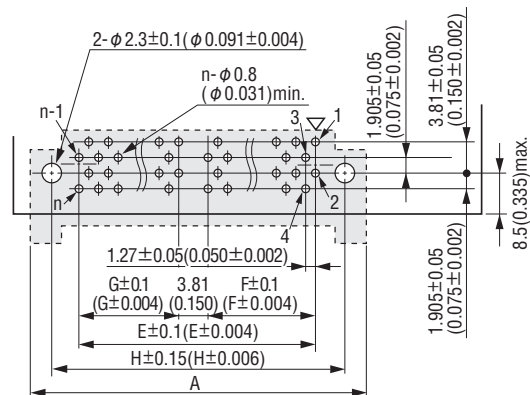
These connectors do not have a symmetrical board layout pattern. The 120 pin connectors have 80 pins on one side and 40 pins on the other. All other pin counts have 100 pins on one side and the balance on the other side



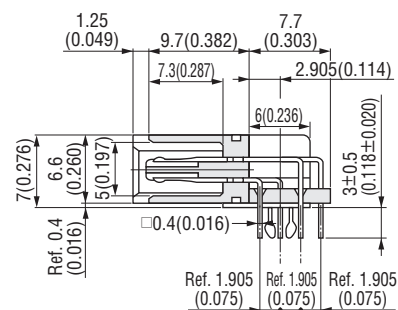
For 160, 180, 200 pins



For 120, 140 pins

Printed Circuit Board Layout (Component Side View)


Recommended PCB Thickness $t = 1.6^{+0.2}_{-0.1} (0.063^{+0.008}_{-0.004})$
 ∇ = Polarity identification "n" is number of contacts.

X-X' Cross Section

Product Table / Dimensions

No. of contact	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.

Packing style
Pipe