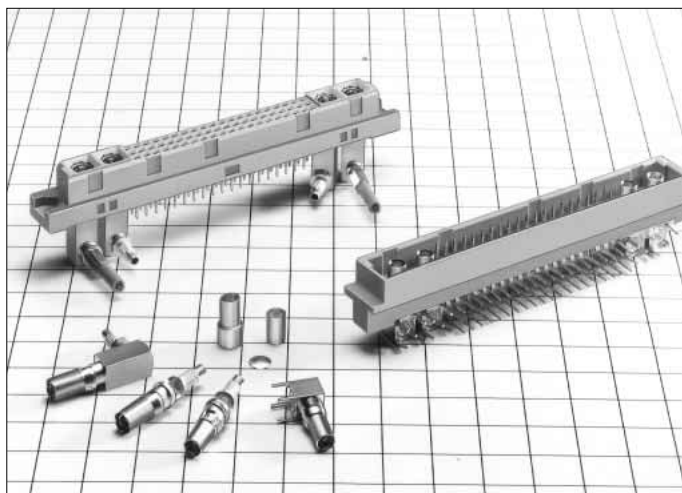


PCN10F Series (Product Compliant with DIN Standard: Coaxial and High Current Contact Composite Type)



■Features

1. Compliant with the DIN standard

The coaxial connector complies with DIN41612 standard.

2. Variation in number of contacts

Coaxial and high current contact insertion holes 2, 4, 6, and 8 contacts are available.

3. Reliable contact construction

PCN10F series is constructed with high reliable double-sided 2 point contacts.

4. Broad applications

The receptacle is provided with solder type and solderless connection type. The contact type is also provided with straight, right angle and wrapping types. The high current contact is provided with 10A and 20A types.

5. High Conformity

High frequency characteristics are 1 GHz and V.S.W.R1.2 maximum.

■Product Specifications

Rating	Current rating: 2A Voltage rating: 300V AC	Operating Temperature Range: -30 to +85°C (Note 1) Operating Relative Humidity: 40 to 80%	Storage Temperature Range: -10 to +60°C (Note 2) Operating Humidity Range: 40 to 70% (Note 2)
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Item	Specification	Condition
1.Insulation Resistance	10 ⁹ M ohms	100V DC
2.Withstanding Voltage	No flashover or insulation breakdown.	1000V 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 ⁹ 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: 350°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.

■Applications

Measurement instrument, control equipment, exchange, etc.

■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

● Plug

PCN10F A - * P - 2.54 DS
① ② ③ ④ ⑤ ⑥

① Series name : PCN10F	④ P : Plug
② Blank : Board edge on mount type A : Board on mount type	⑤ Contact pitch : 2.54mm
③ Number of contacts : 24(8), 42(6), 60(4), 78(2) Values in parentheses indicates the number of coaxial connector and high current contact mounting holes.	⑥ Contact type : DS : Right angle type

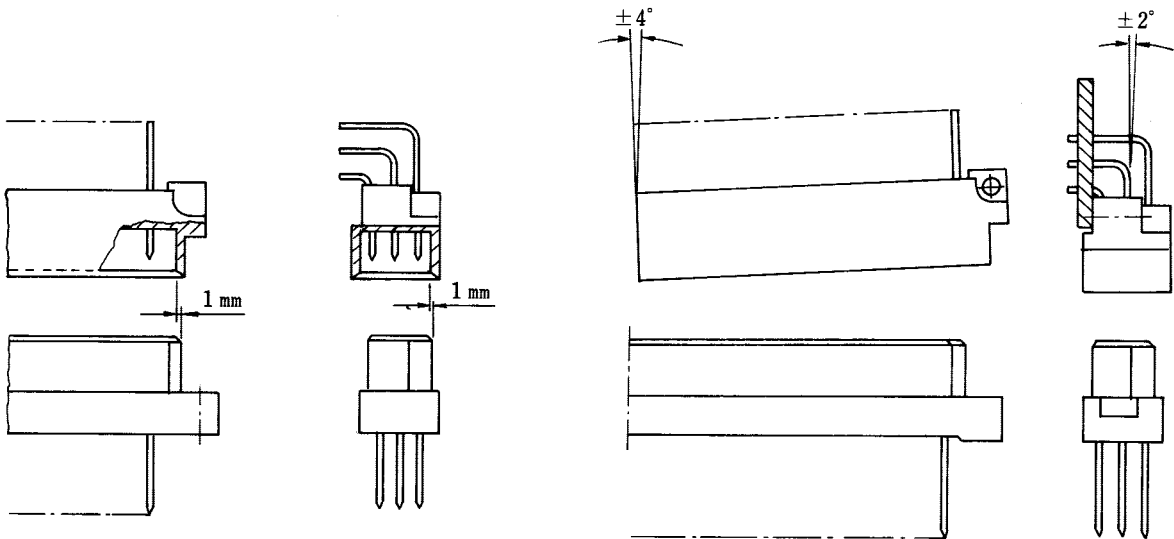
● Receptacle

PCN 10F A - * S - 2.54 DSA
① ② ③ ④ ⑤ ⑥ ⑦

① Series name : PCN	④ Number of contacts : 24(8), 42(6), 60(4), 78(2) Values in parentheses indicates the number of coaxial connector and high current contact mounting holes.
② Series No. : 10F (Soldering type) 11F (Solderless connection type)	⑤ S : Receptacle
③ Contact type: Straight Blank : Coaxial cable connection type A : Coaxial connector through hole type Contact type: Right angle A : Board on mount type B : Board edge on mount type	⑥ Contact pitch : 2.54mm
	⑦ Contact type PCN10F DS : right angle type DSA : Straight type WA : Wrapping type (0.5tx0.7W) WB : Wrapping type (0.5tx0.5W) PCN11F PFB-2 : Short press fit type WB-2 : Wrapping press fit type

◆ DIN Connector Mating Condition

Please be sure to utilize the DIN connector of Hirose within the range as shown below.

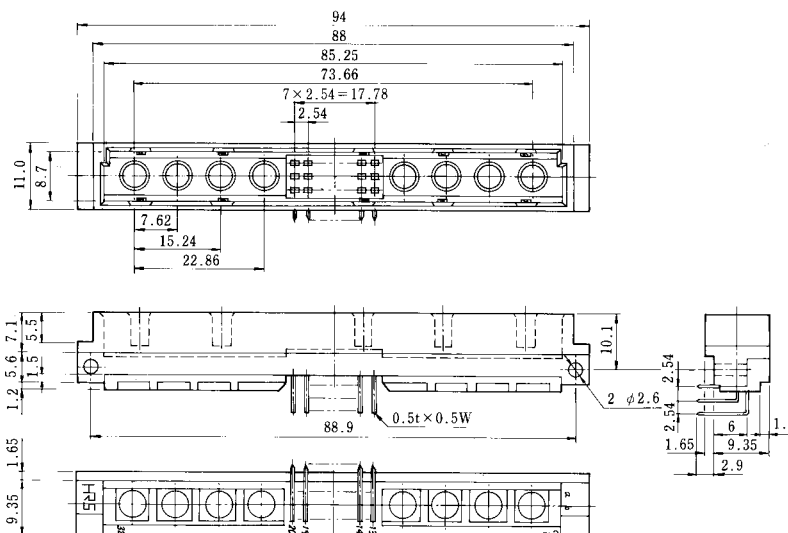


■ Plug Right Angle Type (Board edge on mount type)

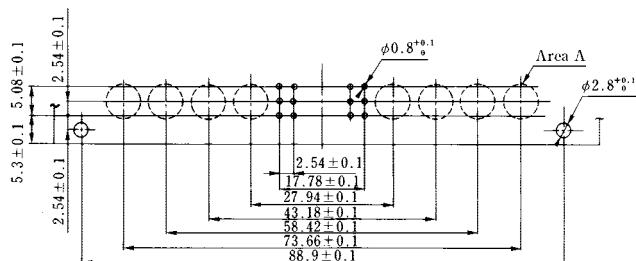
PCN10F-24P-2.54DS(72)
CL583-0341-0-72



RoHS Compliant

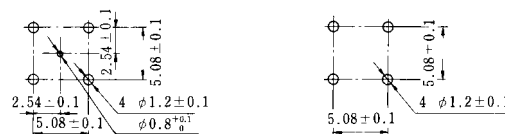


PCB mounting pattern



Area A dimensions

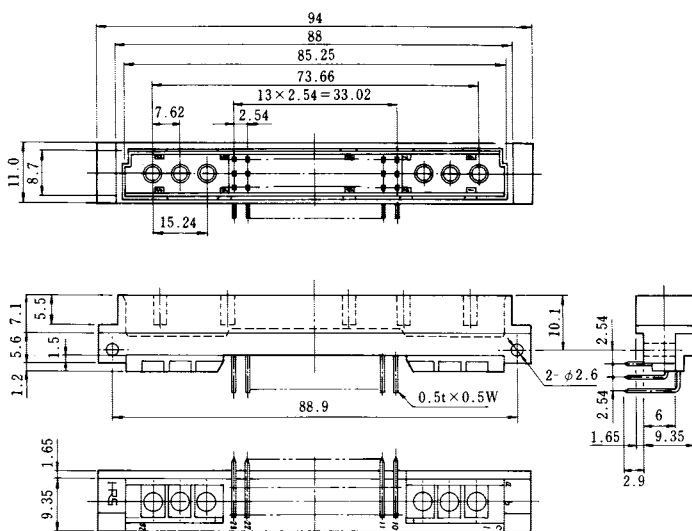
- Coaxial connector (PO51-LR-PC-1(40)) ●High current contact
(Power contact PC(72), PCA(72))



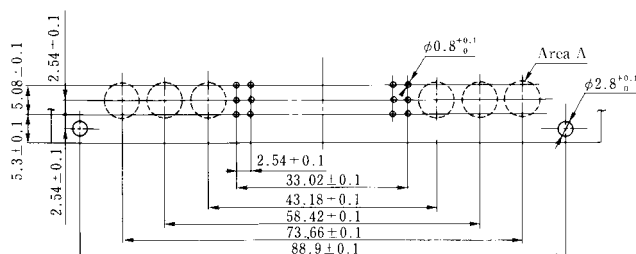
PCN10F-42P-2.54DS(72)
CL583-0145-1-72



RoHS Compliant

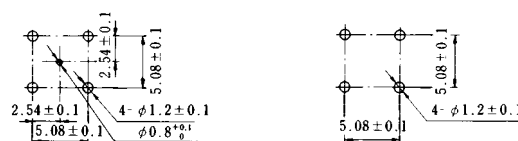


PCB mounting pattern



Area A dimensions

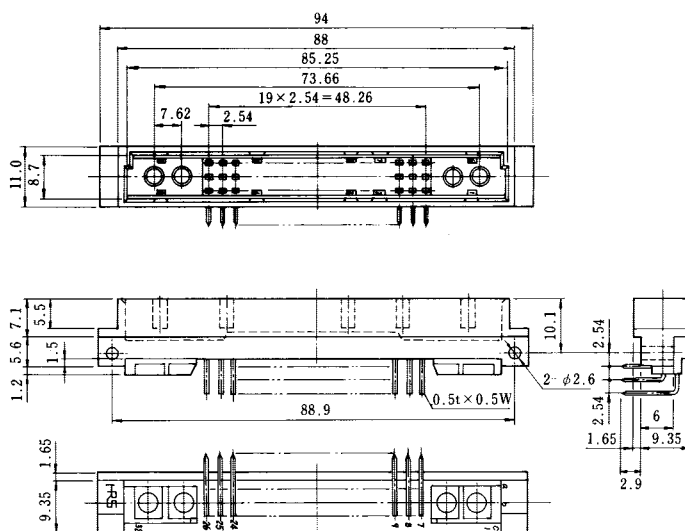
- Coaxial connector (PO51-LR-PC-1(40)) ●High current contact
(Power contact PC(72), PCA(72))



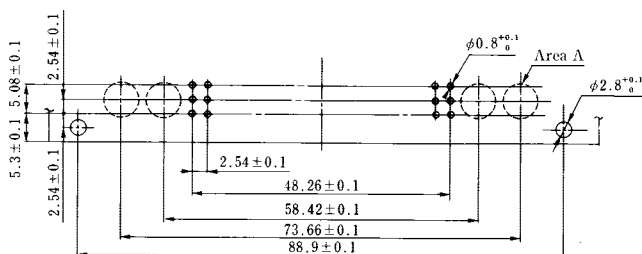
PCN10F-60P-2.54DS(72)
CL583-0303-0-72



RoHS Compliant

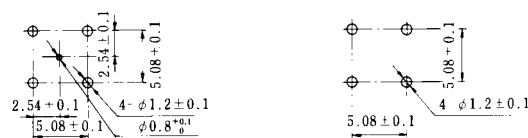


◆PCB mounting pattern



◆Area A dimensions

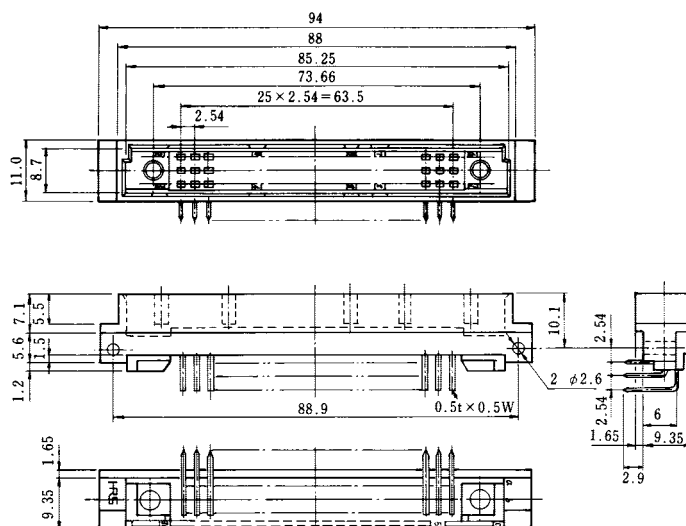
- Coaxial connector (PO51-LR-PC-1(40))
- High current contact (Power contact PC(72), PCA(72))



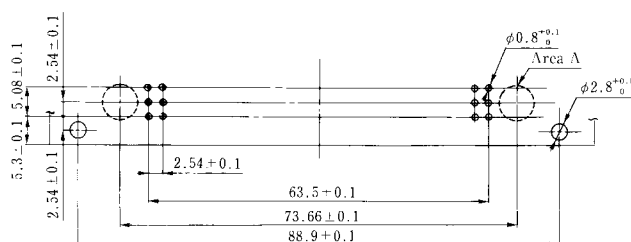
PCN10F-78P-2.54DS(72)
CL583-0321-2-72



RoHS Compliant

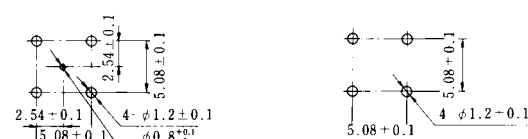


◆PCB mounting pattern



◆Area A dimensions

- Coaxial connector (PO51-LR-PC-1(40))
- High current contact (Power contact PC(72), PCA(72))



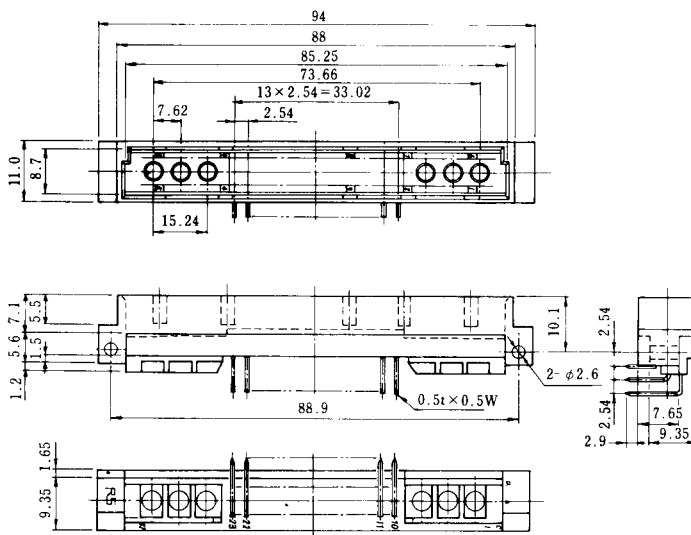
PCN Series Product Compliant to DIN 41612/IEC603-2 Standard

■ Plug Right Angle Type (Board on mount type)

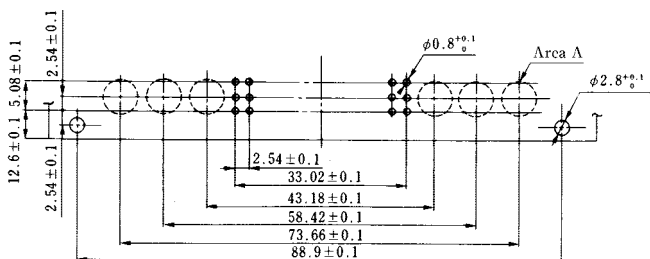
PCN10FA-42P-2.54DS(72)
CL583-0148-0-72



RoHS Compliant

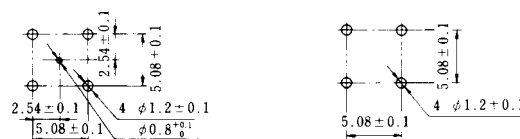


◆ PCB mounting pattern



◆ Area A dimensions

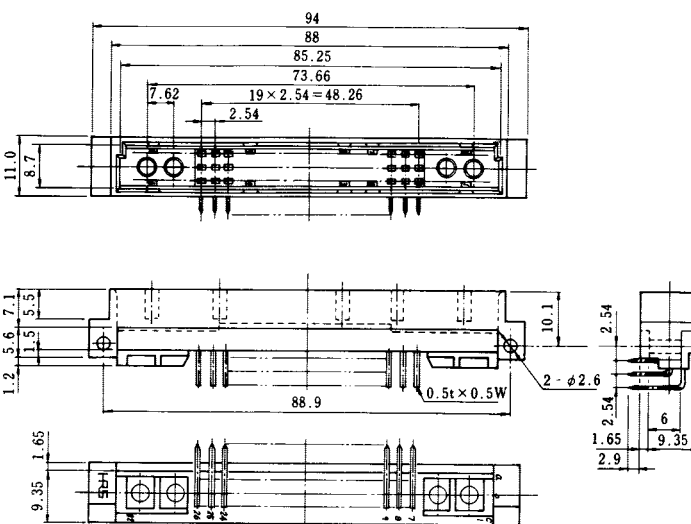
- Coaxial connector (PO51-LR-PC-A(40))
- High current contact (Power contact PC(72), PCA(72))



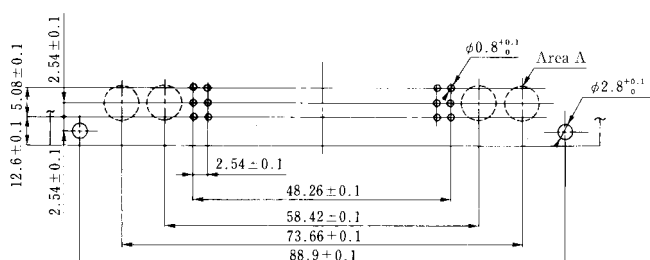
PCN10FA-60P-2.54DS(72)
CL583-0304-3-72



RoHS Compliant

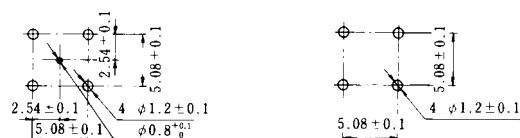


◆ PCB mounting pattern



◆ Area A dimensions

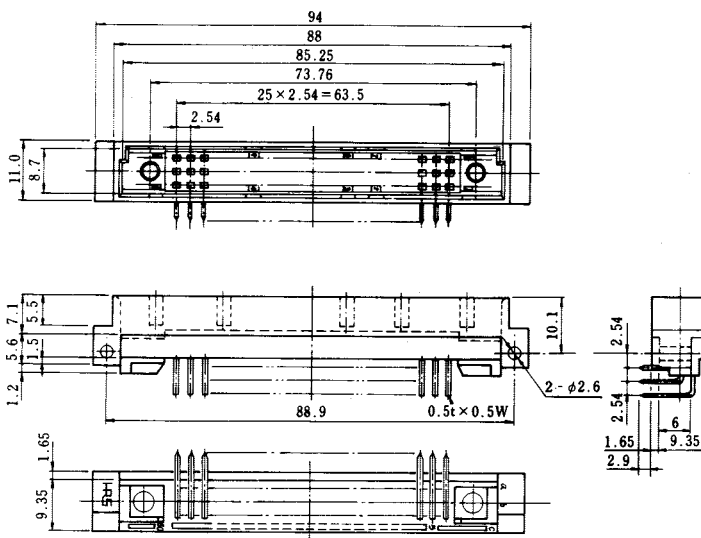
- Coaxial connector (PO51-LR-PC-A(40))
- High current contact (Power contact PC(72), PCA(72))



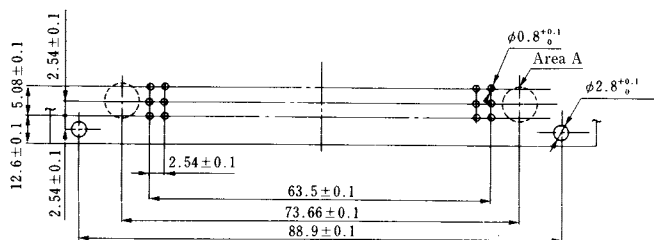
PCN10FA-78P-2.54DS(72)
CL583-0322-5-72



RoHS Compliant

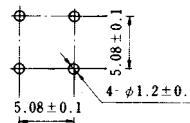
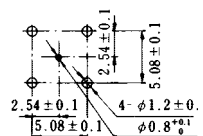


◆PCB mounting pattern



◆Area A dimensions

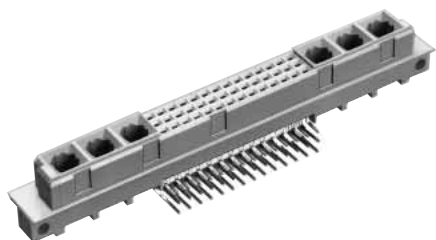
- Coaxial connector (PO51-LR-PC-1(40))
- High current contact (Power contact PC(72), PCA(72))



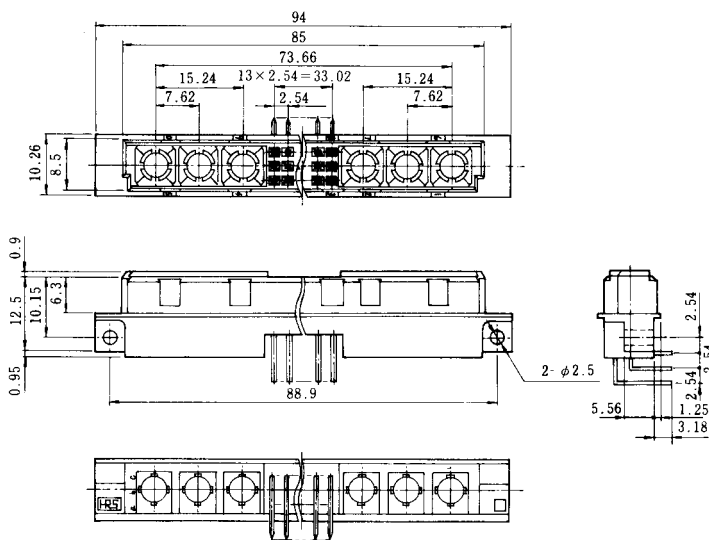
PCN Series Product Compliant to DIN41612/EC603-2 Standard

■Receptacle Right Angle Type (Board edge on mount type)

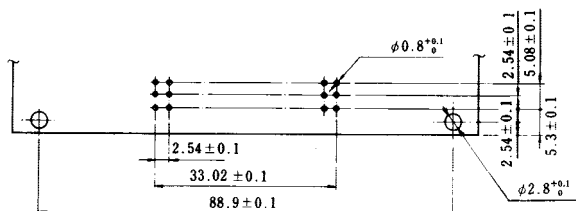
PCN10FB-42S-2.54DS(72)
CL583-0334-4-72



RoHS Compliant



◆PCB mounting pattern

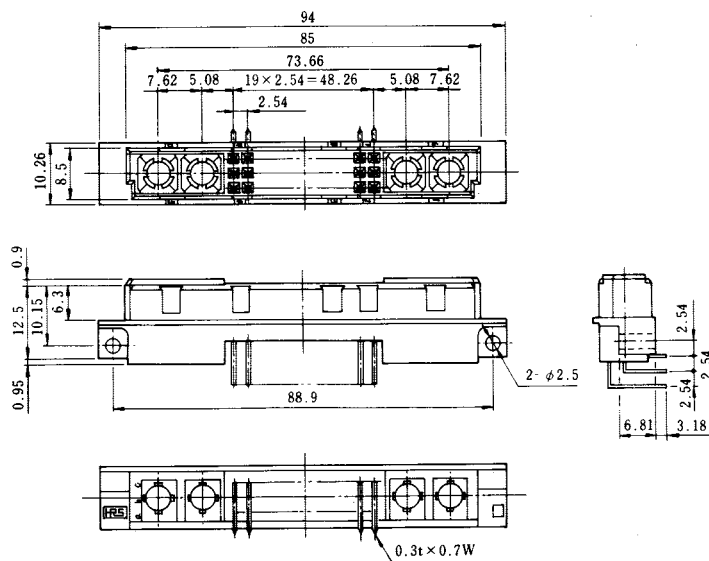


■Receptacle Right Angle Type (Board on mount type)

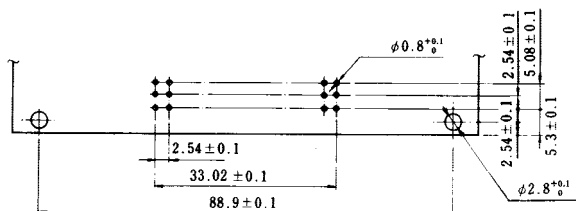
PCN10FA-60S-2.54DS(72)
CL583-0337-2-72



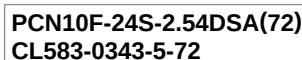
RoHS Compliant



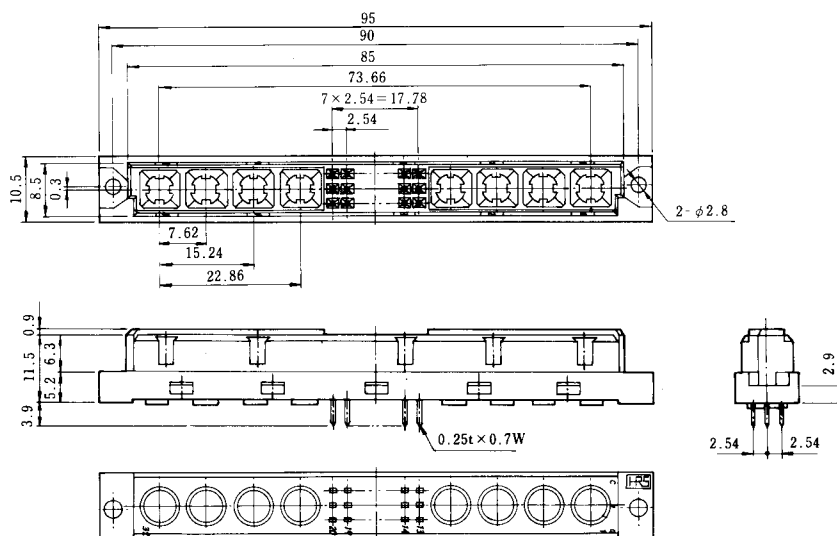
◆PCB mounting pattern



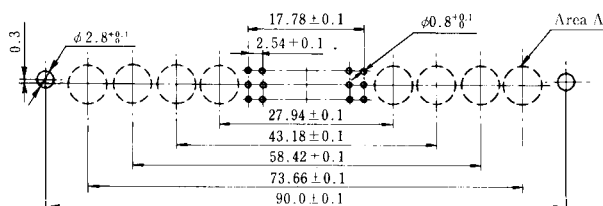
■ Receptacle Straight Type
(Coaxial connector/high current cable)



RoHS Compliant

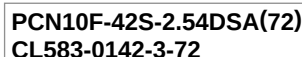
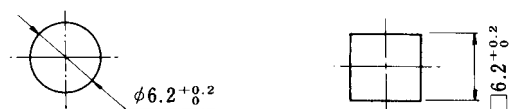


PCB mounting pattern

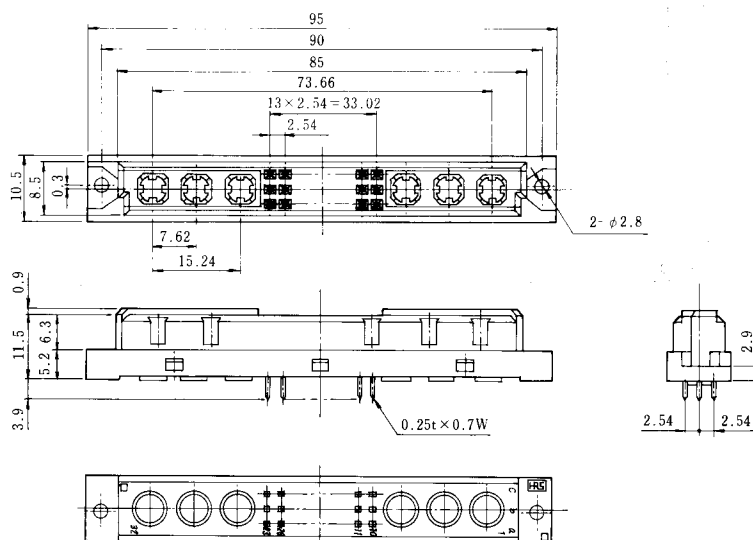


Area A dimensions

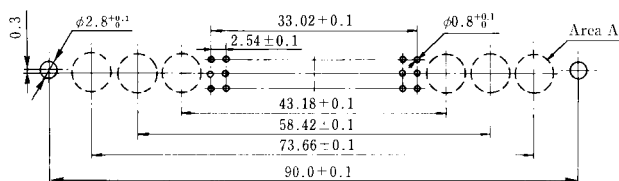
- Coaxial connector (PO51-P-1.5-1A(40))
High current contact
(Power contact 10S, 20S)
- Coaxial connector
(PO51-LP-1.5-A(40))



RoHS Compliant



PCB mounting pattern



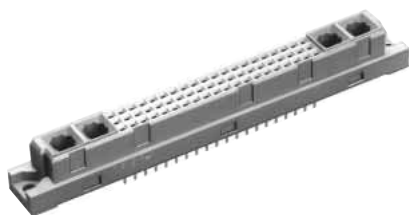
Area A dimensions

- Coaxial connector (PO51-P-1.5-1A(40))
High current contact
(Power contact 10S, 20S)
- Coaxial connector
(PO51-LP-1.5-A(40))

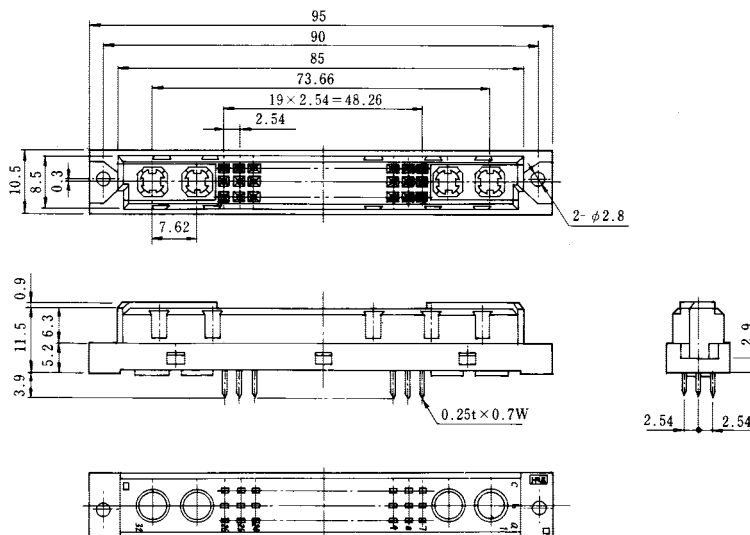


PCN Series Product Compliant to DIN41612/EC603-2 Standard

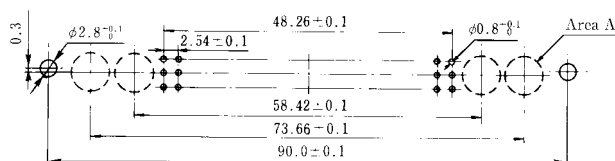
PCN10F-60S-2.54DSA(72)
 CL583-0305-6-72



RoHS Compliant



◆PCB mounting pattern

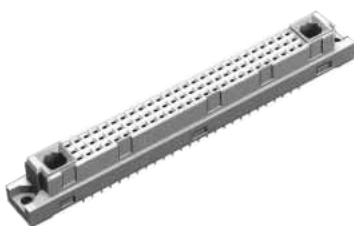


◆Area A dimensions

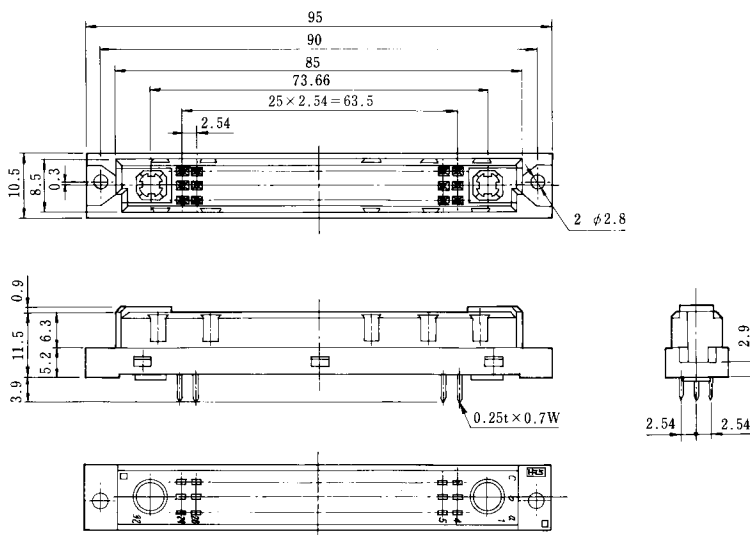
- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



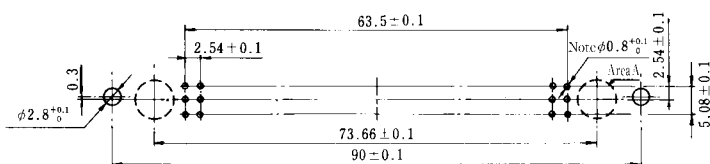
PCN10F-78S-2.54DSA(72)
 CL583-0323-8-72



RoHS Compliant



◆PCB mounting pattern



◆Area A dimensions

- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))

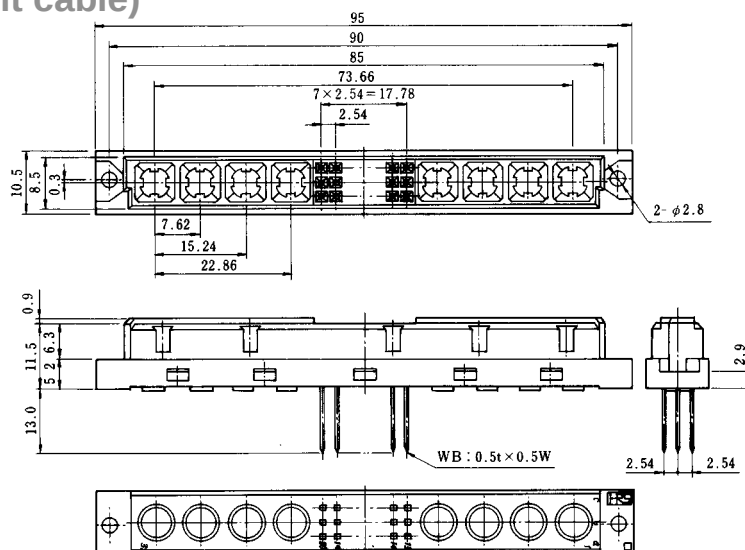


■ Receptacle Wrapping Type (Coaxial connector/high current cable)

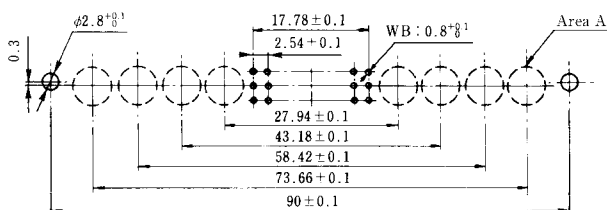
PCN10F-24S-2.54WB(72)
CL583-0345-0-72



RoHS Compliant

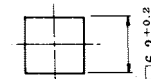
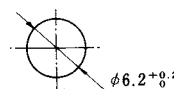


◆PCB mounting pattern



◆Area A dimensions

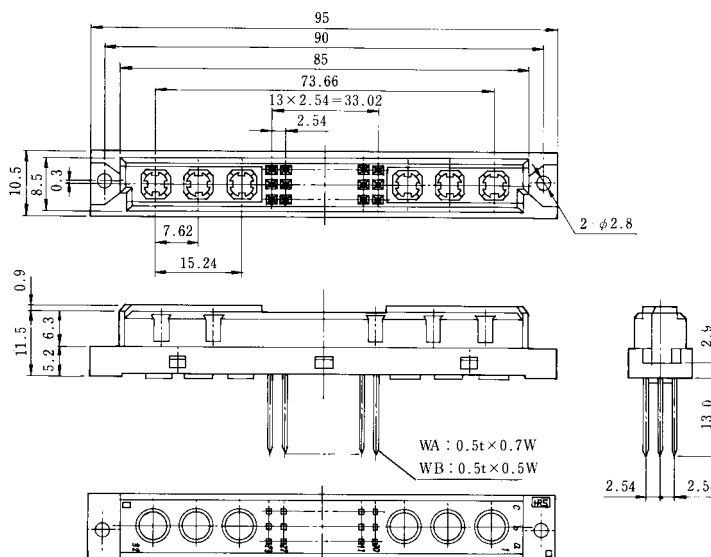
- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



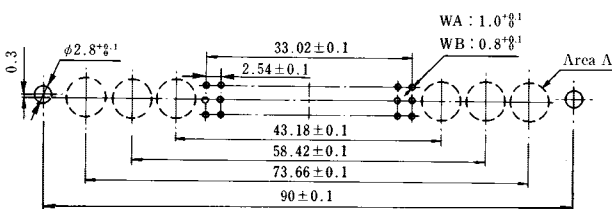
PCN10F-42S-2.54WA(72)
CL583-0151-4-72
PCN10F-42S-2.54WB(72)
CL583-0271-6-72



RoHS Compliant

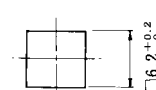
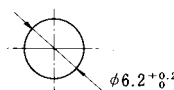


◆PCB mounting pattern



◆Area A dimensions

- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))

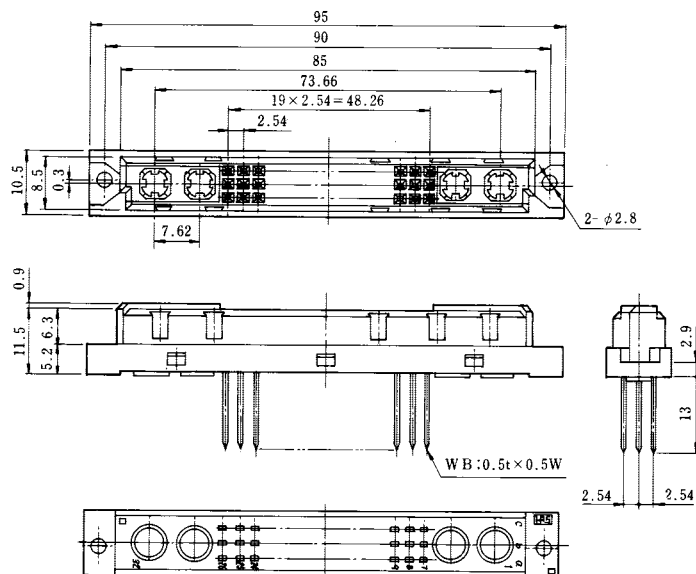


PCN Series Product Compliant to DIN41612/EC603-2 Standard

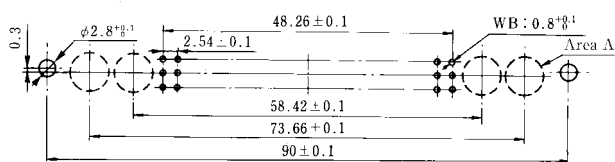
PCN10F-60S-2.54WB(72)
 CL583-0307-1-72



RoHS Compliant

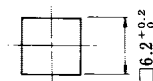
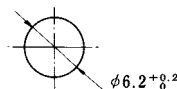


◆PCB mounting pattern



◆Area A dimensions

- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



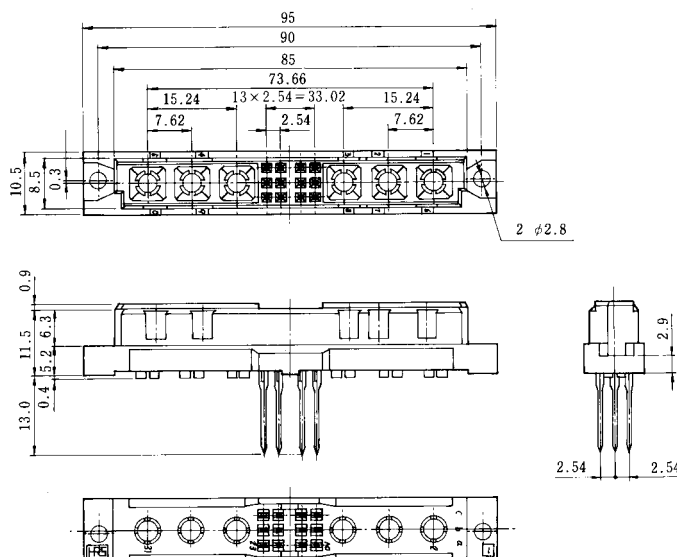
HRS A67

PCN Series Product Compliant to DIN41612/EC603-2 Standard

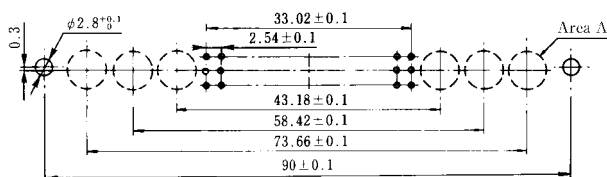
PCN11F-42S-2.54WB-2
CL583-1186-4



RoHS Compliant



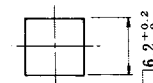
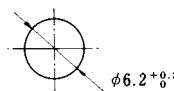
◆PCB mounting pattern



Applicable board: $t=2.4\text{mm}$
 Through-hole finish diameter: $\phi 0.9 \pm 0.08\text{mm}$
 (For details, refer to PCN11 series.)

◆Area A dimensions

- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



Technical drawing of a shaft-hub assembly. The main view is a longitudinal section showing the assembly of a shaft (right) and a hub (left). The shaft has a diameter of $\phi 45.6$ and a length of 10.55 . The hub has an outer diameter of $\phi 4.75$ and an inner bore diameter of $\phi 3.6$. The assembly is secured with a pin of diameter $\phi 1.7$ and length 1 . The total length of the assembly is 21.95 . The dimensions are as follows:

- Shaft diameter: $\phi 45.6$
- Shaft length: 10.55
- Hub outer diameter: $\phi 4.75$
- Hub inner bore diameter: $\phi 3.6$
- Pin diameter: $\phi 1.7$
- Pin length: 1
- Total assembly length: 21.95
- Hub length: 5.8
- Pin length: 2.6
- Shaft length: 10.55

A cross-section view of the shaft is shown on the right, indicating the diameter $\phi 45.6$ and the length 10.55 . The cross-section view also shows the diameter $\phi 4.8$ for the shaft and the diameter $\phi 5.35$ for the hub.

Technical drawing of a mechanical part, showing two views: a side view (top) and a front view (bottom).

Side View Dimensions:

- Overall length: 3.3
- Flange diameter: $\phi 4.8$
- Internal diameter: $\phi 1.7$
- Outer diameter: $\phi 5.35$
- Inner diameter: $\phi 4.75$
- Inner diameter: $\phi 3.6$

Front View Dimensions:

- Overall length: 17.1
- Segment lengths: 5.8, 2.6, 5.7
- Internal features: 4.5, 5.08, 4.5, 5.7
- Note: (4 10.6)

Part Number	CL No.	Operating Current	A	RoHS
POWERCONTACT-PC(72)	CL583-0370-8-72	20A(70℃)	10.1	YES
POWERCONTACT-PCA(72)	CL583-0371-0-72	20A(70℃)	11.75	



Technical drawing of a mechanical part showing a cross-section with dimensions:

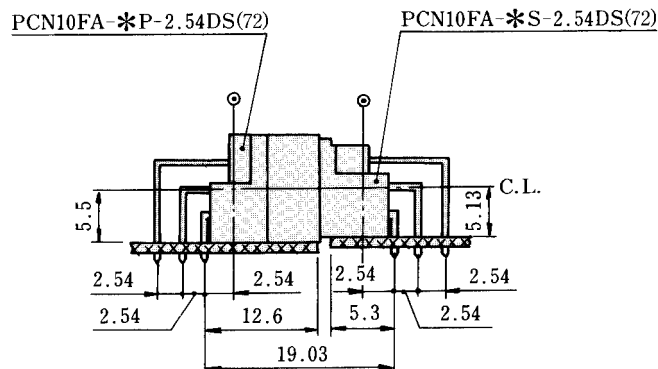
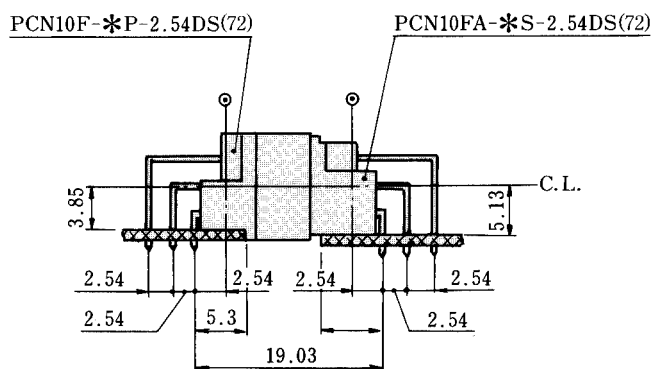
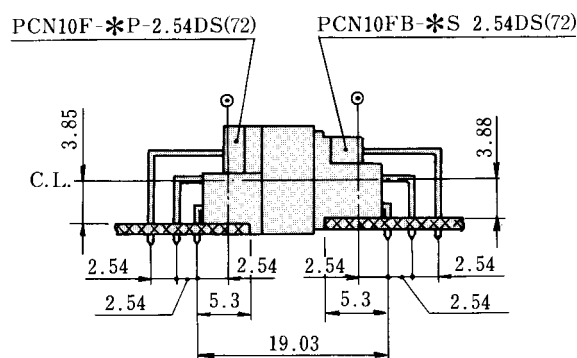
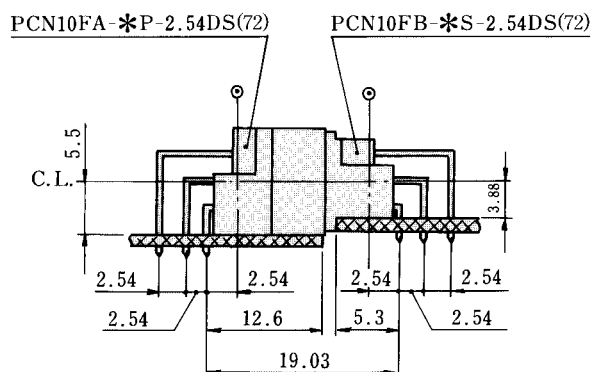
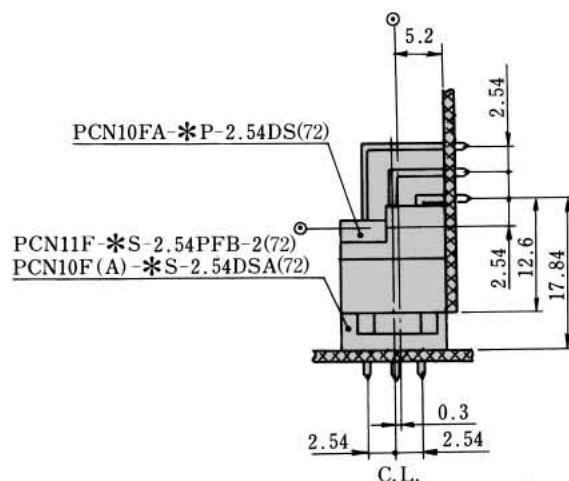
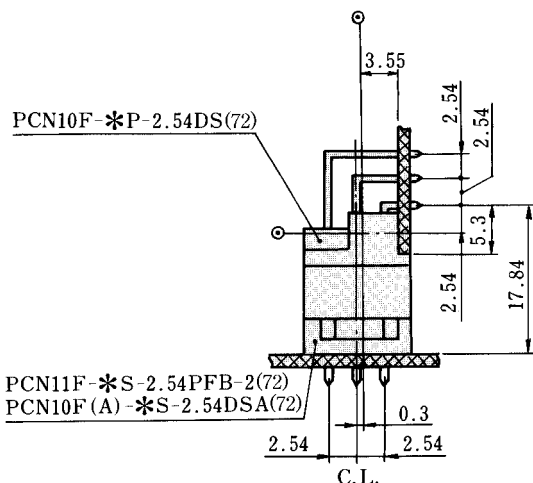
- Overall Length:** 21.8
- Segment Dimensions (from left to right):**
 - (7.0)
 - 2.6 (2.15)
 - 10.05
- Internal Features:**
 - A central hole with diameter $\phi 4.75$.
 - An outer feature with maximum diameter $\phi 4.6 \text{ max}$.
 - A shoulder with diameter $\phi 5.35$.
 - A transition section with diameter $\phi 4.8$.
 - A final section with diameter $\phi 5.6$.
- End Views:** Two circular end views are shown at the far left and right, indicating concentric circles.
- Other Labels:** A label "A" is present near the bottom right corner of the main view.

HRS A69

Application

● : Mounting hole center

C.L. : Center line



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