

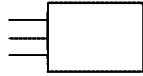
# Product Compliant to DIN41612/IEC603-2 Standard

## PCN Series

### Pin Header Side

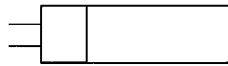
●Straight through hole type

PCN10 - \* \*P-2.54DSA



●Stacking through hole type

PCN10H\* - \* \*P-2.54DSA

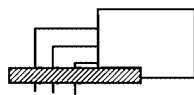


●Right angle through hole type (mounted on the board edge)

PCN10 - \* \*P-2.54DS

PCN12 - \* \*P-2.54DS

PCN12E - \* \*P-2.54DS



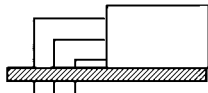
●Right angle through hole type (mounted on the board)

PCN10A - \* \*P-2.54DS

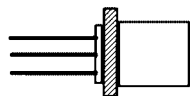
PCN10EA - \* \*P-2.54DS

PCN12A - \* \*P-2.54DS

PCN12EA - \* \*P-2.54DS



●Press fit type



PCN11-\* \*P-2.54W\* -2+PCN11-\* \*P-2.54H-2

### Receptacle Side

●Straight through hole

PCN10 - \* \*S-2.54DSA

PCN10C - \* \*S-2.54DSA

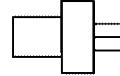
PCN10EA - \* \*S-2.54DSA

PCN10D - \* \*S-2.54DSA

PCN12 - \* \*S-2.54DSA

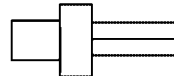
PCN12E - \* \*S-2.54DSA

PCN13 - \* \*S-2.54DSA



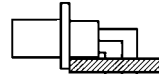
●Wrapping type

PCN10 - \* \*S-2.54W\*



●Right angle through hole type (mounted on the board edge)

PCN10B - \* \*S-2.54DS

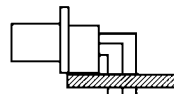


●Right angle through hole type (mounted on the board)

PCN10A - \* \*S-2.54DS

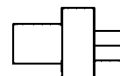
PCN10C - \* \*S-2.54DS

PCN13 - \* \*S-2.54DS



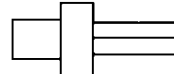
●Press fit short pin type

PCN11-\* \*S-2.54PFB-2



●Press fit long pin type

PCN11-\* \*S-2.54WB-2



●Cable type



PCN10-\* \*S-2.54C+PCN10-\* \* \*SC\*

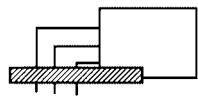
PCN10-\* \*S-2.54R

## ■ Coaxial Connector and High Current Contact Composite Type

### Pin Header Side

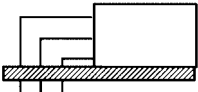
- Right angle through hole type (mounted on the board edge)

PCN10F-\* \*P-2.54DS



- Right angle through hole type (mounted on the board)

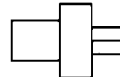
PCN10FA-\* \*P-2.54DS



### Receptacle Side

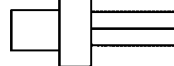
- Straight through hole type

PCN10F -\* \*S-2.54DSA



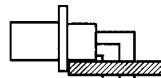
- Wrapping type

PCN10F -\* \*S-2.54W\*



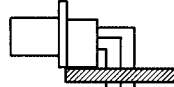
- Right angle through hole type (mounted on the board edge)

PCN10FB-\* \*S-2.54DS



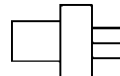
- Right angle through hole type (mounted on the board)

PCN10FA-\* \*S-2.54DS



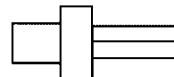
- Press fit short pin type

PCN11F-\* \*S-2.54PFB-2



- Press fit long pin type

PCN11F-\* \*S-2.54WB-2

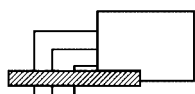


## Circuit Protection Function Type

### Pin Header Side

- Right angle through hole type

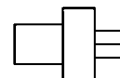
PCN10MC\*-\* \*P-2.54DS



### Receptacle Side

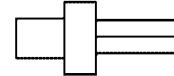
- Straight through hole type

PCN10MC\*-\* \*S-2.54DSA

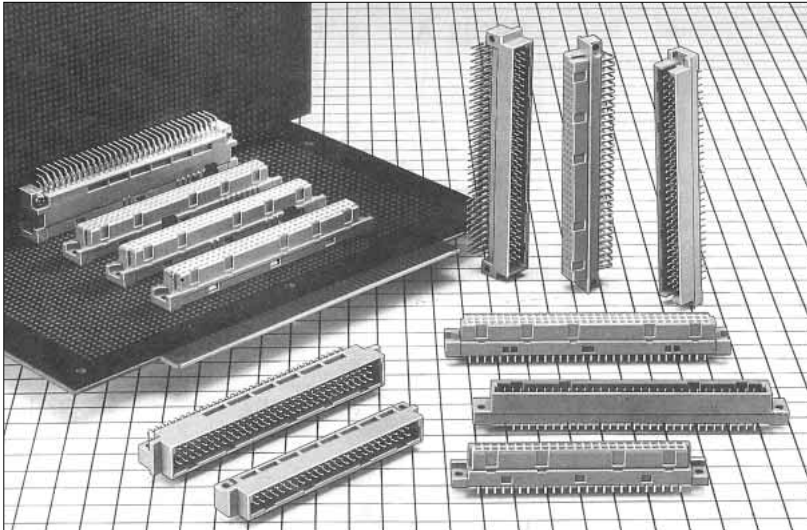


- Wrapping type

PCN10MC\*-\* \*S-2.54W\*



## PCN10, 12, 13 Series (Product Compliant to DIN Standard: through hole, Wrapping Type)



PCN Series

### ■ Features

#### 1. Compliant with DIN Standard

Comply with IEC603-2/DIN41612 standard.

#### 2. Variation in number of contacts

10, 16, 20, 24, 28, 30, 32, 44, 48, 50, 64, 90, 96, 100, 128, and 144 contacts are available.

#### 3. Two point contact construction

PCN10 and 12 series are constructed with high reliable double-sided two point contacts.

PCN13 series pursues after cost performance, and constructed with single sided two point contacts.

#### 4. Broad applications

DIN standard types of B, C, R, and Q are available. The flux tight product is available. The easy lock pin type to prefix the board is available.

#### 5. Stacking height variation

PCN10H series contains 25, 30, 35, 40 and 45mm stacking height.

#### 6. Circuit protection function available

PCN10MC series utilizes a sequence structure for circuit protection function.

#### 7. Cable connector

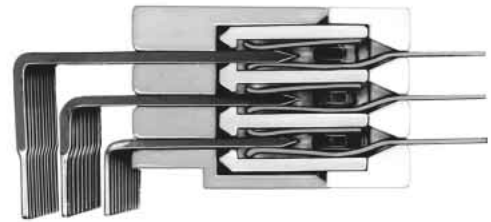
ID connector for ribbon cable is available.

The connector is prepared for crimping connection for AWC#26 to 30 cables.

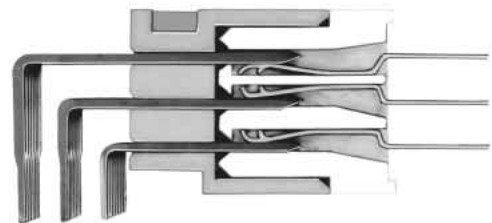
### ■ Application

Control equipment, exchange, measuring instruments etc.

Double-sided two point Contact System



Single-sided two point Contact System



Stacking Connector



## ■Product Specifications

Rating	Current rating: 2A Voltage rating: 300V AC	Operating Temperature Range: -55 to +85°C (Note 1) Operating Humidity Range: 85% max	Storage Temperature Range: -10 to +60°C (Note 2) Storage Humidity Range: 40 to 70% (Note 2)
--------	---	---	--

Item	Specification	Condition
1.Insulation Resistance	10 <sup>6</sup> M ohms	100V DC
2.Withstanding Voltage	No flashover or insulation breakdown.	1000V AC (insulation displacement, crimping type: 650V AC) /1 minute.
3.Contact Resistance	20m ohms max.	0.1A
4.Vibration	No electrical discontinuity of 10μs or more	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.
5.Humidity(Steady state)	Insulation resistance : 10 <sup>6</sup> M ohms min.	96 hours at temperature of 40°C and humidity of 90% to 95%
6.Temperature Cycle	No damage, cracks, or parts looseness.	(-65°C : 30 minutes→15 to 35°C: 5 minutes max.→ 125°C : 30 minutes→15 to 35°C: 5 minutes max.) 5 cycles
7.Durability (Mating/un-mating)	Contact resistance : 20m ohms max.	500 cycles
8.Resistance to Soldering heat	No deformation of components affecting performance.	Manual soldering: 300°C for 3 seconds

Note 1: Includes temperature rise caused by current flow.

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

Note 3. Information contained in this catalog represents general requirements for this Series. Contact us for the drawings and specifications for a specific part number shown.

## ■Material

Parts	Material	Finish	Remarks
Insulator	PBT	Gray	UL94V-0
Contact	Pin header	Brass	Contact area: Gold plated Remainder: Tin plated
	Receptacle	Copper alloy	

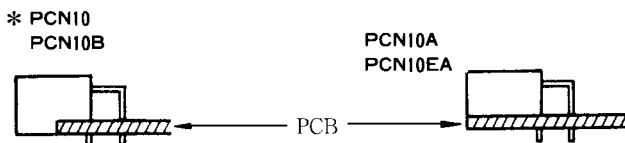
## ■Ordering Information

●PCN 10 Series

**PCN10**   **A** - **\***   **P** - **2.54**   **DS**

①                    ②                    ③                    ④                    ⑤                    ⑥

① Series Name : PCN10	③ Number of contacts: 2-row : 16, 20, 24, 32, 44, 50, 64, 90, 100 3-row : 48, 96, 144 4-row : 128
② Blank } mold type (as listed below) A } B } C : Flux prevention type (DSA only) D : Rack installation type EA : With Board prefixed lock pin H : Stacking height 35mm type HA : Stacking height 30mm type HB : Stacking height 25mm type HC : Stacking height 45mm type HD : Stacking height 40mm type MC : Circuit Protection function type	④ Connector type : P : Pin header : S : Receptacle
	⑤ Contact pitch : 2.54mm
	⑥ Contact type DS : Right angle through hole type DSA : Straight through hole type WA : Wrapping type (0.5x0.7W) WB : Wrapping type (0.5x0.5W) R : Insulation displacement type C : Crimping type



\* The receptacle double-row right angle type indicates the type of PCN10A type.

●PCN 12 Series (Plug)

PCN12   A - \* P - 2.54 DS  
 ①            ②            ③   ④            ⑤            ⑥

① Series name : PCN12	③ Number of contacts : 2-row: 10, 16, 20, 24, 28, 32, 44, 50, 64, 90, 100 3-row: 96
② No symbol : DIN standard type C (96 Contacts) A : Original type E-EA : With board prefixed lock pin type	④ P : Plug
	⑤ Contact pitch : 2.54mm
	⑥ Contact type : DS: Right angle through hole type

●PCN 12E-\*S-2.54 DSA(Socket)

PCN12   E - \* S - 2.54 DSA  
 ①            ②            ③   ④            ⑤            ⑥

① Series name : PCN12	④ S : Socket
② No symbol : Standard type E : With board prefixed lock pin type	⑤ Contact pitch : 2.54mm
③ Number of contacts : 2-row: 10, 16, 20, 28, 32, 44, 50, 64, 90, 100 3-row: 96	⑥ Contact type : DSA: Straight through hole type

●PCN 13E-\*S-2.54 DSA (Socket)

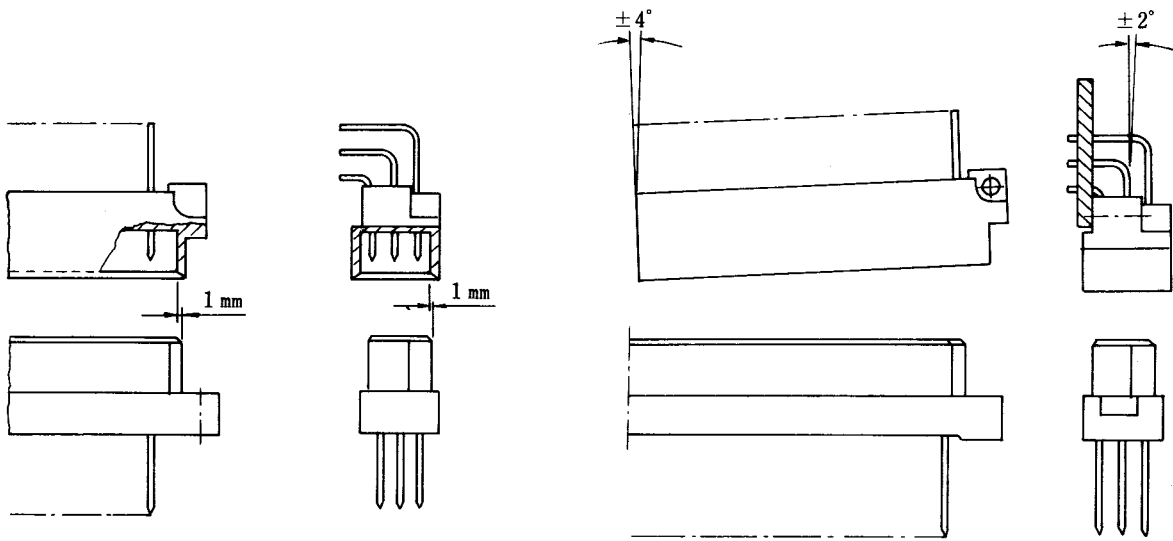
PCN13   E - \* S - 2.54 DSA  
 ①            ②            ③   ④            ⑤            ⑥

① Series name : PCN13	④ S : Socket
② No symbol : Standard type E : With board prefixed easy pin type	⑤ Contact pitch : 2.54mm
③ Number of contacts : 2-row: 10, 16, 20, 30, 32, 44, 50, 64, 90, 100 3-row: 48, 96	⑥ Contact style : DS: Right angle through hole type : DSA: Straight through hole type

\*PCN13 series are only socket type.  
PCN10 and 12 series are mating connectors.

## ◆DIN Connector Mating Condition

DIN connectors of Hirose should be used under conditions as illustrated below.



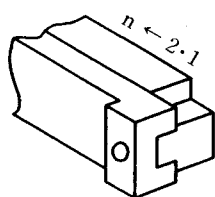
## ◆ Contact numbers

According to the inter-combination with DIN standard type C (type B) and type R (type Q), the contact numbers and row numbers represent contact No. (No.1 to 32) and row No. (a, b, c).

- DIN standard type C and type R represent the 3-row 96 contacts type, including 32 contacts in single-row.
- DIN standard type B and type Q represent the 2-row 64 contacts type, including 32 contacts in single-row.

### ① Receptacle straight type

Type C (Type B)

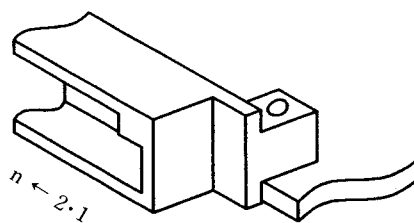


c row  
b row  
a row

(Contact No. matching)

### ② Pin header right angle type

Type C (Type B)



c row  
b row  
a row

n ← 2.1

(Contact No. inverted)

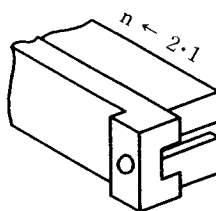


(Contact No. inverted)



### ③ Pin header straight type

Type R (Type Q)

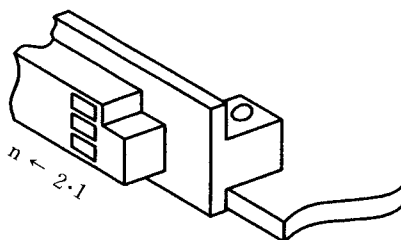


c row  
b row  
a row

(Contact No. matching)

### ④ Receptacle right angle type

Type R (Type Q)



c row  
b row  
a row

n ← 2.1

Note: The DIN connector is basically standardized in combination with straight and right angle types. As shown above in illustrations;

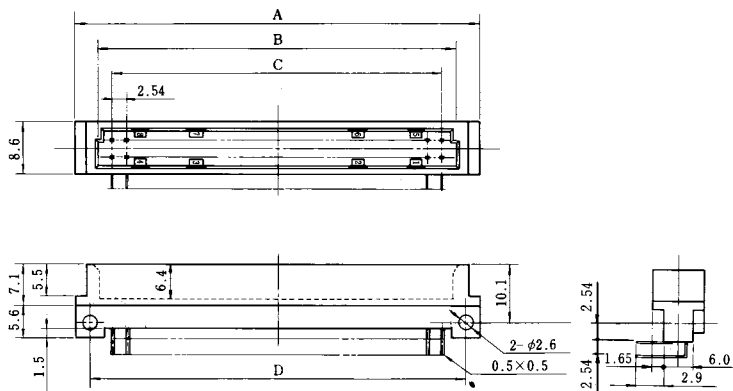
The contact numbers is matched in combination with (1)-(2) and (3)-(4), while the contact numbers are inverted in combination with (1)-(2) and (3)-(4).

## PCN10 Series

### ■ Pin Header: 2-row Right Angle Type (DIN standard type B)

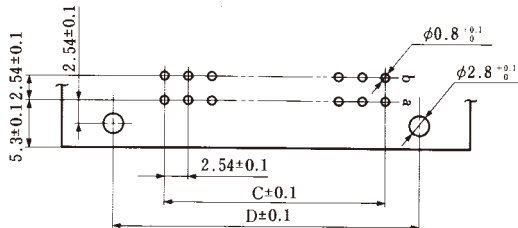


PCN10-\*P-2.54DS(72)



Unit:mm

### ◆ PCB mounting pattern

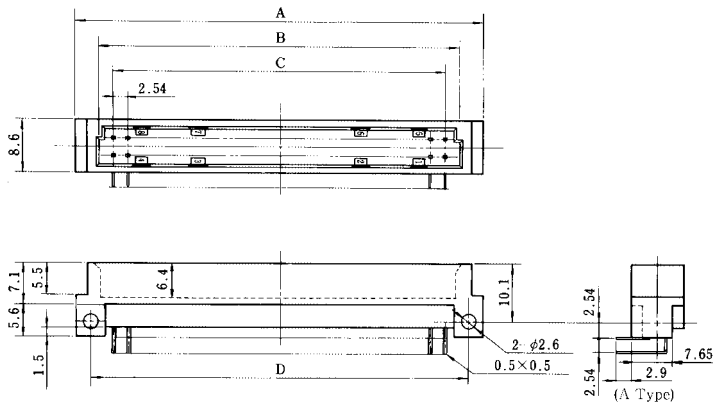


Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10- 16P-2.54DS(72)	CL583-0230-9-72	16	33.04	24.39	17.78	27.94	YES
PCN10- 20P-2.54DS(72)	CL583-0077-3-72	20	38.12	29.47	22.86	33.02	
PCN10- 32P-2.54DS(72)	CL583-0015-6-72	32	53.36	44.71	38.1	48.26	
PCN10- 44P-2.54DS(72)	CL583-0038-1-72	44	68.6	59.95	53.34	63.5	
PCN10- 50P-2.54DS(72)	CL583-0016-9-72	50	76.22	67.57	60.96	71.12	
PCN10- 64P-2.54DS(72)	CL583-0017-1-72	64	94	85.35	78.74	88.9	
PCN10- 90P-2.54DS(72)	CL583-0018-4-72	90	127.02	118.37	111.76	121.92	
PCN10-100P-2.54DS(72)	CL583-0113-5-72	100	139.72	131.07	124.46	134.62	

### ■ Pin Header: 2-row Right Angle Type

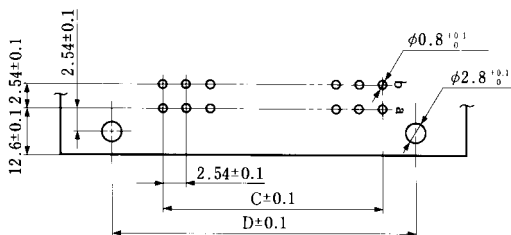


PCN10A-\*P-2.54DS(72)



Unit:mm

### ◆ PCB mounting pattern



Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10A- 16P-2.54DS(72)	CL583-0231-1-72	16	33.04	24.39	17.78	27.94	YES
PCN10A- 20P-2.54DS(72)	CL583-0078-6-72	20	38.12	29.47	22.86	33.02	
PCN10A- 32P-2.54DS(72)	CL583-0011-5-72	32	53.36	44.71	38.1	48.26	
PCN10A- 44P-2.54DS(72)	CL583-0039-4-72	44	68.6	59.95	53.34	63.5	
PCN10A- 50P-2.54DS(72)	CL583-0012-8-72	50	76.22	67.57	60.96	71.12	
PCN10A- 64P-2.54DS(72)	CL583-0013-0-72	64	94	85.35	78.74	88.9	
PCN10A- 90P-2.54DS(72)	CL583-0014-3-72	90	127.02	118.37	111.76	121.92	
PCN10A-100P-2.54DS(72)	CL583-0114-8-72	100	139.72	131.07	124.46	134.62	



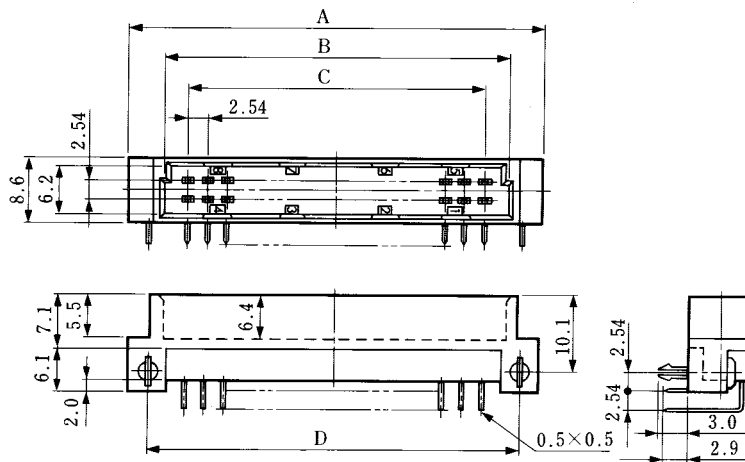
## ■ Pin Header: 2-row Right Angle Type

● With Board prefixed lock pin



PCN10EA\*P-2.54DS(72)

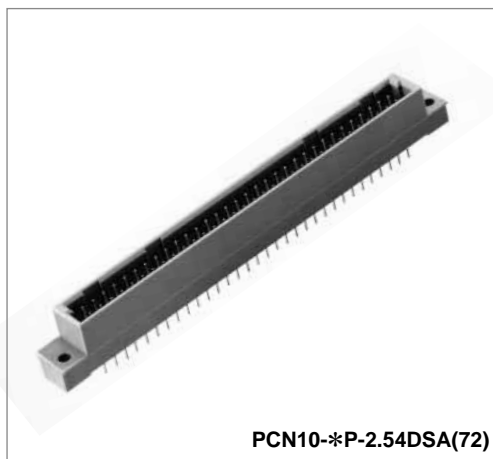
● The PCB mounting pattern is equivalent to PCN10A-\*P-2.54DS. (Refer to page A19.)



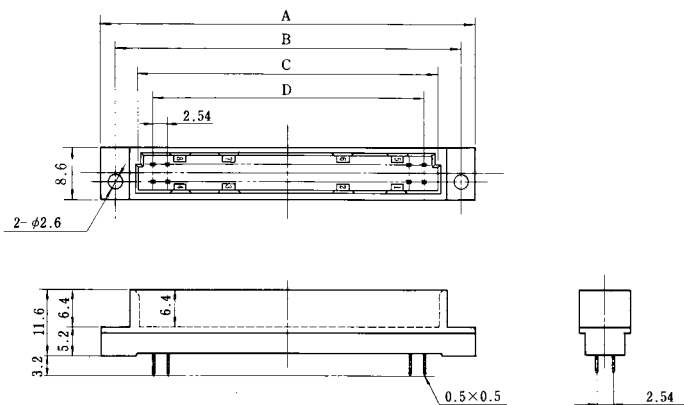
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10EA- 16P-2.54DS(72)	CL583-0256-2-72	16	33.04	24.39	17.78	27.94	YES
PCN10EA- 20P-2.54DS(72)	CL583-0181-5-72	20	38.12	29.47	22.86	33.02	
PCN10EA- 32P-2.54DS(72)	CL583-0182-8-72	32	53.36	44.71	38.1	48.26	
PCN10EA- 44P-2.54DS(72)	CL583-0183-0-72	44	68.6	59.95	53.34	63.5	
PCN10EA- 50P-2.54DS(72)	CL583-0184-3-72	50	76.22	67.57	60.96	71.12	
PCN10EA- 64P-2.54DS(72)	CL583-0185-6-72	64	94	85.35	78.74	88.9	
PCN10EA- 90P-2.54DS(72)	CL583-0186-9-72	90	127.02	118.37	111.76	121.92	
PCN10EA-100P-2.54DS(72)	CL583-0187-1-72	100	139.72	131.07	124.46	134.62	

## ■ Pin Header: 2-row Straight Type



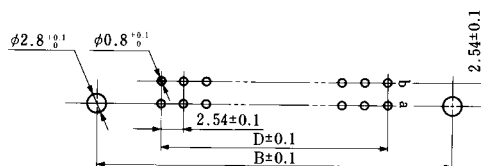
PCN10-\*P-2.54DSA(72)



\*Type Q differs in the outer dimensions and PCB mounting pattern.

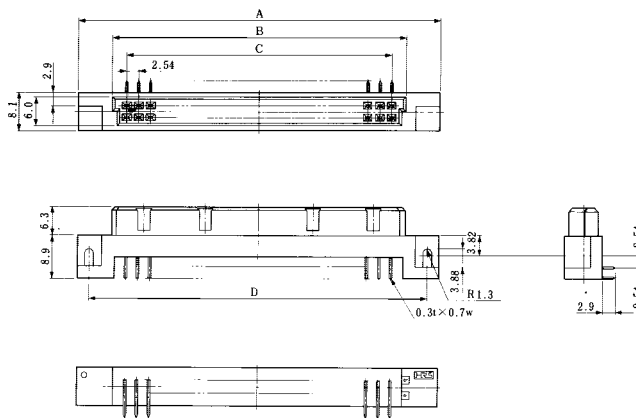
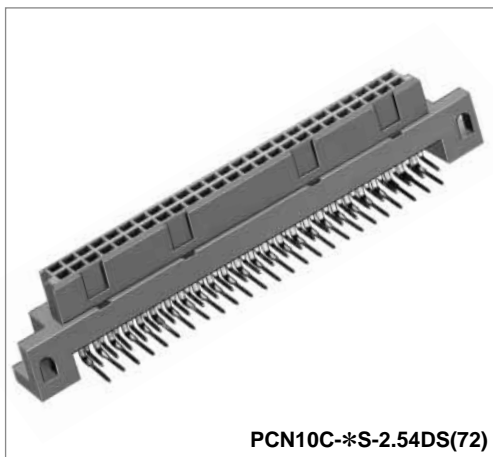
Unit:mm

### ◆ PCB mounting pattern



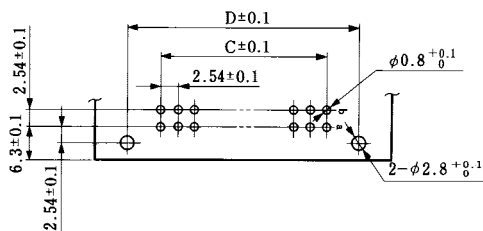
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10- 20P-2.54DSA(72)	CL583-0139-9-72	20	43.3	38.1	29.47	22.86	YES
PCN10- 32P-2.54DSA(72)	CL583-0007-8-72	32	58.54	53.34	44.71	38.1	
PCN10- 44P-2.54DSA(72)	CL583-0488-8-72	44	73.78	68.58	59.95	53.54	
PCN10- 50P-2.54DSA(72)	CL583-0008-0-72	50	81.4	76.2	67.57	60.96	
PCN10- 64P-2.54DSA(72)	CL583-0009-3-72	64	99.18	93.98	85.35	78.74	
PCN10- 90P-2.54DSA(72)	CL583-0010-2-72	90	132.2	127	118.37	111.76	
PCN10-100P-2.54DSA(72)	CL583-0251-9-72	100	144.9	139.7	131.07	124.46	

### ■ Receptacle: 2-row Right Angle Type



\*Type Q differs in the external size and PCB mounting pattern.

### ◆ PCB mounting pattern

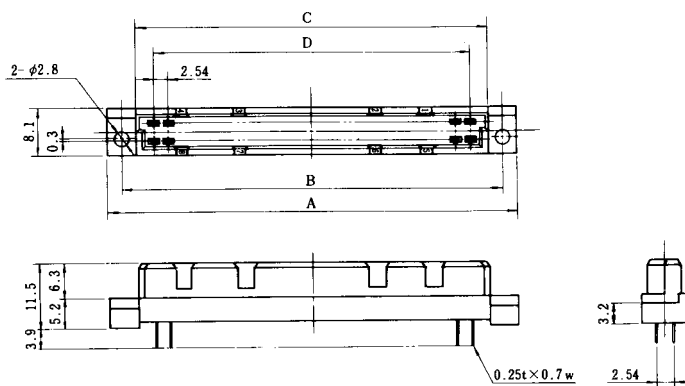
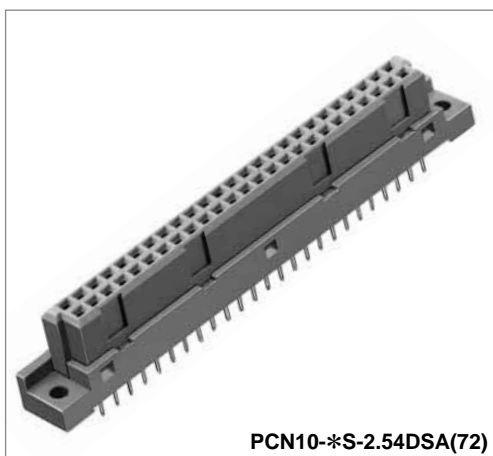


Note

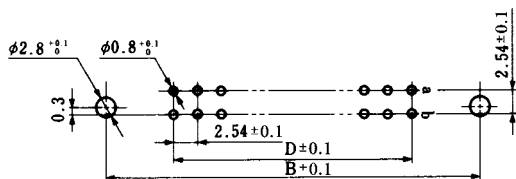
							Unit:mm
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10C- 20S-2.54DS(72)	CL583-0201-0-72	20	43.1	29.12	22.86	38.1	YES
PCN10C- 32S-2.54DS(72)	CL583-0202-3-72	32	58.34	44.36	38.1	53.34	
PCN10C- 44S-2.54DS(72)	CL583-0052-2-72	44	73.58	59.6	53.34	68.58	
PCN10C- 50S-2.54DS(72)	CL583-0168-7-72	50	81.2	67.22	60.96	76.2	
PCN10C- 60S-2.54DS(72)	CL583-0174-0-72	60	93.9	79.92	73.66	88.9	
PCN10C- 64S-2.54DS(72)	CL583-0203-6-72	64	98.98	85	78.74	93.98	
PCN10C- 90S-2.54DS(72)	CL583-0204-9-72	90	132	118.02	111.76	127	
PCN10C-100S-2.54DS(72)	CL583-0178-0-72	100	144.7	130.72	124.46	139.7	

Note: DIN standard type Q (Reverse type of type B) indicates PCN10B-64S-2.54DS(72).

### ■ Receptacle: 2-row Straight Type (DIN standard type B)



### ◆ PCB mounting pattern



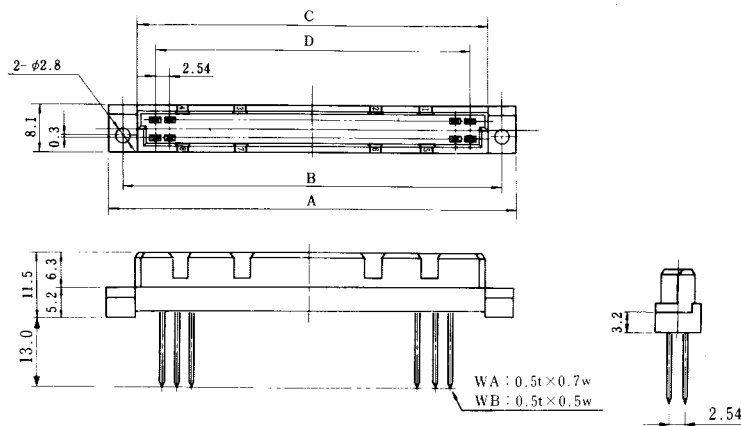
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10-32S-2.54DSA(72)	CL583-0019-7-72	32	54.36	49.36	44.36	38.1	YES
PCN10-50S-2.54DSA(72)	CL583-0020-6-72	50	77.22	72.22	67.22	60.96	
PCN10-64S-2.54DSA(72)	CL583-0021-9-72	64	95	90	85	78.74	

## ■Receptacle: 2-row Wrapping Type (DIN standard type B)

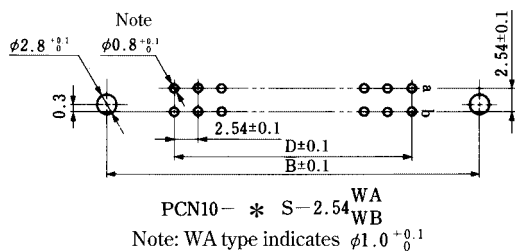


PCN10-\*S-2.54 WA(72)  
WB(72)



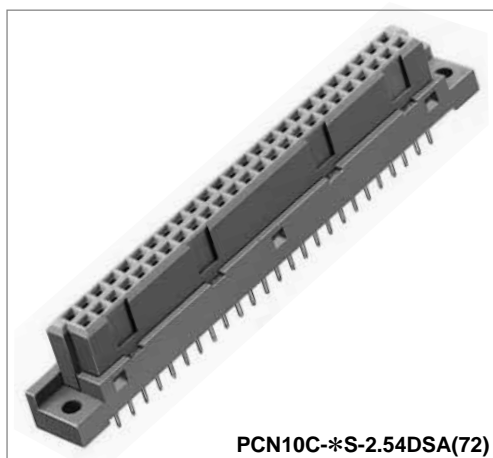
Unit:mm

### ◆PCB mounting pattern

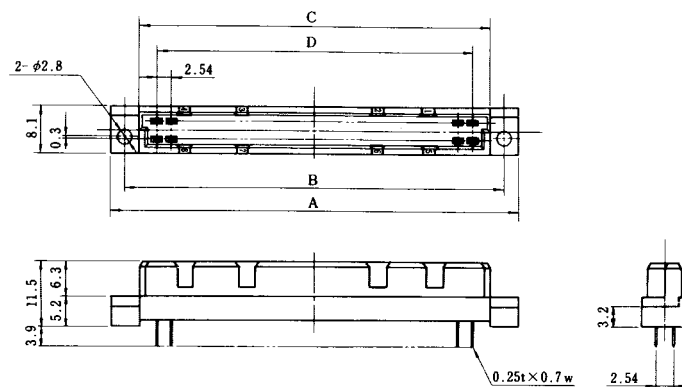


Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10-32S-2.54WA(72)	CL583-0107-2-72	32	54.36	49.36	44.36	38.1	YES
PCN10-32S-2.54WB(72)	CL583-0067-0-72	32	54.36	49.36	44.36	38.1	
PCN10-50S-2.54WA(72)	CL583-0108-5-72	50	77.22	72.22	67.22	60.96	
PCN10-50S-2.54WB(72)	CL583-0068-2-72	50	77.22	72.22	67.22	60.96	
PCN10-64S-2.54WA(72)	CL583-0109-8-72	64	95	90	85	78.74	
PCN10-64S-2.54WB(72)	CL583-0069-5-72	64	95	90	85	78.74	

## ■Flux Prevention Type (DIN standard type B)

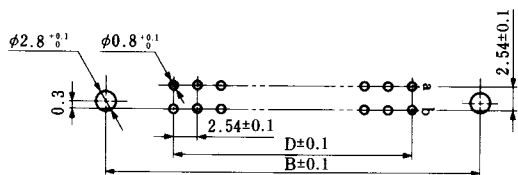


PCN10C-\*S-2.54DSA(72)



Unit:mm

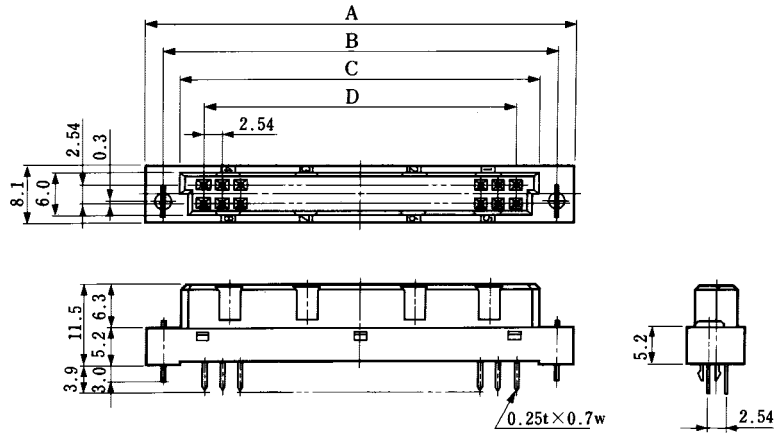
### ◆PCB mounting pattern



Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10C- 16S-2.54DSA(72)	CL583-0226-1-72	16	34.04	29.04	24.04	17.78	YES
PCN10C- 20S-2.54DSA(72)	CL583-0079-9-72	20	39.12	34.12	29.12	22.86	
PCN10C- 32S-2.54DSA(72)	CL583-0033-8-72	32	54.36	49.36	44.36	38.1	
PCN10C- 44S-2.54DSA(72)	CL583-0034-0-72	44	69.6	64.6	59.6	53.34	
PCN10C- 50S-2.54DSA(72)	CL583-0035-3-72	50	77.22	72.22	67.22	60.96	
PCN10C- 64S-2.54DSA(72)	CL583-0036-6-72	64	95	90	85	78.74	
PCN10C- 90S-2.54DSA(72)	CL583-0037-9-72	90	128.02	123.02	118.02	111.76	
PCN10C-100S-2.54DSA(72)	CL583-0112-2-72	100	140.72	135.72	130.72	124.46	

## ■Board Prefixed Lock Pin Type (DIN standard type B)

### ●Flux prevention type

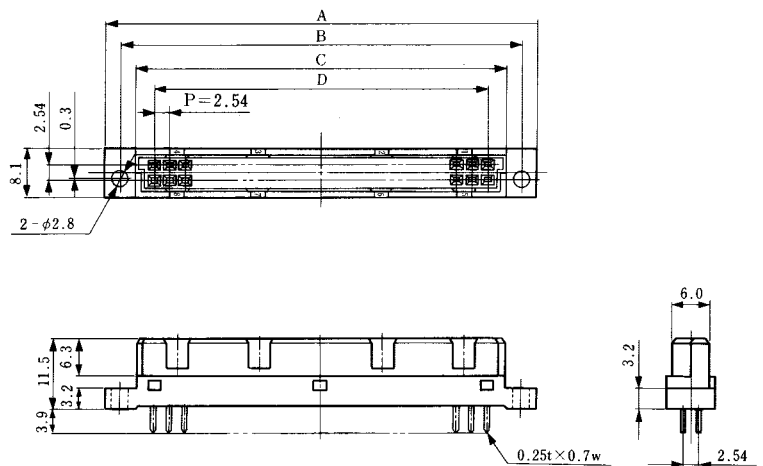
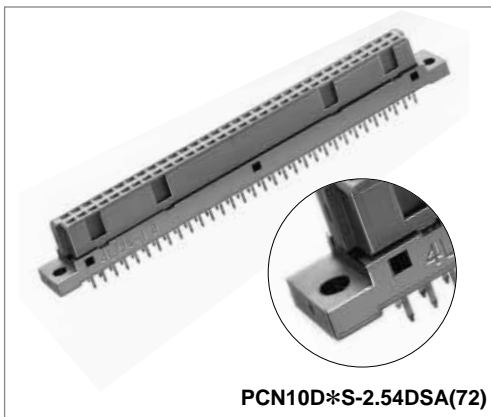


- The PCB mounting pattern is equivalent to PCN10-\*P-2.54DSA and PCN10C-\*P-2.54DSA. (Refer to catalog page A21 and A22.)

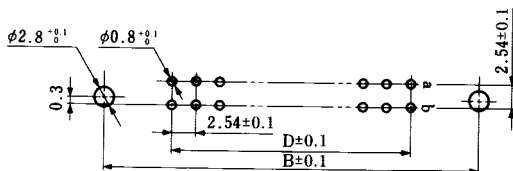
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10EA- 20S-2.54DSA(72)	CL583-0188-4-72	20	39.12	34.12	29.12	22.86	YES
PCN10EA- 32S-2.54DSA(72)	CL583-0189-7-72	32	54.36	49.36	44.36	38.1	
PCN10EA- 44S-2.54DSA(72)	CL583-0190-6-72	44	69.6	64.6	59.6	53.34	
PCN10EA- 50S-2.54DSA(72)	CL583-0191-9-72	50	77.22	72.22	67.22	60.96	
PCN10EA- 64S-2.54DSA(72)	CL583-0192-1-72	64	95	90	85	78.74	
PCN10EA- 90S-2.54DSA(72)	CL583-0193-4-72	90	128.02	123.02	118.02	111.76	
PCN10EA-100S-2.54DSA(72)	CL583-0194-7-72	100	140.72	135.72	130.72	124.46	

## ■Receptacle: 2-row Straight Type (Rack installation type)



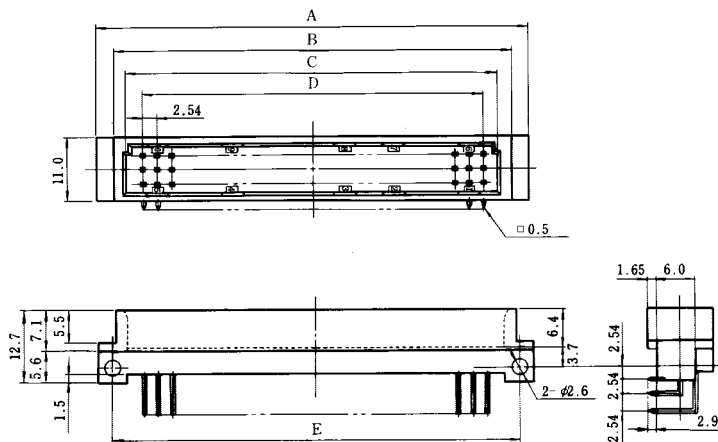
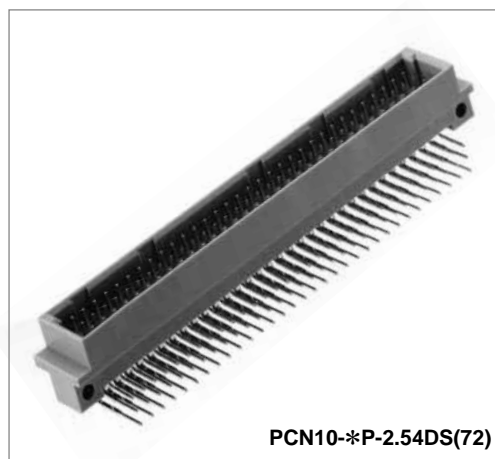
### ◆PCB mounting pattern



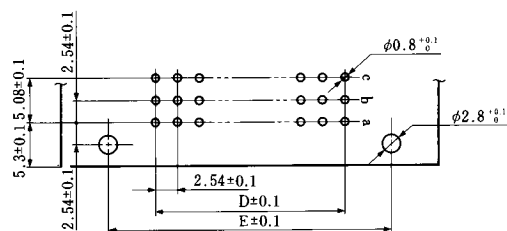
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10D-50S-2.54DSA(72)	CL583-0055-0-72	50	77.22	72.22	67.22	60.96	YES
PCN10D-64S-2.54DSA(72)	CL583-0056-3-72	64	95	90	85	78.74	
PCN10D-90S-2.54DSA(72)	CL583-0057-6-72	90	128.02	123.02	118.02	111.76	

## ■ Pin Header: 3-row Right Angle Type (DIN standard type C)



### ◆ PCB mounting pattern

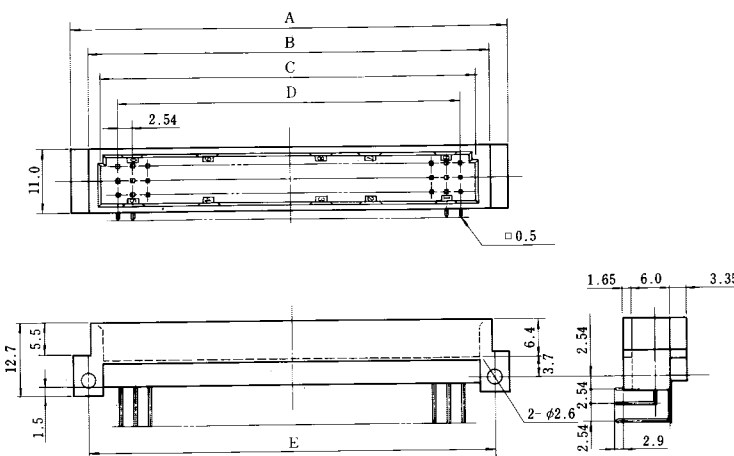


The 48 contact type contains guide key grooves at 8 points.

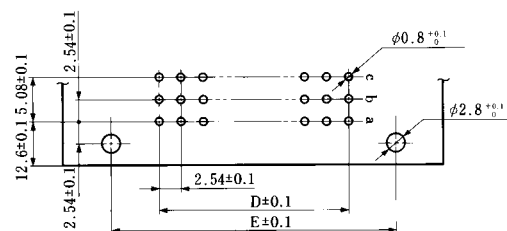
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	RoHS
PCN10-48P-2.54DS(72)	CL583-0063-9-72	48	53.36	47.36	44.61	38.1	48.26	YES
PCN10-96P-2.54DS(72)	CL583-0001-1-72	96	94	88	85.25	78.74	88.9	

## ■ Pin Header: 3-row Right Angle Type



### ◆ PCB mounting pattern



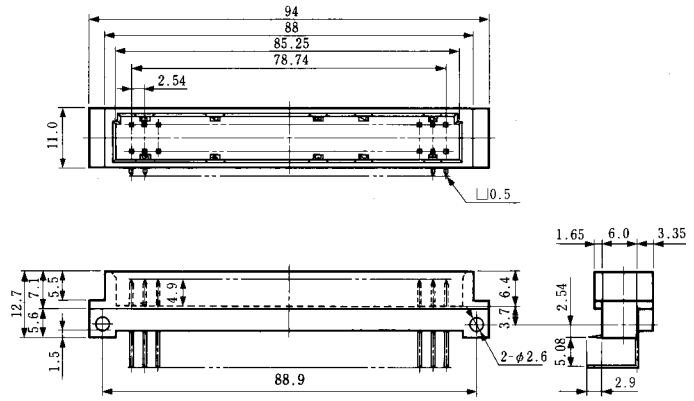
The 48 contact type contains guide key grooves at 8 points.

Unit:mm

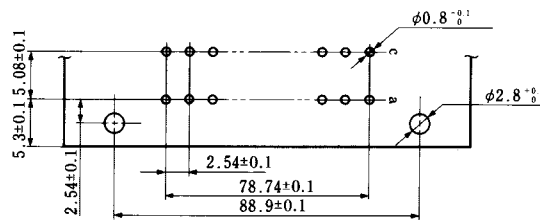
Part Number	CL No.	Number of Contacts	A	B	C	D	E	RoHS
PCN10A-48P-2.54DS(72)	CL583-0064-1-72	48	53.36	47.36	44.61	38.1	48.26	YES
PCN10A-96P-2.54DS(72)	CL583-0006-5-72	96	94	88	85.25	78.74	88.9	

## ■ Pin Header: Right Angle Type

PCN10-64ACP-2.54DS(72)  
CL583-0046-0-72

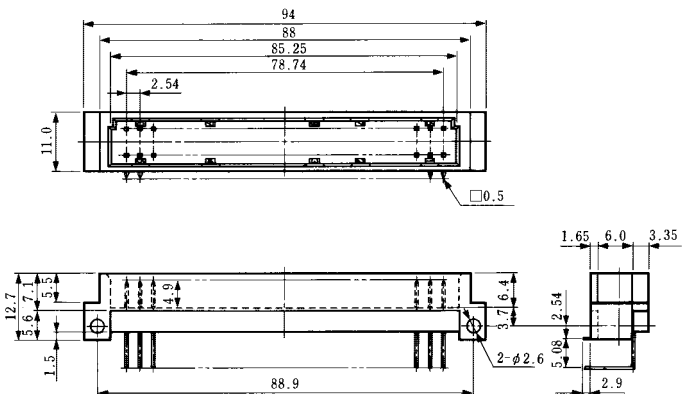


### ◆ PCB mounting pattern

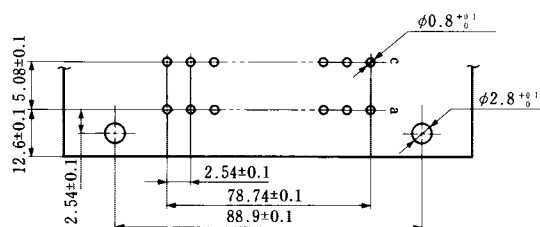


## ■ Pin Header: Right Angle Type

PCN10A-64ACP-2.54DS(72)  
CL583-0032-5-72

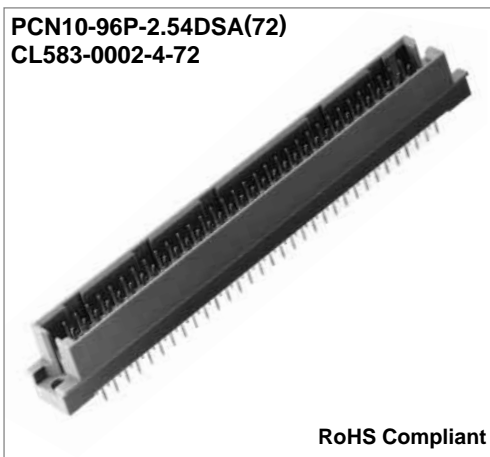


### ◆ PCB mounting pattern

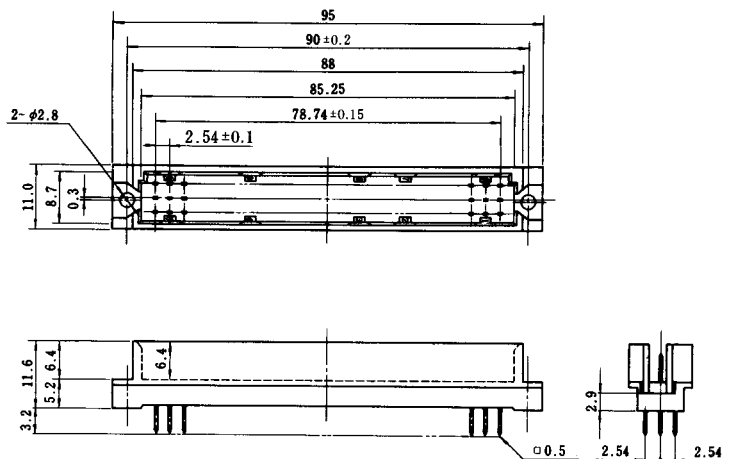


## ■ Pin Header: 3-row Straight Type (DIN standard type R)

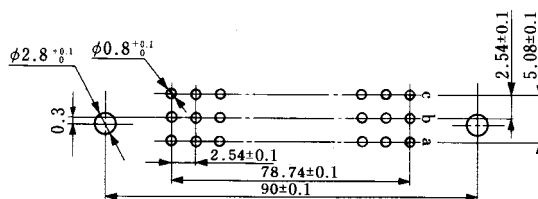
PCN10-96P-2.54DSA(72)  
CL583-0002-4-72



RoHS Compliant

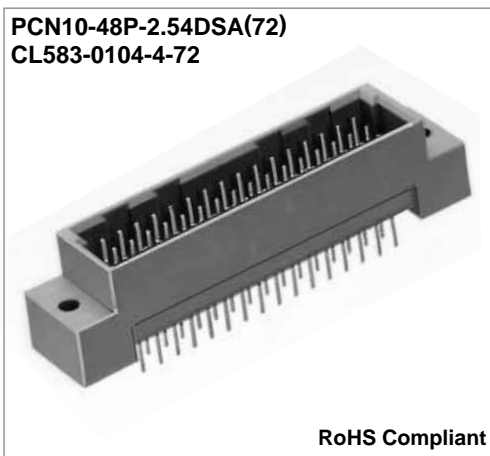


### ◆ PCB mounting pattern

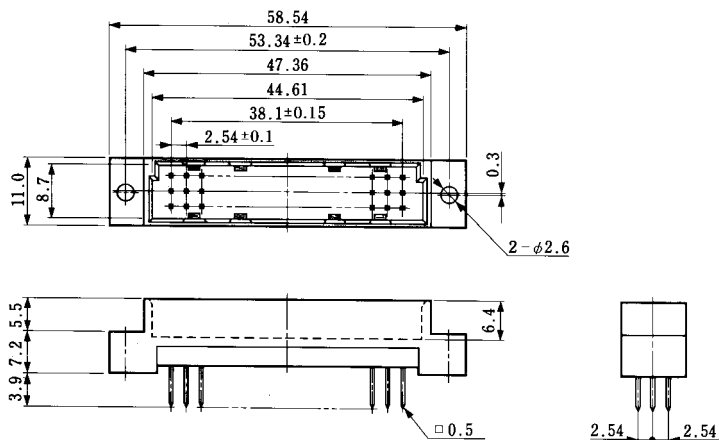


## ■ Pin Header: 3-row Straight Type

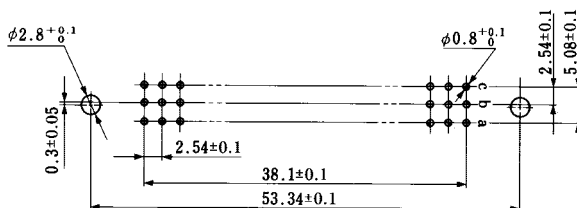
PCN10-48P-2.54DSA(72)  
CL583-0104-4-72



RoHS Compliant

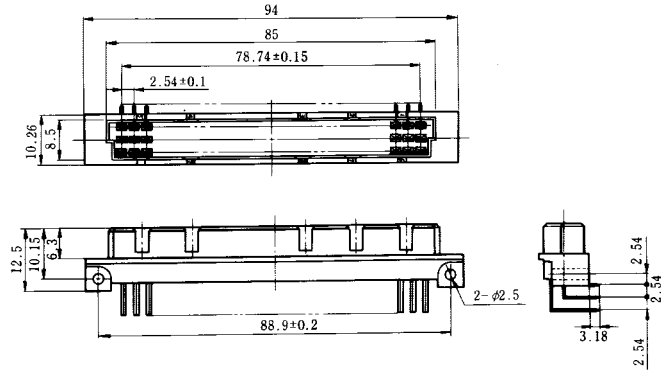
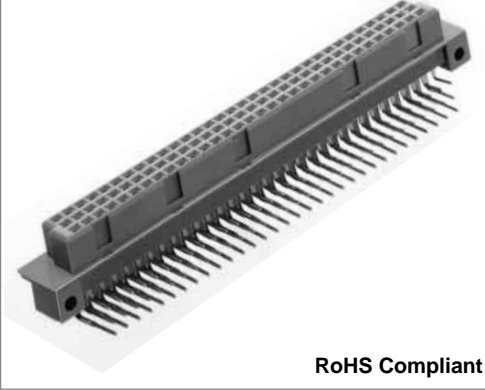


### ◆ PCB mounting pattern

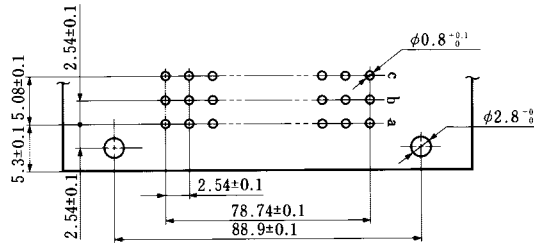


## ■ Receptacle: 3-row Right Angle Type

PCN10A-96S-2.54DS(72)  
CL583-0027-5-72

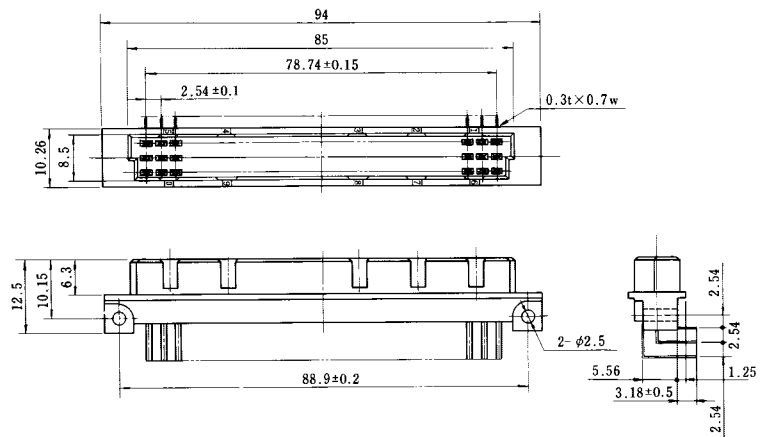
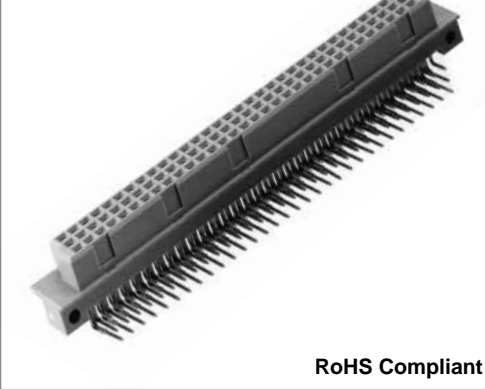


### ◆ PCB mounting pattern

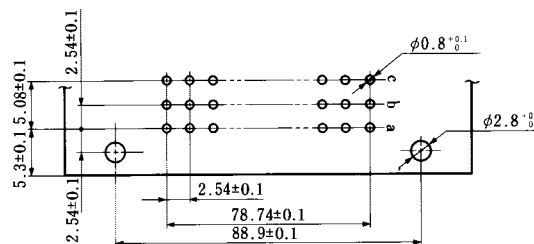


## ■ Receptacle: 3-row Right Angle Type (DIN standard type R)

PCN10B-96S-2.54DS(72)  
CL583-0004-0-72



### ◆ PCB mounting pattern



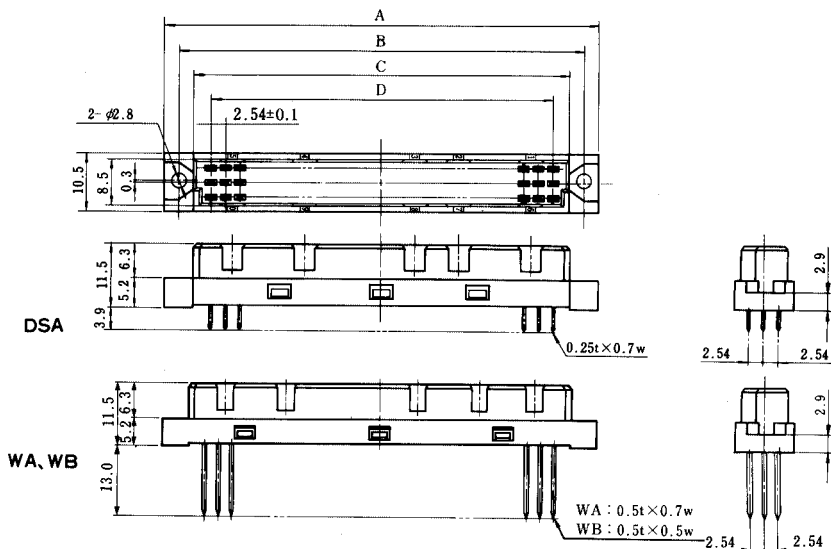
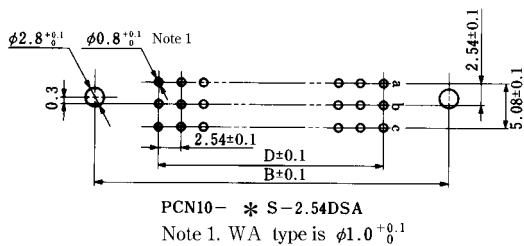


## ■Receptacle: 3-row Straight Type(DIN standard type C)



PCN10\*S-2.54DSA(72)

### ◆PCB mounting pattern



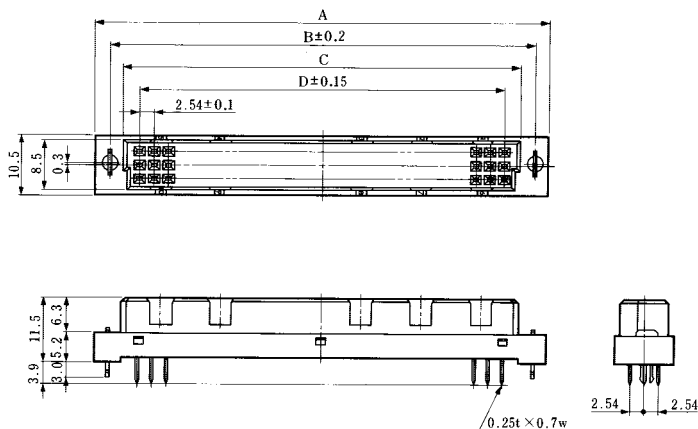
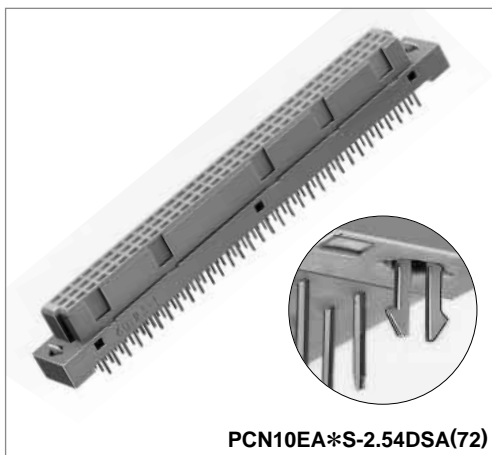
The 48 contact type contains guide key grooves at 8 points.

Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10-48S-2.54DSA(72)	CL583-0065-4-72	48	54.36	50	44.36	38.1	YES
PCN10-96S-2.54DSA(72)	CL583-0003-7-72	96	95	90	85	78.74	
PCN10-96S-2.54WA(72)	CL583-0085-1-72	96	95	90	85	78.74	
PCN10-96S-2.54WB(72)	CL583-0071-7-72	96	95	90	85	78.74	

## ■Receptacle: 3-row Straight Type(DIN standard type C)

●With Board prefixed lock pin



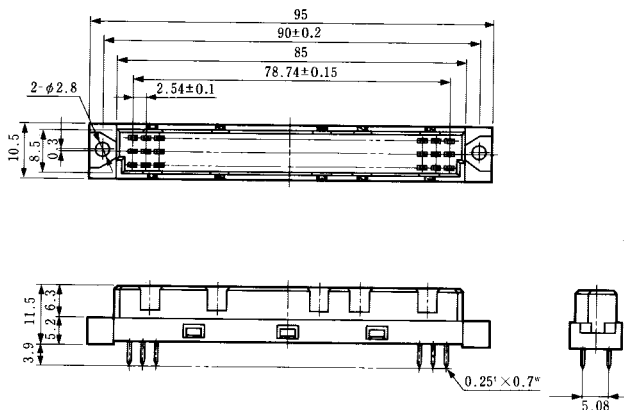
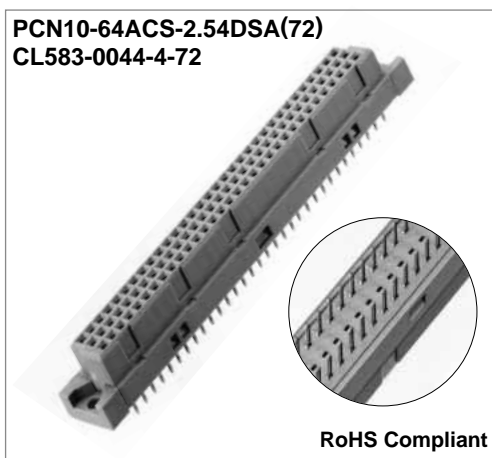
Note: The PCB mounting pattern is equivalent to PCN10-\*S-2.54DSA(72).  
(Refer to catalog page A21.)

Unit:mm

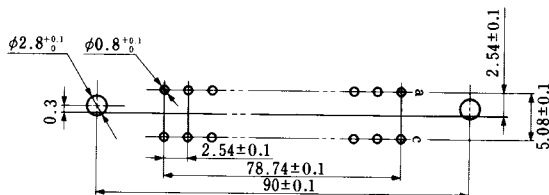
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10EA-48S-2.54DSA(72)	CL583-0195-0-72	48	54.36	50	44.36	38.1	YES
Note PCN10EA-96S-2.54DSA(72)	CL583-0180-2-72	96	95	90	85	78.74	

Note: Flux prevention type

## ■Receptacle: Straight Type



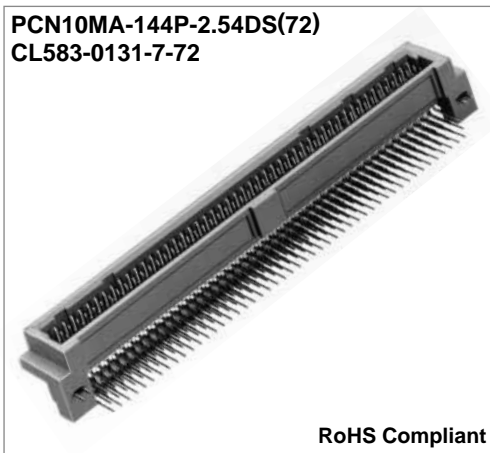
## ◆PCB mounting pattern



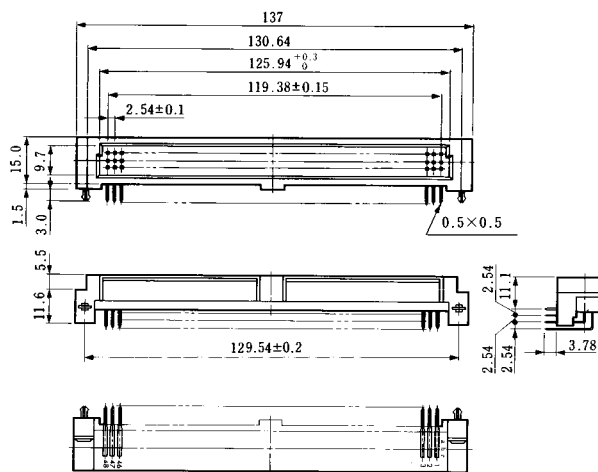
## ■ Pin Header: 3-row Right Angle Type

- With Board prefixed lock pin

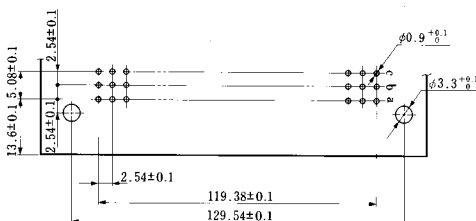
PCN10MA-144P-2.54DS(72)  
CL583-0131-7-72



RoHS Compliant



### ◆ PCB mounting pattern



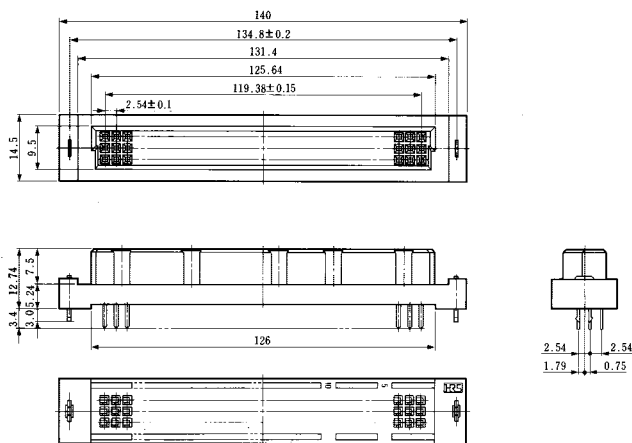
## ■ Receptacle: 3-row Straight Type

- Board prefixed lock pin attached

PCN10MA-144S-2.54DSA(72)  
CL583-0130-4-72

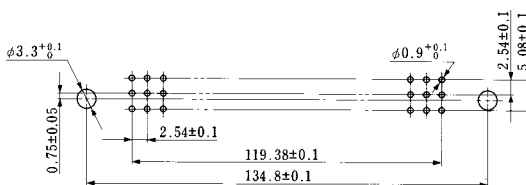


RoHS Compliant



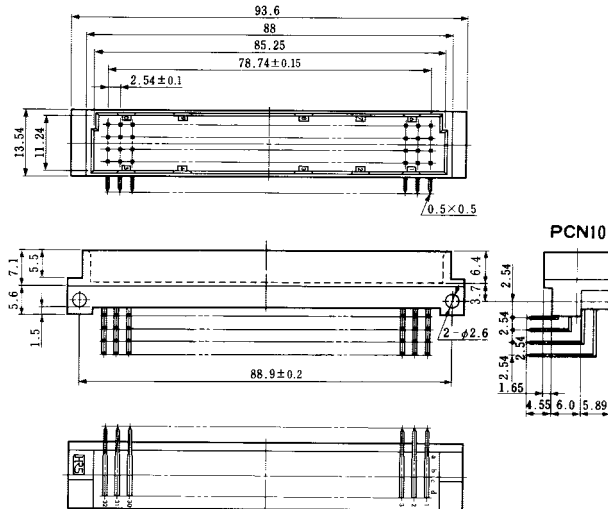
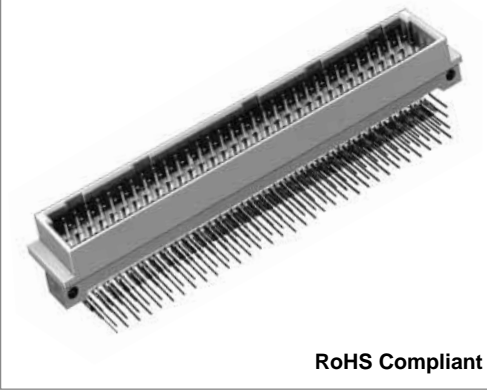
### ◆ PCB mounting pattern

Sequential contacts are located at 27 points up to contact No.30~38 in both rows b and c.

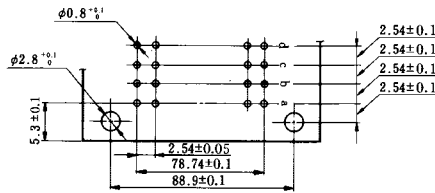


### ■ Pin Header: 4-row Right Angle Type

PCN10-128P-2.54DS(72)  
CL583-0087-7-72

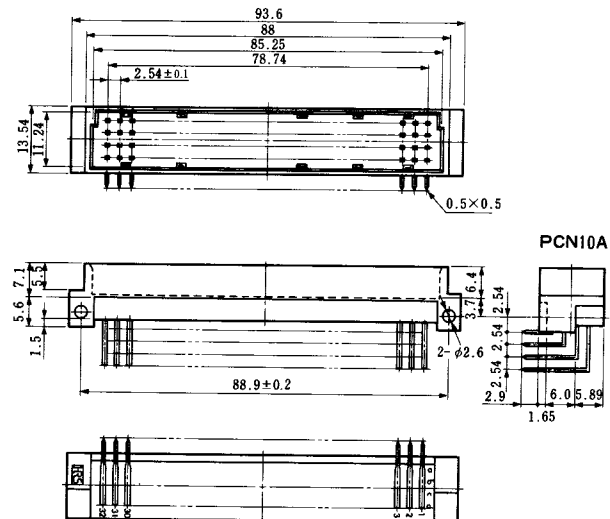
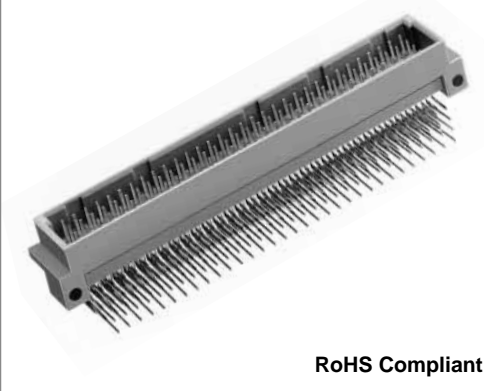


### ◆ PCB mounting pattern

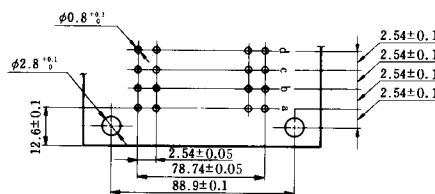


### ■ Pin Header: 4-row Right Angle Type

PCN10A-128P-2.54DS(72)  
CL583-0088-0-72

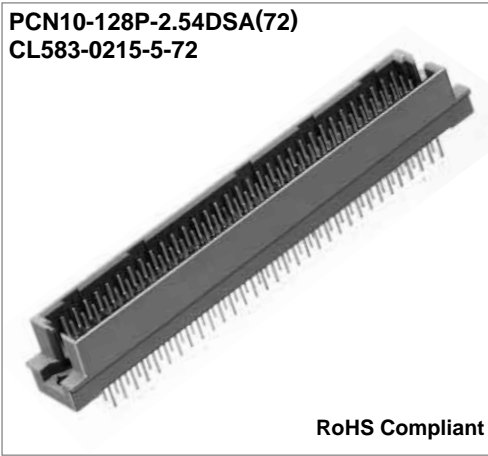


### ◆ PCB mounting pattern

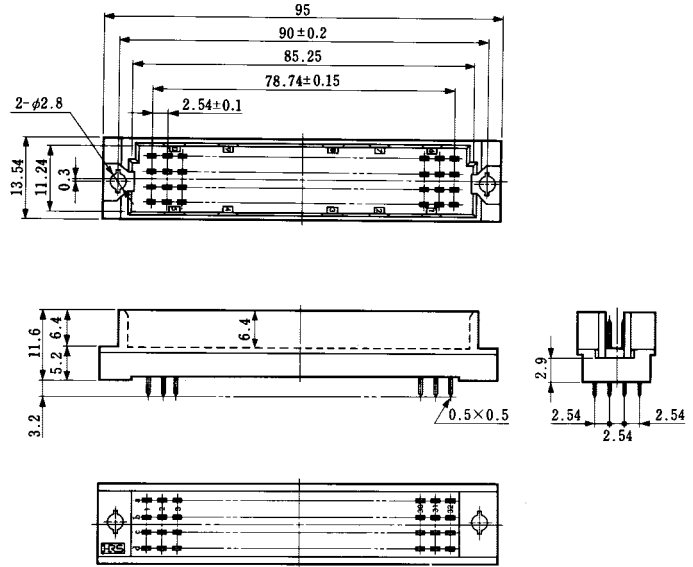


## Pin Header: 4-row Straight Type

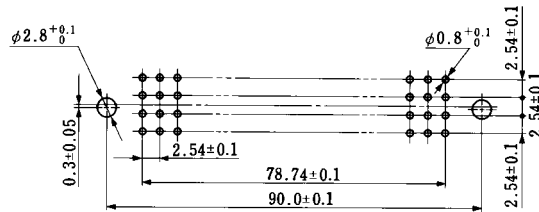
PCN10-128P-2.54DSA(72)  
CL583-0215-5-72



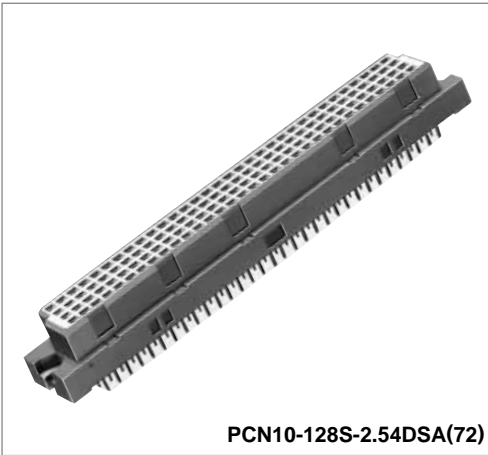
RoHS Compliant



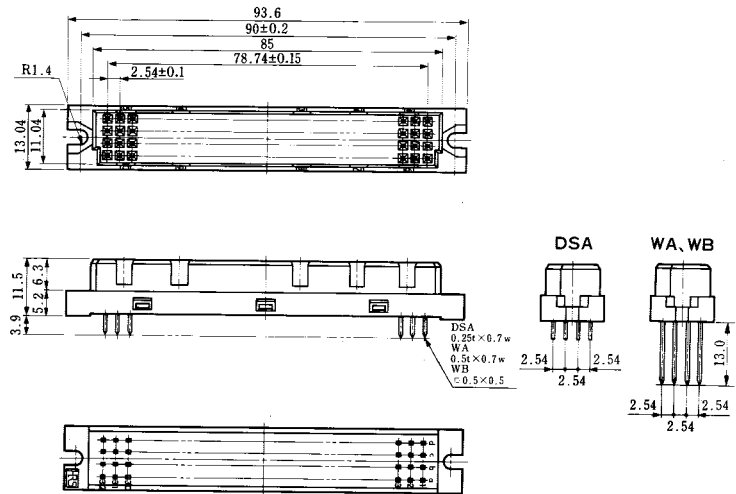
### PCB mounting pattern



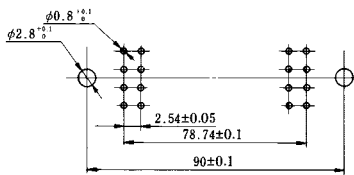
## Receptacle: 4-row Straight Type



PCN10-128S-2.54DSA(72)



### PCB mounting pattern



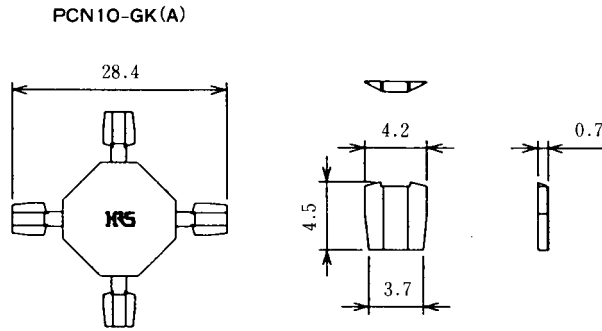
\* WA is φ1.0\*

Unit:mm

Part Number	CL No.	Number of Contacts	RoHS
PCN10-128S-2.54DSA(72)	CL583-0089-2-72	128	YES
PCN10-128S-2.54WA(72)	CL583-0090-1-72	128	
PCN10-128S-2.54WB(72)	CL583-0091-4-72	128	



## ■Polarizing Key



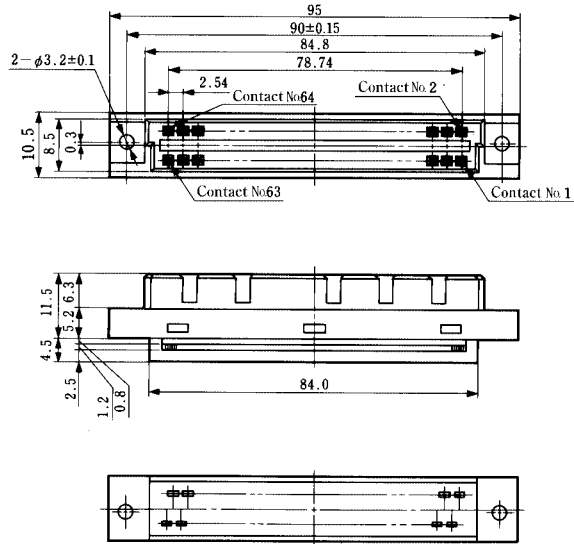
Part Number	CL No.	Material	RoHS
PCN10-GK(A)	583-0269-4	PBT, black	YES

Note: Using the polarizing key prevents connector mis-insertion in the board.  
 Insert the polarizing key in both connectors on the receptacle side and header side.  
 Insert the polarizing key so as to hit the mold bottom.

## Ribbon Cable Connector Compliant with DIN Standard

### ■ Cable Insulation displacement Connector

PCN10-64S-2.54R(52)  
CL583-0030-0-52



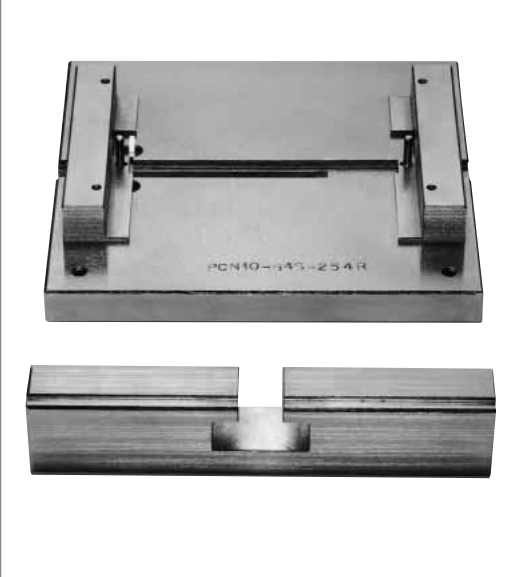
Dec.1.2018 Copyright 2018 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

### ■ Insulation displacement Tool

● Guide plate for insulation displacement + pressing block

● Hi-Flex connection press

PCN10-GPB64  
CL550-0168-6



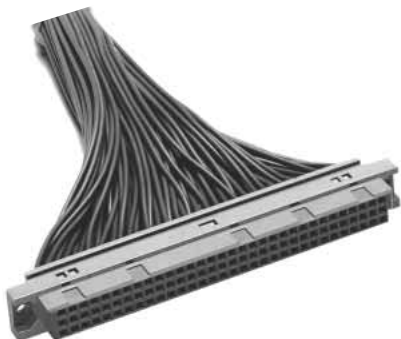
Part Number	CL No.	Height	Width	Depth	Weight
Hi-Flex connection press HHP502	550-0082-2	440mm	160mm	350mm	13kg



## Crimping Connector Compliant with DIN Standard

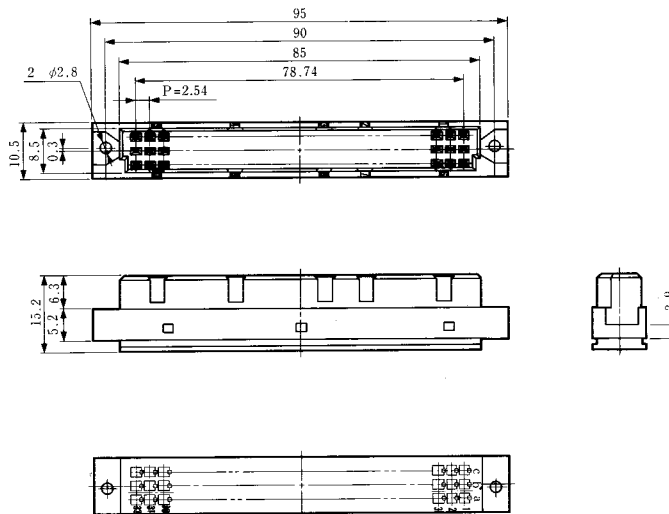
### ■3-row Type

PCN10-96S-2.54C  
CL583-0100-3

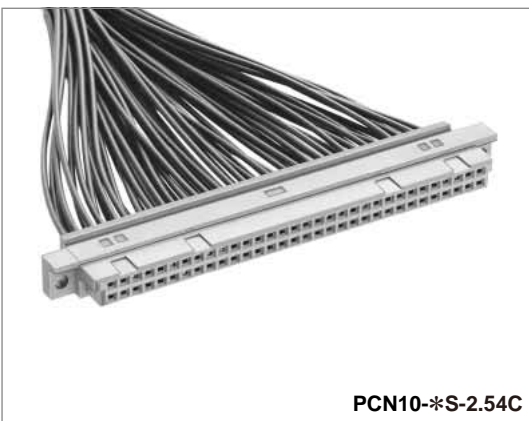


RoHS Compliant

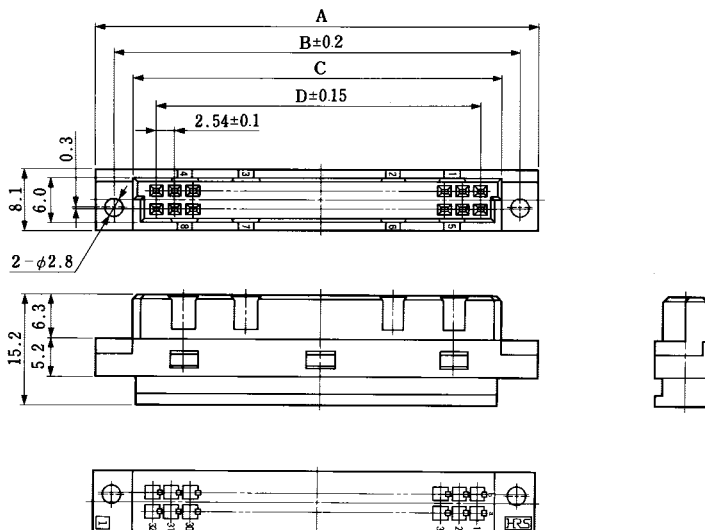
Current rated	2A	(	ID type	1A	)
Voltage rated	300V AC		Crimping type	AWG#26 2A AWG#28-30 1A	



### ■2-row Type



PCN10-\*S-2.54C

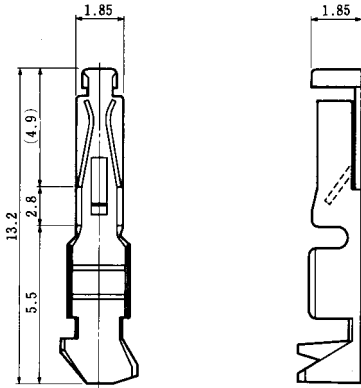


Unit:mm

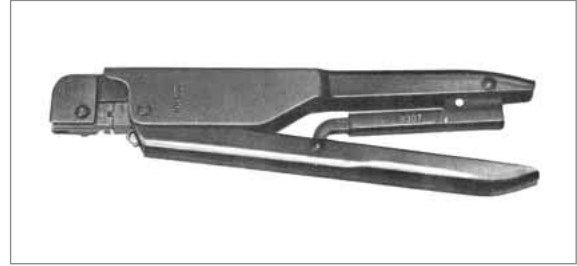
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10-20S-2.54C	CL583-0241-5	20	39.12	34.12	29.12	22.86	YES
PCN10-64S-2.54C	CL583-0243-0	64	95	90	85	78.74	

## Manual Crimping Tool

- Crimping Contact
- PCN10-2630SC (Full Gold plated)  
CL583-0102-9 (RoHS Compliant)
- PCN10-2226SC (Selective Gold plated)  
CL583-0216-8 (RoHS Compliant)
- Crimping tool
- PCN10-TA2630HC (PCN10-2230SC)  
CL550-0163-2
- PCN10-TA2226HC (PCN10-2226SC)  
CL550-0218-2



**Applicable Cable**



- PCN10-2630SC: AWG#26 to #30  
100pcs per bag
- PCN10-2226SC: AWG#22 to #26  
100pcs per bag

## Automatic Crimping Tool

Item	Part Number	CL No.	Applicable Contact
Crimping tool unit	CM-105	901-0005-4	—————
Applicator	AP105-PCN10-2226S	901-3506-6	PCN10-2226SCF
	AP105-PCN10-2630S	901-3508-1	PCN10-2630SCF

## Contact Extraction Tool

Part Number	CL No.
PCN10-PO	550-0282-1

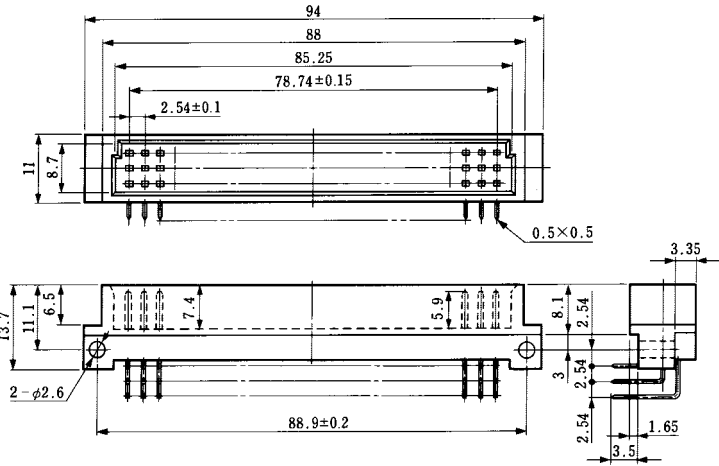
## Circuit Protection Function Type

### Pin Header: 3-row Right Angle Type

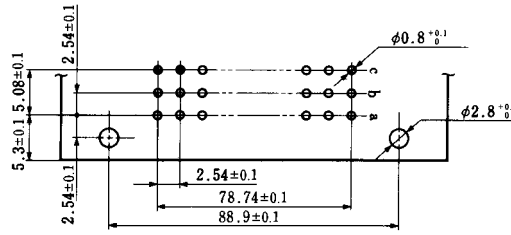
PCN10MC-96P-2.54DS(72)  
CL583-0120-0-72



RoHS Compliant

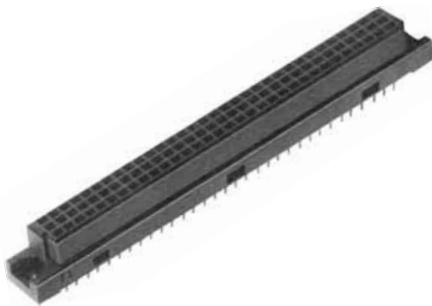


### PCB mounting pattern

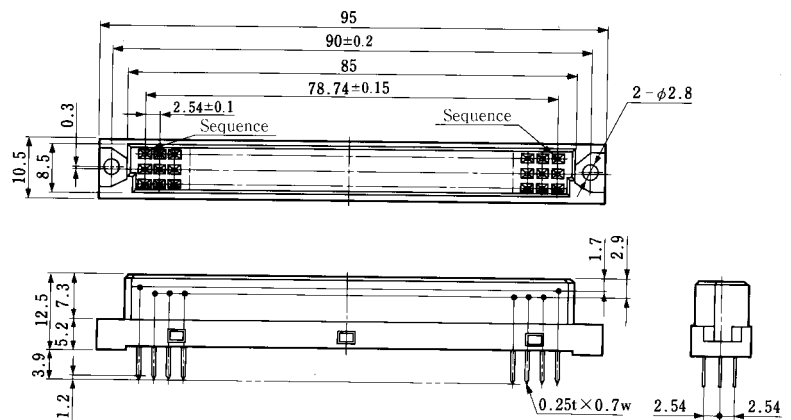


### Receptacle: 3-row Straight Type

PCN10MC-96S-2.54DSA(72)  
CL583-0169-0-72

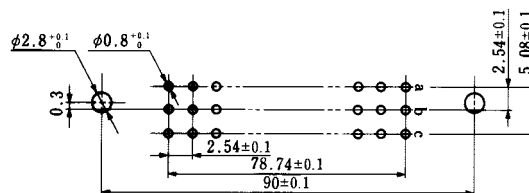


RoHS Compliant



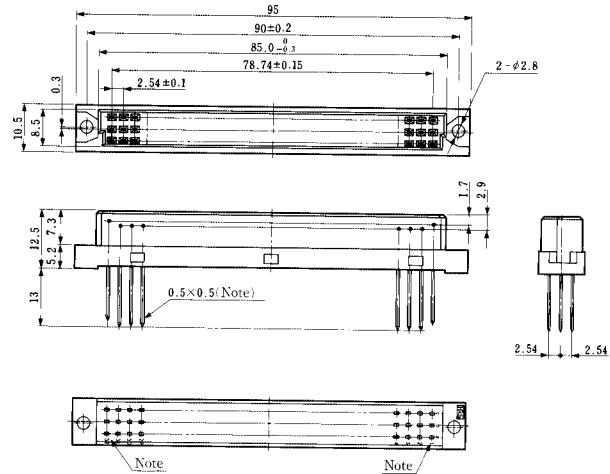
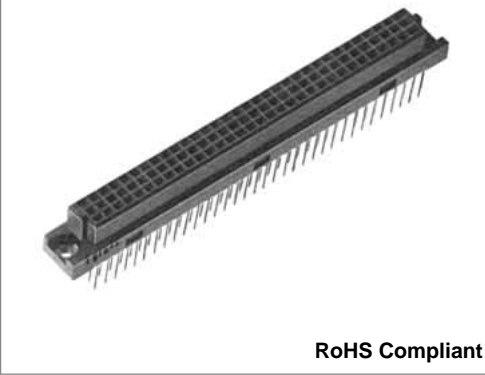
The sequential contacts are No. 1 and No. 32 in the row a.

### PCB mounting pattern

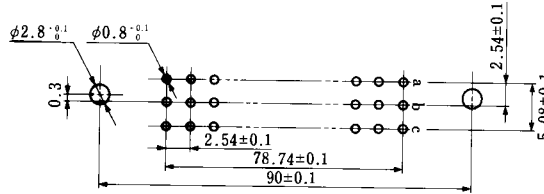


## ■ Receptacle: 3-row Wrapping Type

PCN10MC-96S-2.54WB(72)  
CL583-0119-1-72

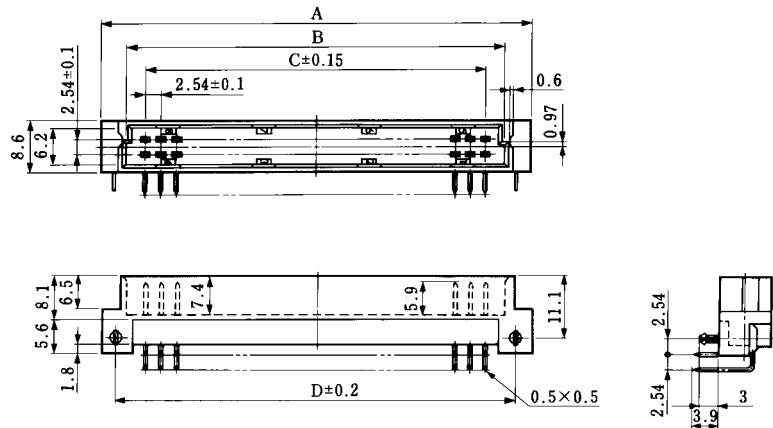


### ◆ PCB mounting pattern

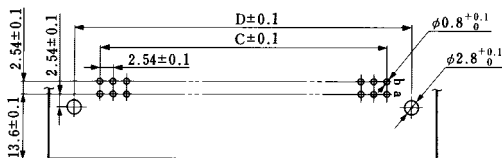


## ■ Pin Header: 2-row Right Angle Type

PCN10MC-*\*P*-2.54DS(72)



### ◆ PCB mounting pattern

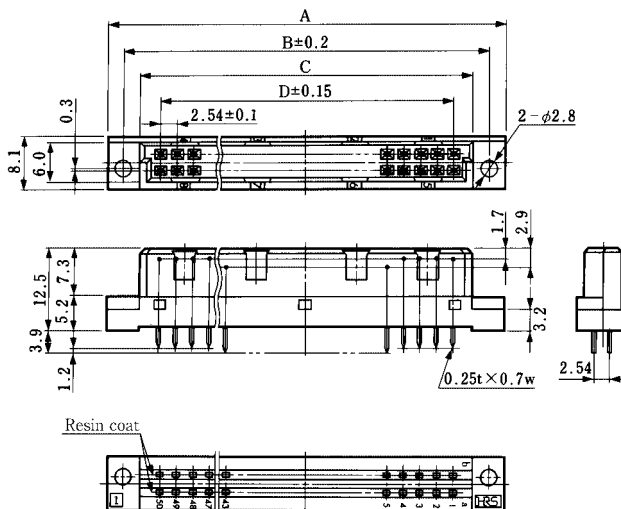


Unit:mm

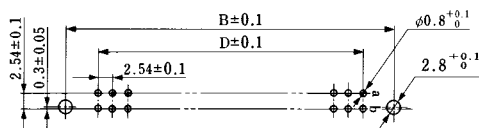
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10MC- 64P-2.54DS(72)	CL583-0211-4-72	64	94	85.35	78.74	88.9	YES
PCN10MC-100P-2.54DS(72)	CL583-0212-7-72	100	139.72	131.07	124.46	134.62	

## Receptacle: 2-row Straight Type

PCN10MC-\*S-2.54DSA(72)



### PCB mounting pattern



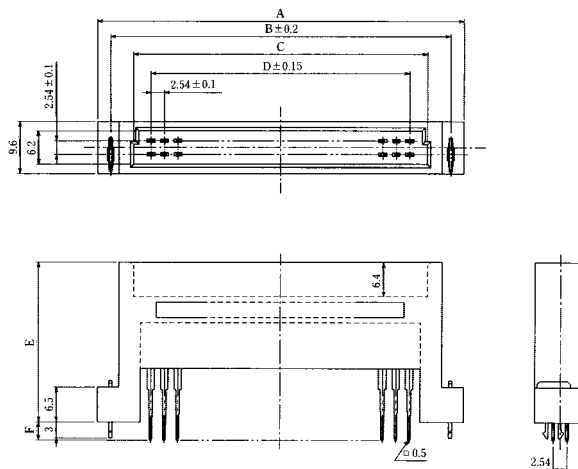
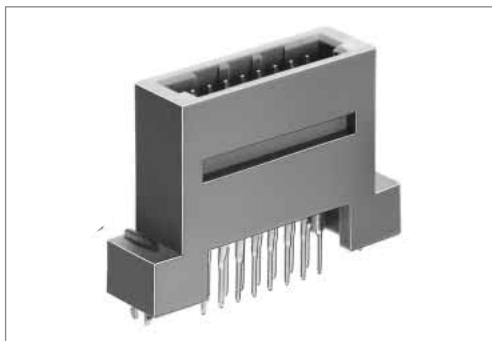
(64 contacts): The sequential contacts are located at 27 points of 1 to 4 and 26 to 32 in both rows a and b.  
 (100 contacts): The sequential contacts are located at 22 points of 1 to 4 and 44 to 50 in both rows a and b.

Unit:mm

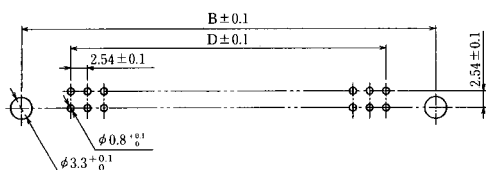
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN10MC- 64S-2.54DSA(72)	CL583-0213-0-72	64	95	90	85	78.74	YES
PCN10MC-100S-2.54DSA(72)	CL583-0214-2-72	100	140.72	135.72	130.72	124.46	

# Stacking Connector

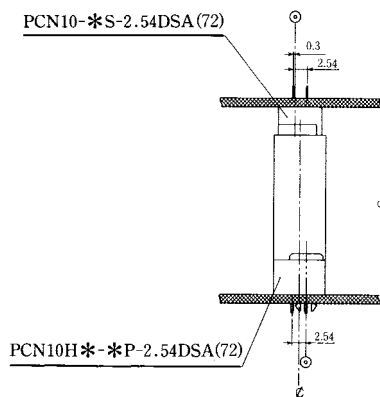
## Stacking Plug



## PCB mounting pattern



## Application Pattern



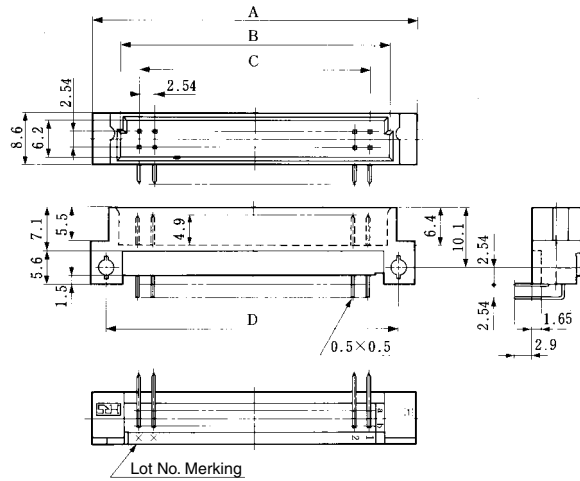
Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	F	G	RoHS
PCN10H- 16P-2.54DSA(72)	CL583-0227-4-72	16	37.92	33.02	24.39	17.78	29.8	3.44	35	YES
PCN10H- 20P-2.54DSA(72)	CL583-0157-0-72	20	43	38.1	29.47	22.86				
PCN10H- 24P-2.54DSA(72)	CL583-0425-8-72	24	48.08	43.18	34.55	27.94				
PCN10H- 32P-2.54DSA(72)	CL583-0161-8-72	32	58.24	53.34	44.71	38.1				
PCN10H- 44P-2.54DSA(72)	CL583-0164-6-72	44	73.48	68.58	59.95	53.34				
PCN10H- 50P-2.54DSA(72)	CL583-0401-0-72	50	81.1	76.2	67.57	60.96	24.8	3.36	30	
PCN10HA-16P-2.54DSA(72)	CL583-0228-7-72	16	37.92	33.02	24.39	17.78				
PCN10HA-20P-2.54DSA(72)	CL583-0158-3-72	20	43	38.1	29.47	22.86				
PCN10HA-24P-2.54DSA(72)	CL583-0426-0-72	24	48.08	43.18	34.55	27.94				
PCN10HA-32P-2.54DSA(72)	CL583-0162-0-72	32	58.24	53.34	44.71	38.1				
PCN10HA-44P-2.54DSA(72)	CL583-0165-9-72	44	73.48	68.58	59.95	53.34	19.8	3.28	25	
PCN10HA-50P-2.54DSA(72)	CL583-0402-2-72	50	81.1	76.2	67.57	60.96				
PCN10HB-16P-2.54DSA(72)	CL583-0229-0-72	16	37.92	33.02	24.39	17.78				
PCN10HB-20P-2.54DSA(72)	CL583-0159-6-72	20	43	38.1	29.47	22.86				
PCN10HB-24P-2.54DSA(72)	CL583-0427-3-72	24	48.08	43.18	34.55	27.94				
PCN10HB-32P-2.54DSA(72)	CL583-0163-3-72	32	58.24	53.34	44.71	38.1	39.8	3.30	45	
PCN10HB-44P-2.54DSA(72)	CL583-0166-1-72	44	73.48	68.58	59.95	53.34				
PCN10HB-50P-2.54DSA(72)	CL583-0403-5-72	50	81.1	76.2	67.57	60.96				
PCN10HC-16P-2.54DSA(72)	CL583-0397-4-72	16	37.92	33.02	24.39	17.78				
PCN10HC-44P-2.54DSA(72)	CL583-0399-0-72	44	73.48	68.58	59.95	53.34				
PCN10HC-50P-2.54DSA(72)	CL583-0404-8-72	50	81.1	76.2	67.57	60.96	34.8	4.42	40	
PCN10HD-16P-2.54DSA(72)	CL583-0398-7-72	16	37.92	33.02	24.39	17.78				
PCN10HD-24P-2.54DSA(72)	CL583-0429-9-72	24	48.08	43.18	34.55	27.94				
PCN10HD-44P-2.54DSA(72)	CL583-0400-7-72	44	73.48	68.58	59.95	53.34				
PCN10HD-50P-2.54DSA(72)	CL583-0405-0-72	50	81.1	76.2	67.57	60.96				

Note: Please note that the above series can not mate with PCN10EA series.

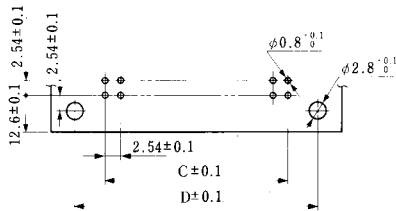
## PCN12 Series

### ■ Plug: 2-row Right Angle Type



Unit:mm

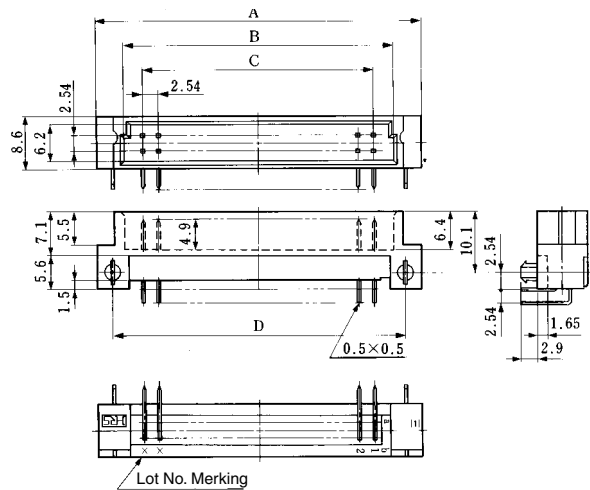
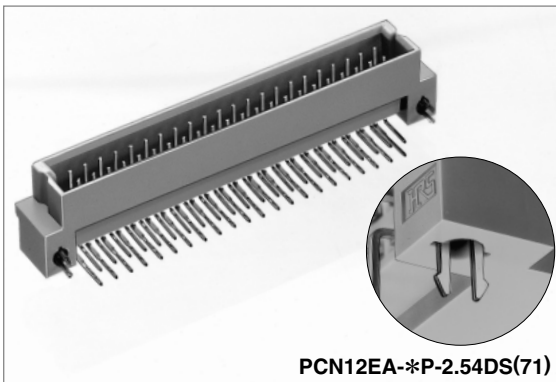
### ◆ PCB mounting pattern



Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN12A- 10P-2.54DS(71)	CL583-2010-3-71	10	25.42	16.77	10.16	20.32	YES
PCN12A- 20P-2.54DS(71)	CL583-2012-9-71	20	38.12	29.47	22.86	33.02	
PCN12A- 28P-2.54DS(71)	CL583-2085-2-71	28	48.26	39.63	33.02	43.18	
PCN12A- 32P-2.54DS(71)	CL583-2013-1-71	32	53.36	44.71	38.1	48.26	
PCN12A- 44P-2.54DS(71)	CL583-2014-4-71	44	68.6	59.95	53.34	63.5	
PCN12A- 50P-2.54DS(71)	CL583-2015-7-71	50	76.22	67.57	60.96	71.12	
PCN12A- 64P-2.54DS(71)	CL583-2016-0-71	64	94	85.35	78.74	88.9	

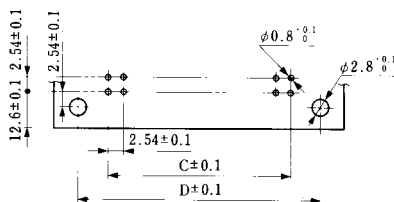
### ■ Plug: 2-row Right Angle Type

#### ● With board prefixed lock pin attached



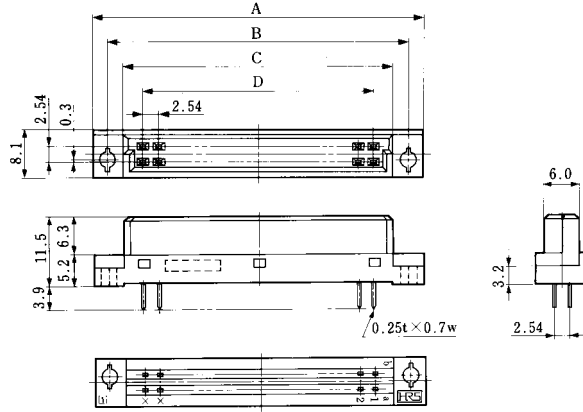
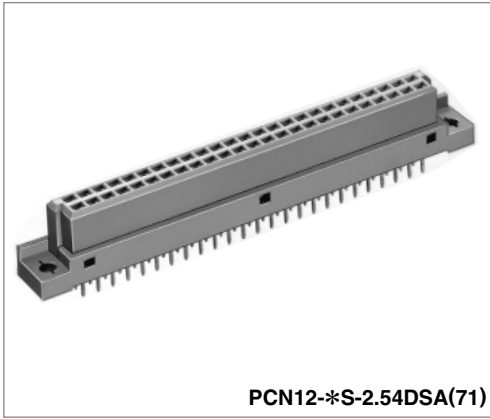
Unit:mm

### ◆ PCB mounting pattern

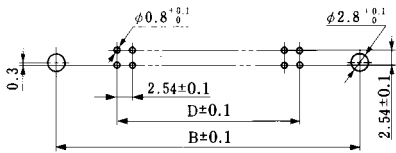


Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN12EA- 10P-2.54DS(71)	CL583-2028-9-71	10	25.42	16.77	10.16	20.32	YES
PCN12EA- 16P-2.54DS(71)	CL583-2029-1-71	16	33.04	24.39	17.78	27.94	
PCN12EA- 20P-2.54DS(71)	CL583-2030-0-71	20	38.12	29.47	22.86	33.02	
PCN12EA- 32P-2.54DS(71)	CL583-2031-3-71	32	53.36	44.71	38.1	48.26	
PCN12EA- 44P-2.54DS(71)	CL583-2032-6-71	44	68.6	59.95	53.34	63.5	
PCN12EA- 50P-2.54DS(71)	CL583-2033-9-71	50	76.22	67.57	60.96	71.12	
PCN12EA- 64P-2.54DS(71)	CL583-2034-1-71	64	94	85.35	78.74	88.9	
PCN12EA- 90P-2.54DS(71)	CL583-2035-4-71	90	127.02	118.37	111.76	121.92	

■Socket: Straight Type



◆PCB mounting pattern

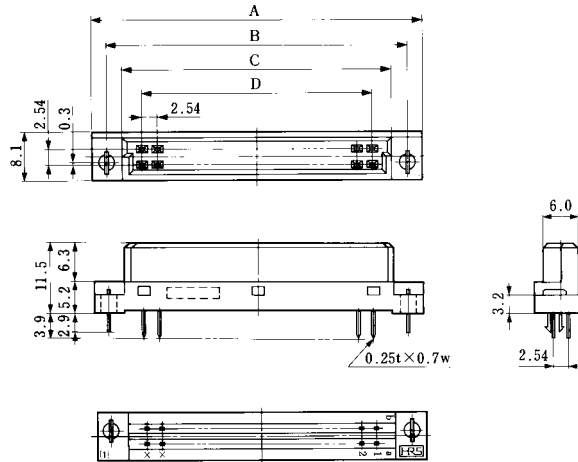
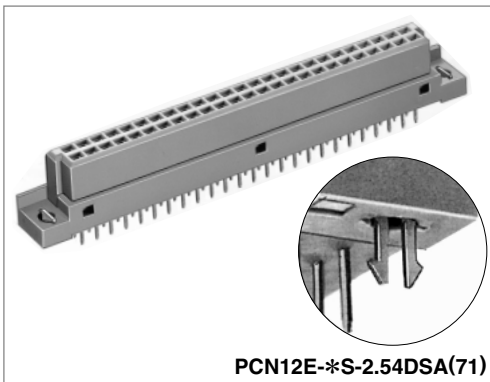


Unit:mm

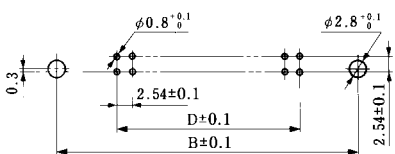
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN12- 10S-2.54DSA(71)	CL583-2055-1-71	10	26.42	21.42	16.42	10.16	
PCN12- 16S-2.54DSA(71)	CL583-2056-4-71	16	34.04	29.04	24.04	17.78	
PCN12- 20S-2.54DSA(71)	CL583-2057-7-71	20	39.12	34.12	29.12	22.86	
PCN12- 24S-2.54DSA(71)	CL583-2106-0-71	24	44.2	39.2	34.2	27.94	
PCN12- 28S-2.54DSA(71)	CL583-2088-0-71	28	49.28	44.28	39.28	33.02	
PCN12- 32S-2.54DSA(71)	CL583-2058-0-71	32	54.36	49.36	44.36	38.1	YES
PCN12- 44S-2.54DSA(71)	CL583-2059-2-71	44	69.6	64.6	59.6	53.34	
PCN12- 50S-2.54DSA(71)	CL583-2060-1-71	50	77.22	72.22	67.22	60.96	
PCN12- 64S-2.54DSA(71)	CL583-2061-4-71	64	95	90	85	78.74	
PCN12- 90S-2.54DSA(71)	CL583-2062-7-71	90	128.02	123.02	118.02	111.76	
PCN12-100S-2.54DSA(71)	CL583-2063-0-71	100	140.72	135.72	130.72	124.46	

■Socket: Straight Type

●With Board prefixed lock pin attached



◆PCB mounting pattern



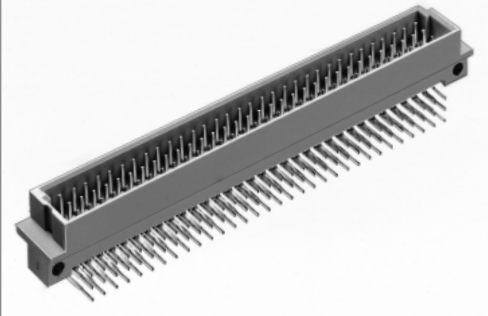
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN12E- 10S-2.54DSA(71)	CL583-2064-2-71	10	26.42	21.42	16.42	10.16	
PCN12E- 20S-2.54DSA(71)	CL583-2066-8-71	20	39.12	34.12	29.12	22.86	
PCN12E- 32S-2.54DSA(71)	CL583-2067-0-71	32	54.36	49.36	44.36	38.1	
PCN12E- 44S-2.54DSA(71)	CL583-2068-3-71	44	69.6	64.6	59.6	53.34	
PCN12E- 50S-2.54DSA(71)	CL583-2069-6-71	50	77.22	72.22	67.22	60.96	YES
PCN12E- 64S-2.54DSA(71)	CL583-2070-5-71	64	95	90	85	78.74	
PCN12E- 90S-2.54DSA(71)	CL583-2071-8-71	90	128.02	123.02	118.02	111.76	
PCN12E-100S-2.54DSA(71)	CL583-2072-0-71	100	140.72	135.72	130.72	124.46	

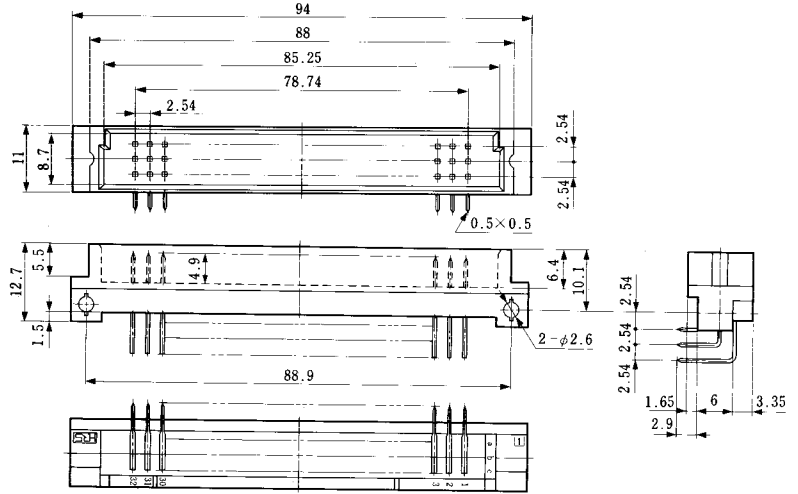


### ■ Plug: 3-row Right Angle Type (DIN standard type C)

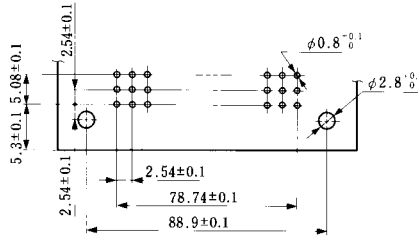
PCN12-96P-2.54DS(71)  
CL583-2090-2-71



RoHS Compliant

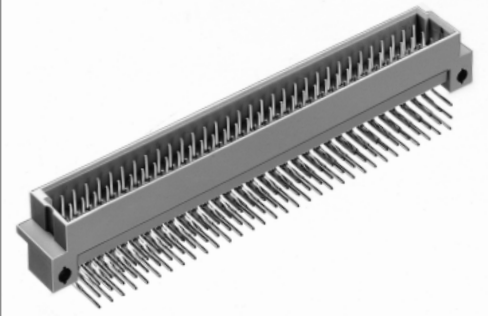


### ◆ PCB mounting pattern

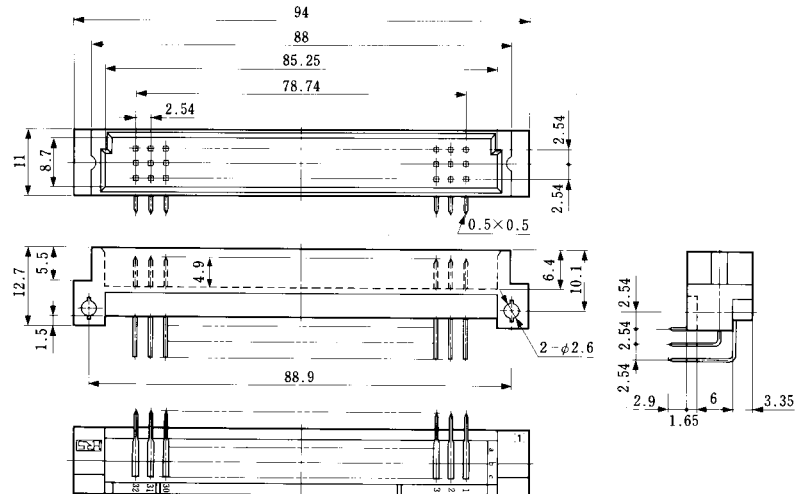


### ■ Plug: 3-row Right Angle Type

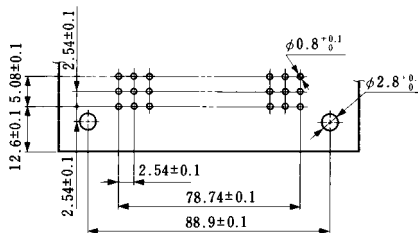
PCN12A-96P-2.54DS(71)  
CL583-2091-5-71



RoHS Compliant



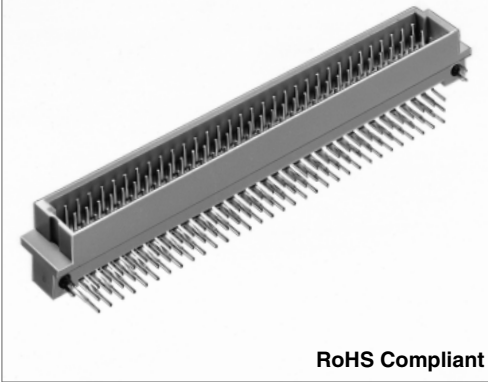
### ◆ PCB mounting pattern



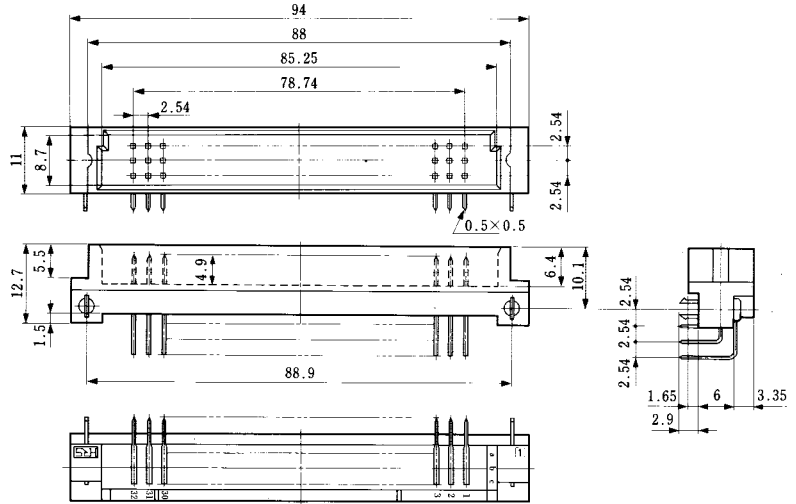
### ■Plug: 3-row Right Angle Type (Type C)

●With Board prefixed lock pin

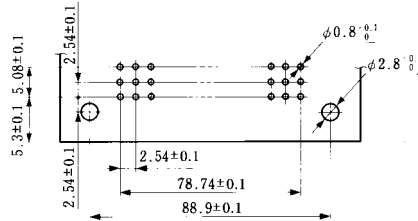
PCN12E-96P-2.54DS(71)  
CL583-2092-8-71



RoHS Compliant



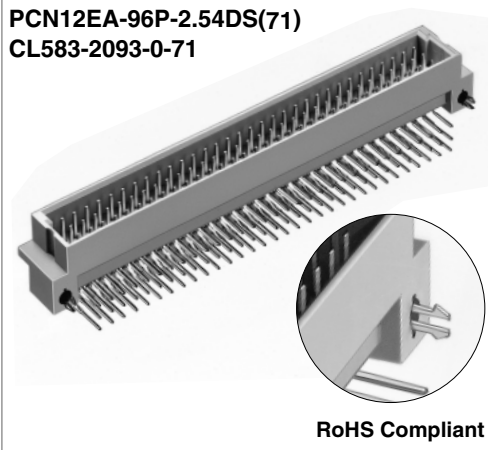
### ◆PCB mounting pattern



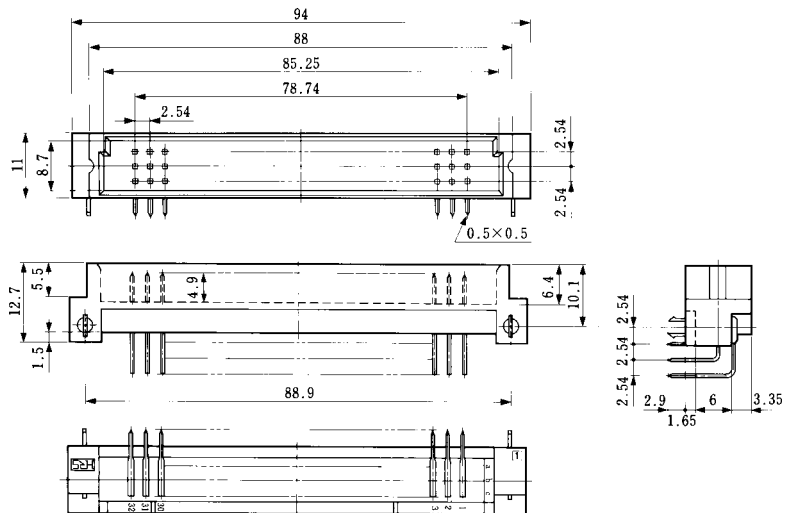
### ■Plug: 3-row Right Angle Type

●With Board prefixed lock pin

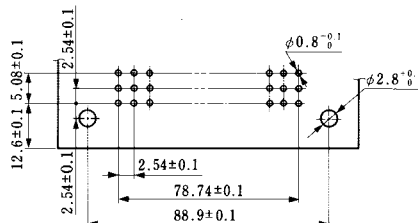
PCN12EA-96P-2.54DS(71)  
CL583-2093-0-71



RoHS Compliant

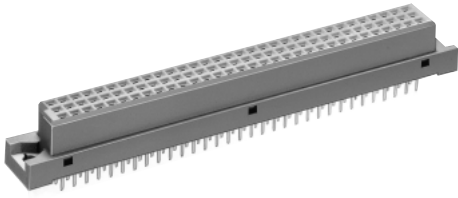


### ◆PCB mounting pattern

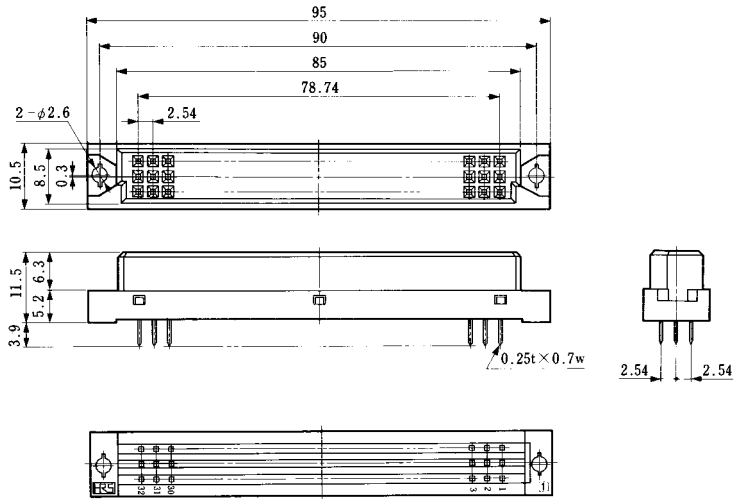


### ■Socket: 3-row Straight Type

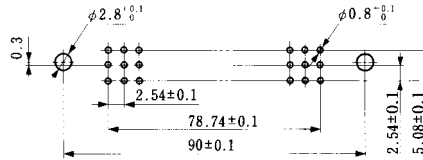
PCN12-96S-2.54DSA(71)  
CL583-2096-9-71



RoHS Compliant

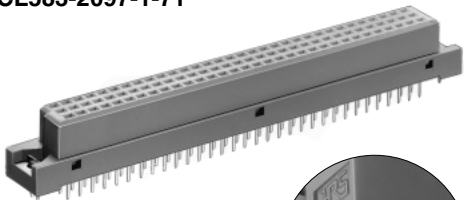


### ◆PCB mounting pattern

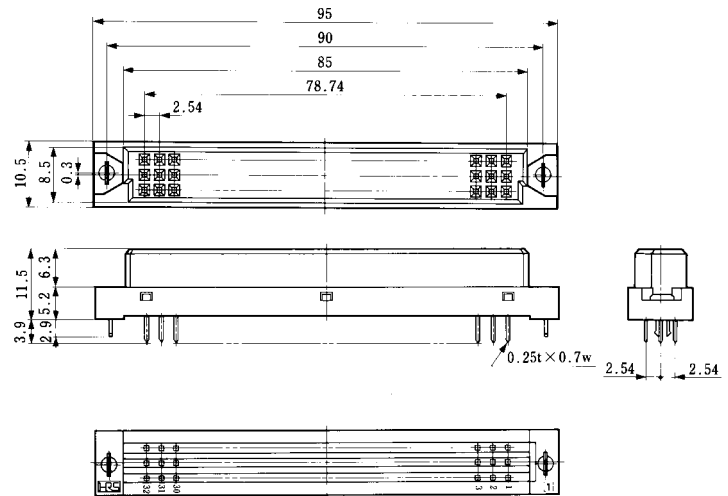


### ■Socket: 3-row Straight Type

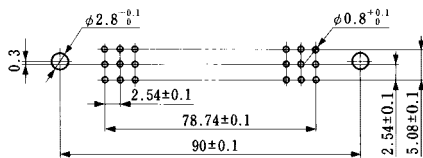
PCN12E-96S-2.54DSA(71)  
CL583-2097-1-71



RoHS Compliant



### ◆PCB mounting pattern

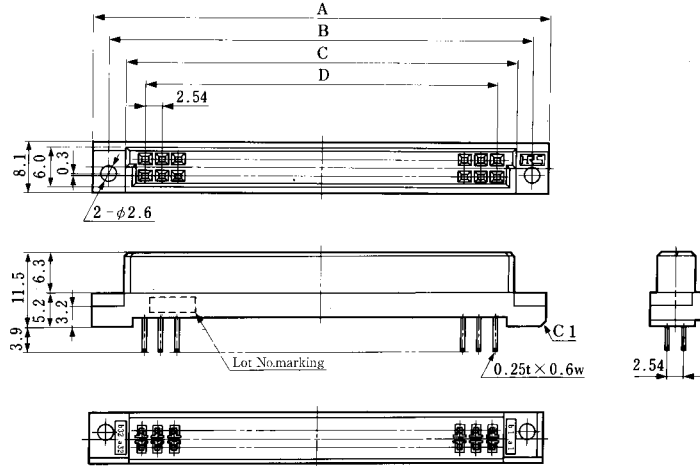


PCN13 Series

■Socket: 2-row Straight Type



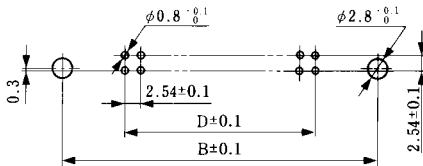
PCN13-*\*S-2.54*DSA(71)



Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN13- 16S-2.54DSA(71)	CL583-3001-8-71	16	34.04	29.04	24.04	17.78	YES
PCN13- 20S-2.54DSA(71)	CL583-3002-0-71	20	39.12	34.12	29.12	22.86	
PCN13- 32S-2.54DSA(71)	CL583-3004-6-71	32	54.36	49.36	44.36	38.1	
PCN13- 44S-2.54DSA(71)	CL583-3005-9-71	44	69.6	64.6	59.6	53.34	
PCN13- 50S-2.54DSA(71)	CL583-3006-1-71	50	77.22	72.22	67.22	60.96	
PCN13- 64S-2.54DSA(71)	CL583-3007-4-71	64	95	90	85	78.74	
PCN13- 90S-2.54DSA(71)	CL583-3008-7-71	90	128.02	123.02	118.02	111.76	
PCN13-100S-2.54DSA(71)	CL583-3009-0-71	100	140.72	135.72	130.72	124.46	

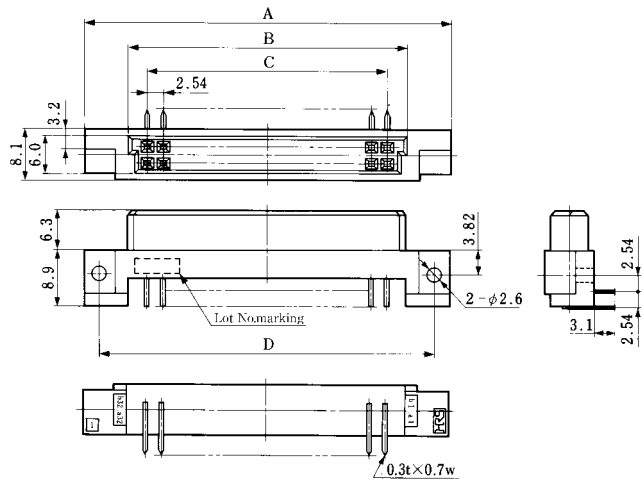
◆PCB mounting pattern



■Socket: 2-row Right Angle Type



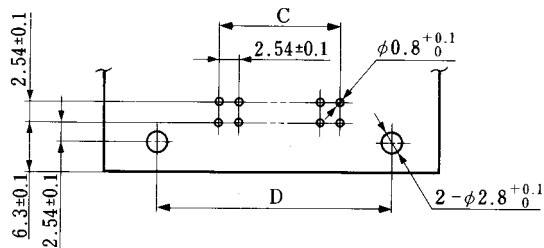
PCN13-*\*S-2.54*DS(71)



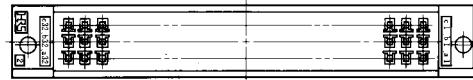
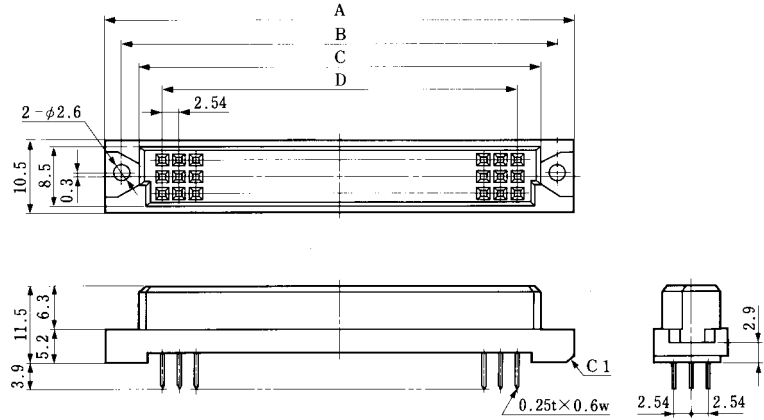
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN13- 16S-2.54DS(71)	CL583-3031-9-71	16	38.02	24.04	17.78	33.02	YES
PCN13- 20S-2.54DS(71)	CL583-3032-1-71	20	43.1	29.12	22.86	38.1	
PCN13- 30S-2.54DS(71)	CL583-3033-4-71	30	55.8	41.82	35.56	50.8	
PCN13- 32S-2.54DS(71)	CL583-3034-7-71	32	58.34	44.36	38.1	53.34	
PCN13- 44S-2.54DS(71)	CL583-3035-0-71	44	73.58	59.6	53.34	68.58	
PCN13- 50S-2.54DS(71)	CL583-3036-2-71	50	81.2	67.22	60.96	76.2	
PCN13- 64S-2.54DS(71)	CL583-3037-5-71	64	98.98	85	78.74	93.98	
PCN13-100S-2.54DS(71)	CL583-3039-0-71	100	144.7	130.72	124.46	139.7	

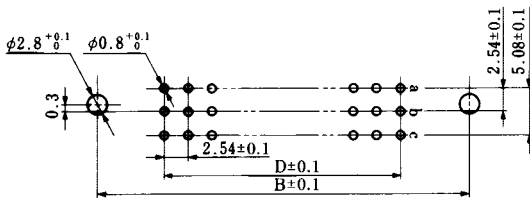
◆PCB mounting pattern



### ■Socket: 3-row Straight Type

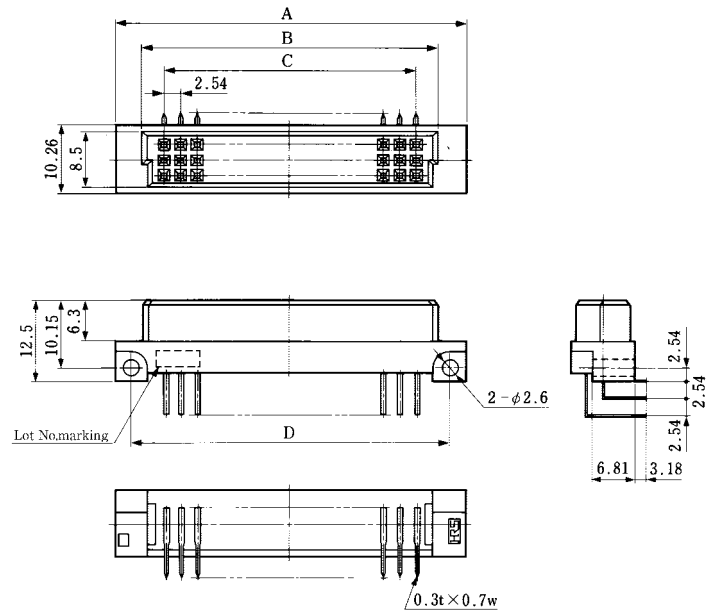


### ◆PCB mounting pattern

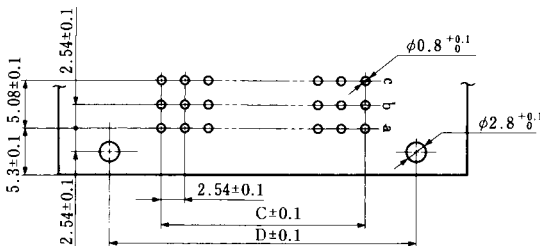


Unit:mm							
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN13-48S-2.54DSA(71)	CL583-3010-9-71	48	54.36	50	44.36	38.1	YES
PCN13-96S-2.54DSA(71)	CL583-3011-1-71	96	95	90	85	78.74	

### ■Socket: 3-row Right Angle Type



### ◆PCB mounting pattern



Unit:mm							
Part Number	CL No.	Number of Contacts	A	B	C	D	RoHS
PCN13-48S-2.54DS(71)	CL583-3040-0-71	48	53.36	44.36	38.1	48.26	YES
PCN13-96S-2.54DS(71)	CL583-3041-2-71	96	94	85	78.74	88.9	

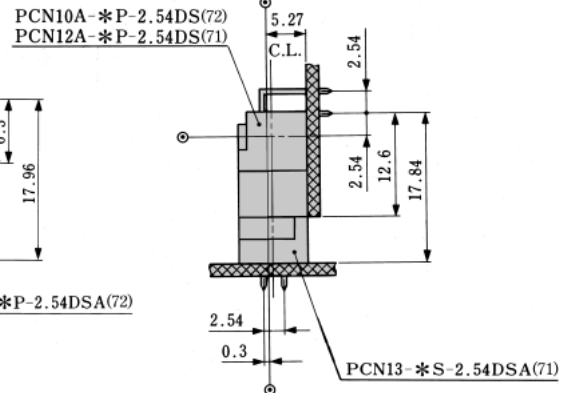
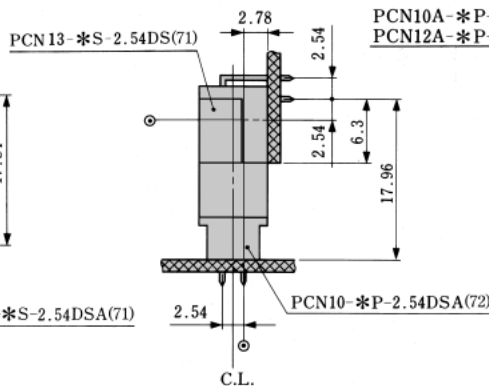
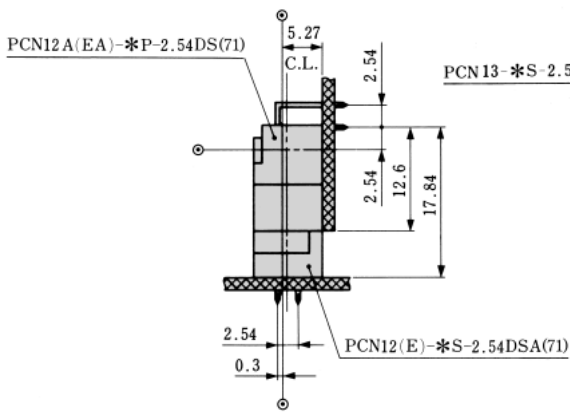
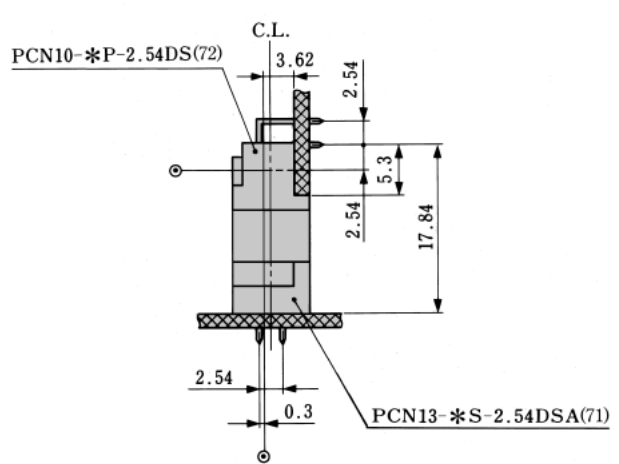
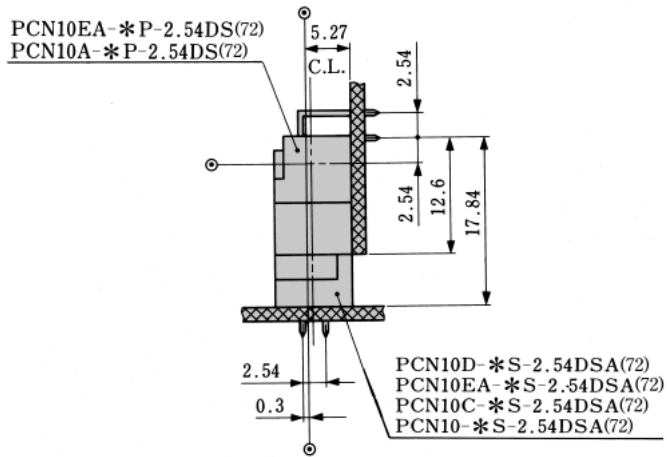
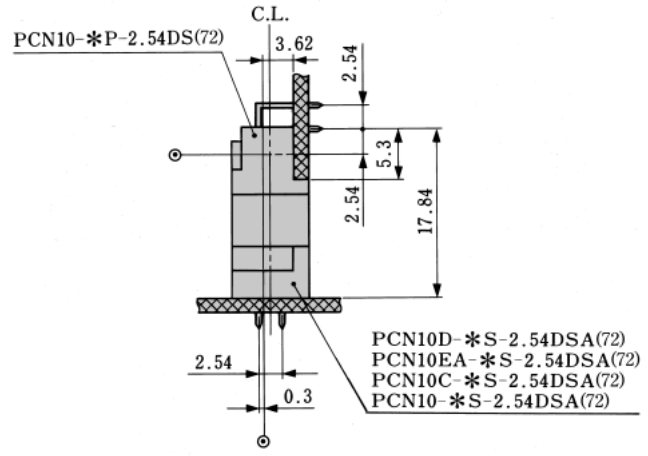
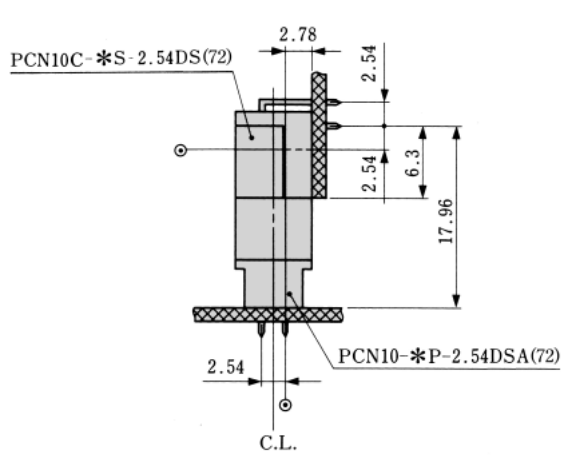
# Application Pattern

## Vertical Connection

### 2-row type

● : Mounting hole center

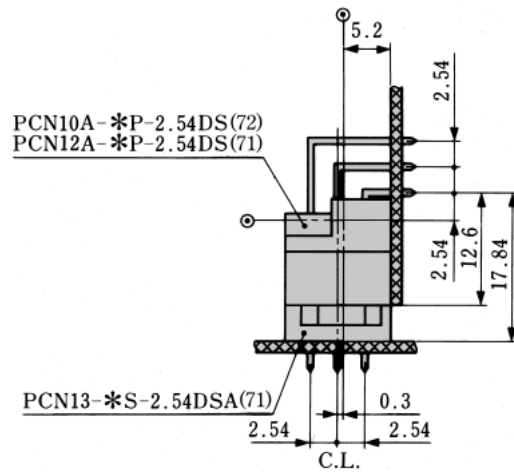
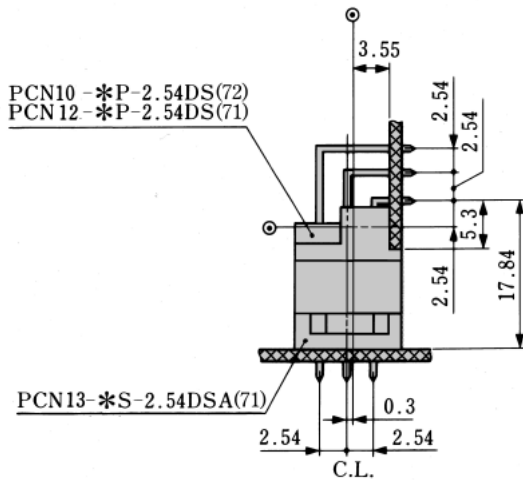
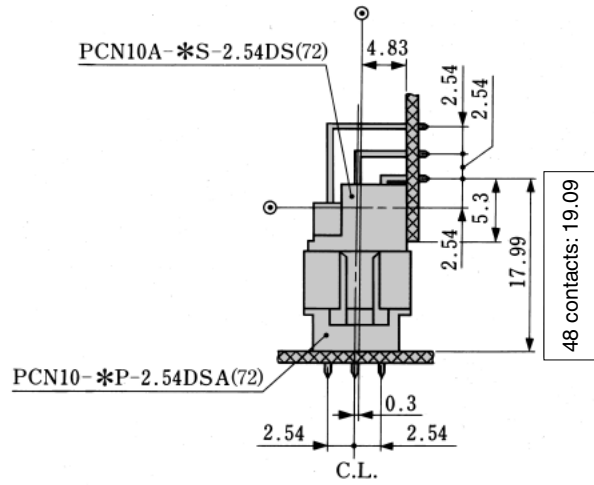
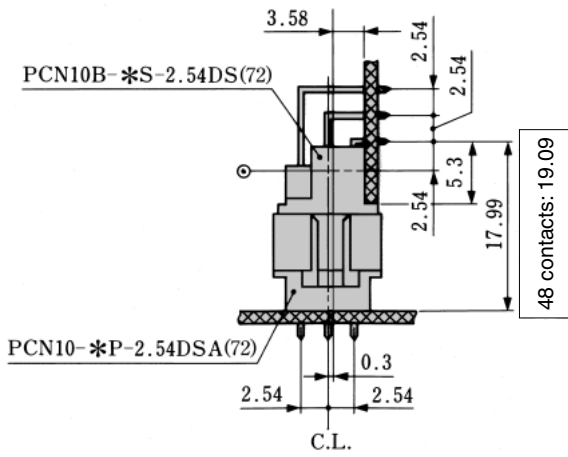
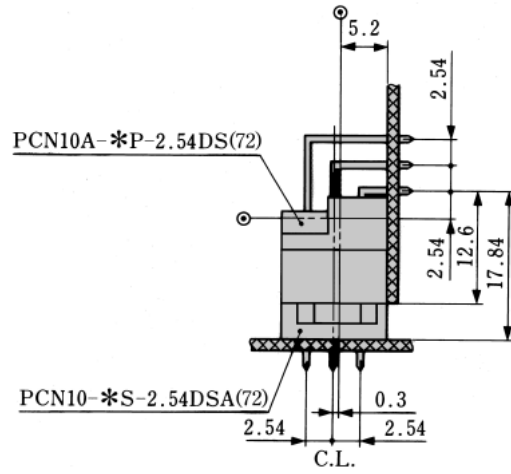
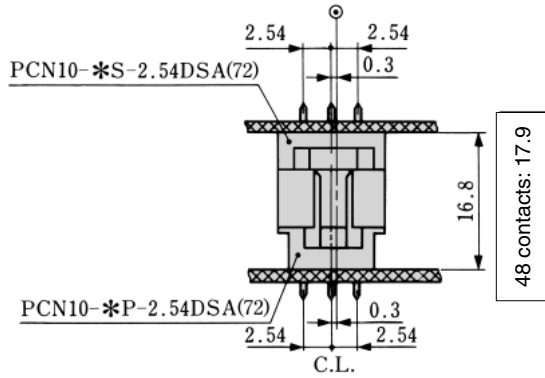
C.L. : Center line



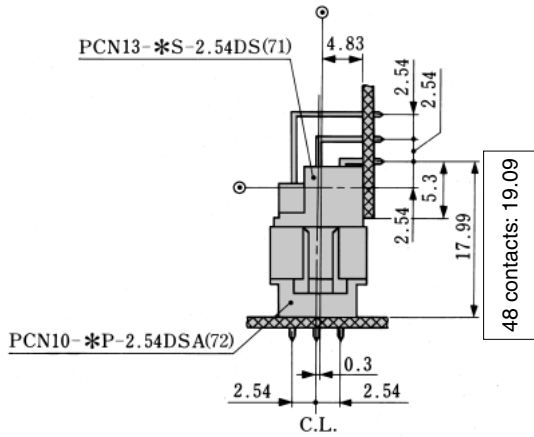
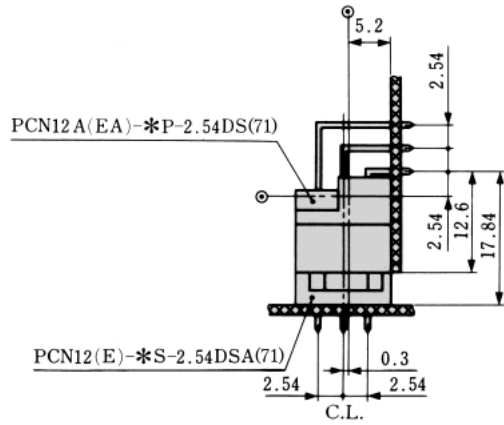
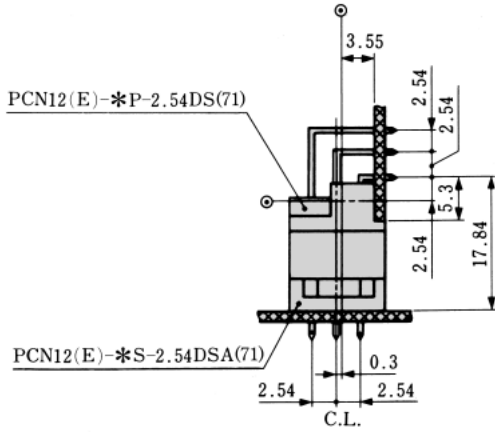
Dec.1.2018 Copyright 2018 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

● 3-row type

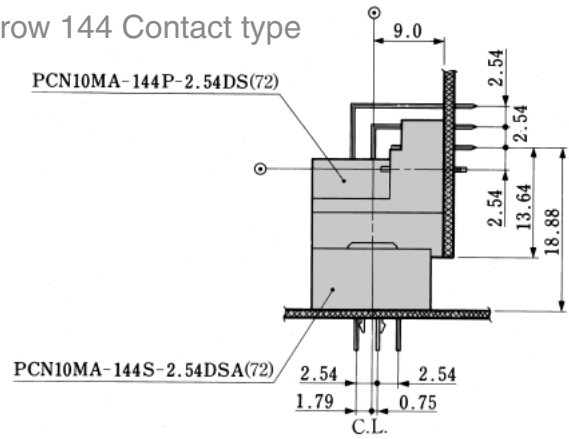
● : Mounting hole center  
 C.L. : Center line



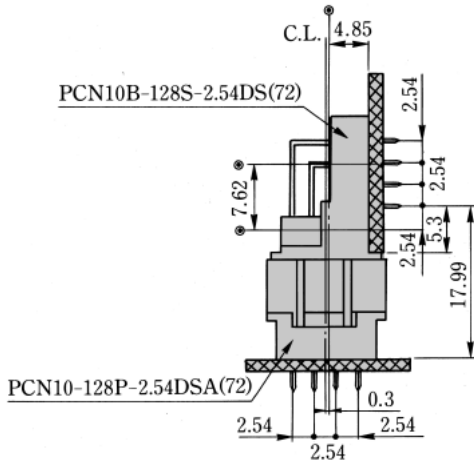
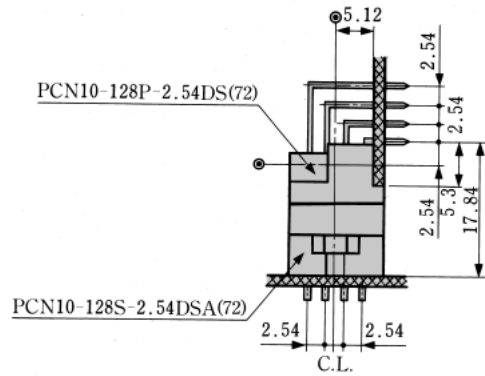
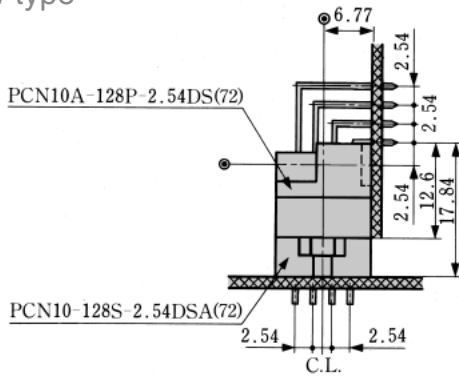
● : Mounting hole center  
C.L. : Center line



● 3-row 144 Contact type



● 4-row type





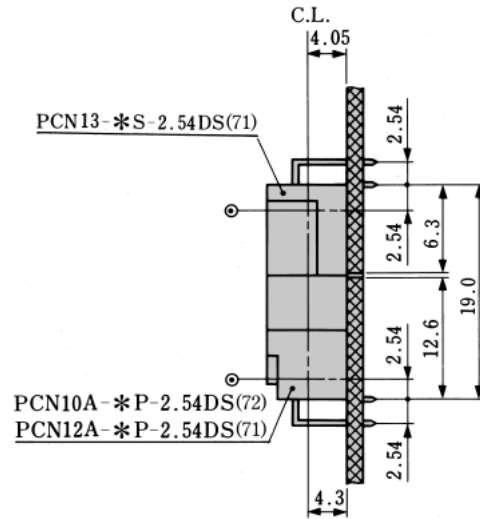
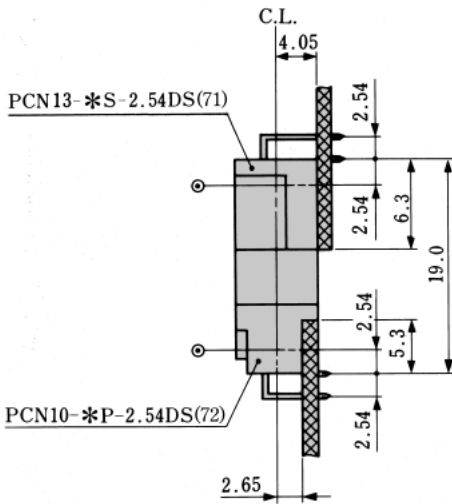
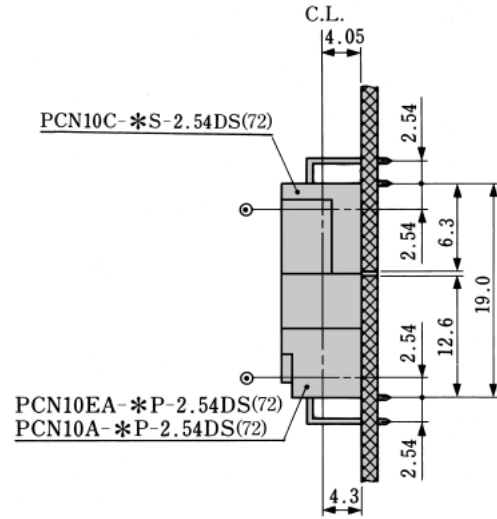
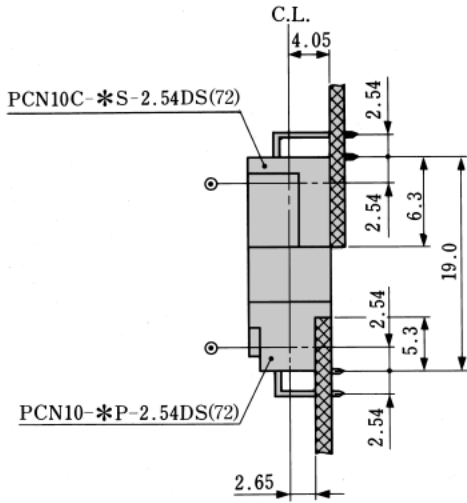
# ◆ Application Pattern

## ● Horizontal Connection

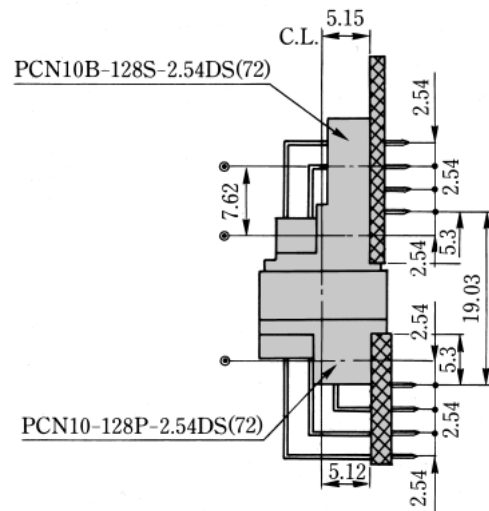
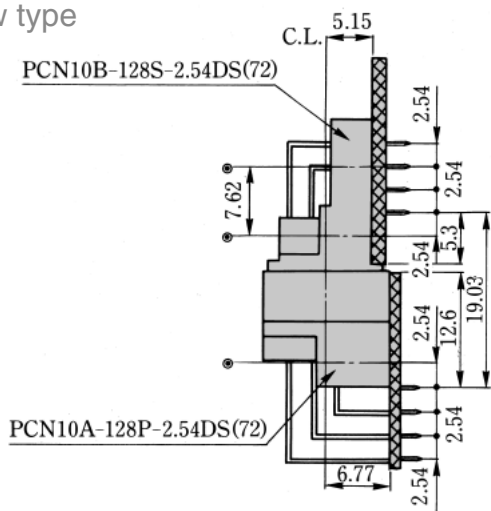
### ● 2-row type

● : Mounting hole center

C.L. : Center line

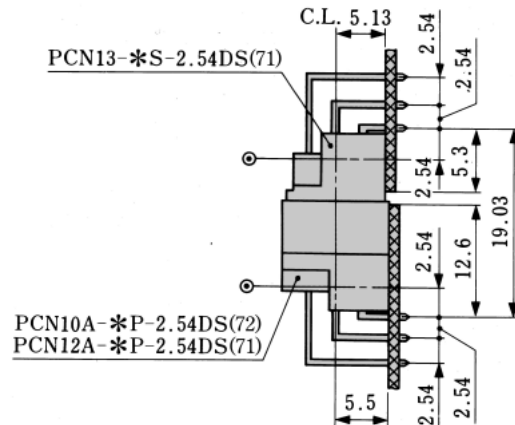
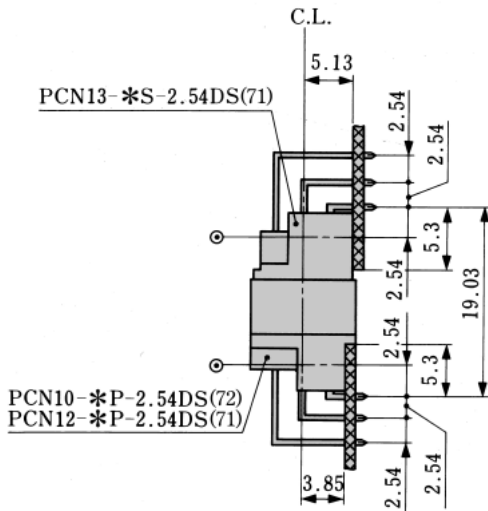
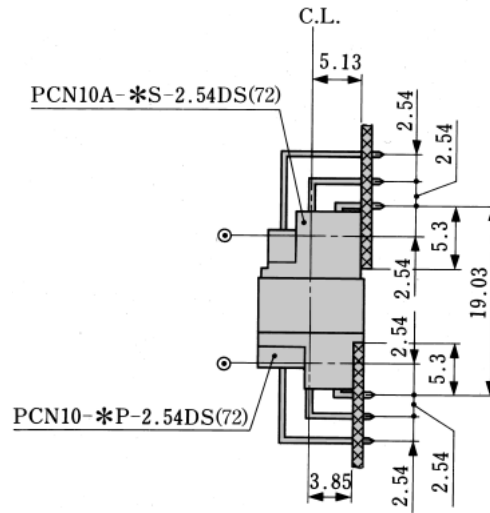
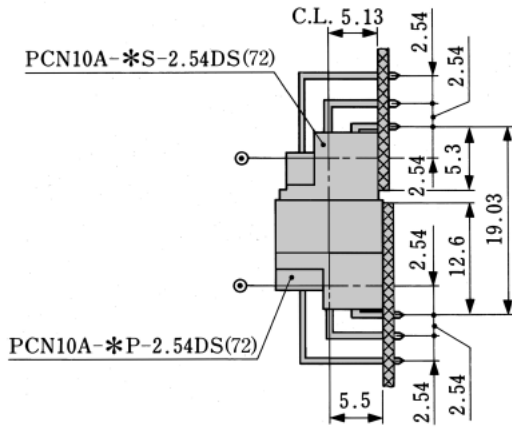
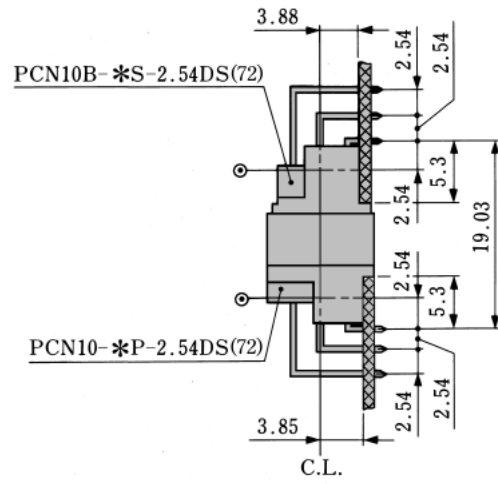
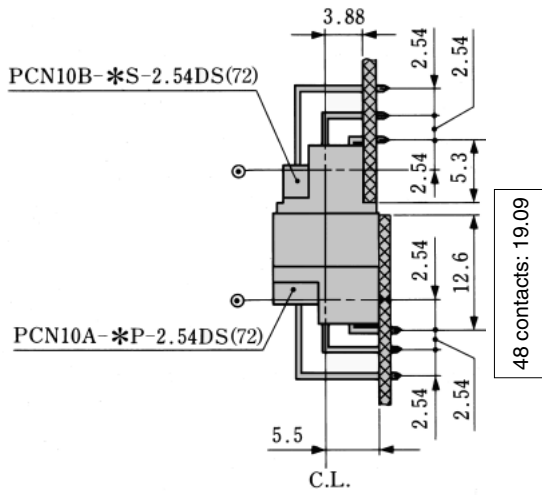


### ● 4-row type



● 3-row type

● : Mounting hole center  
 C.L. : Center line

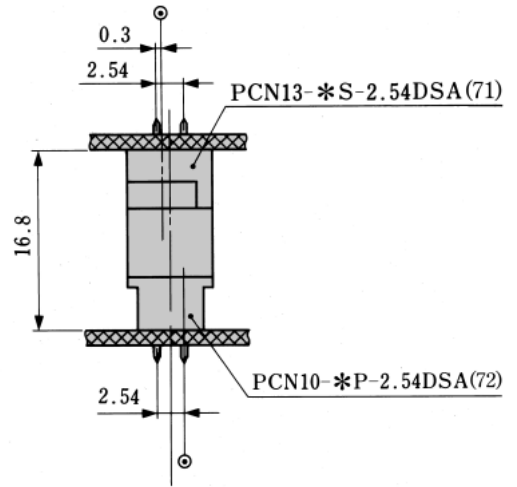
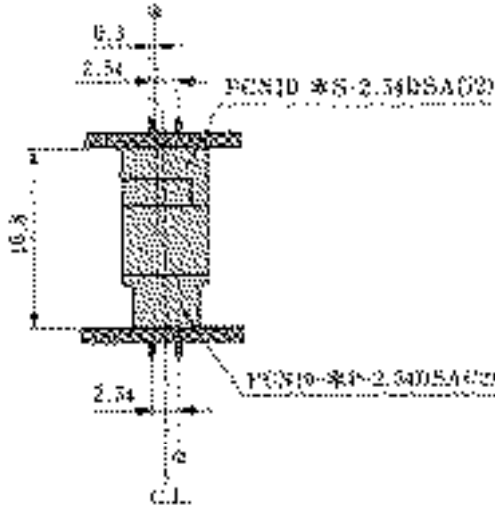


## ◆ Application Pattern

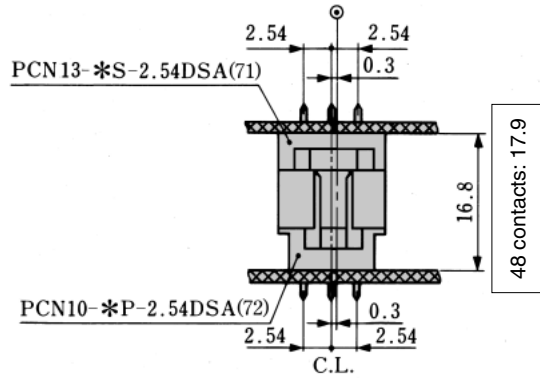
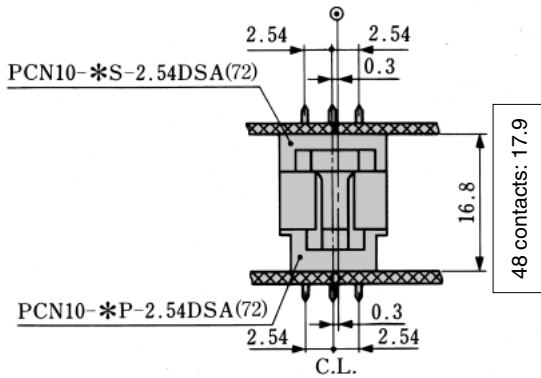
### ● Horizontal Connection

#### ● 2-row type

● : Mounting hole center  
C.L. : Center line



#### ● 3-row type



#### ● 4-row type

