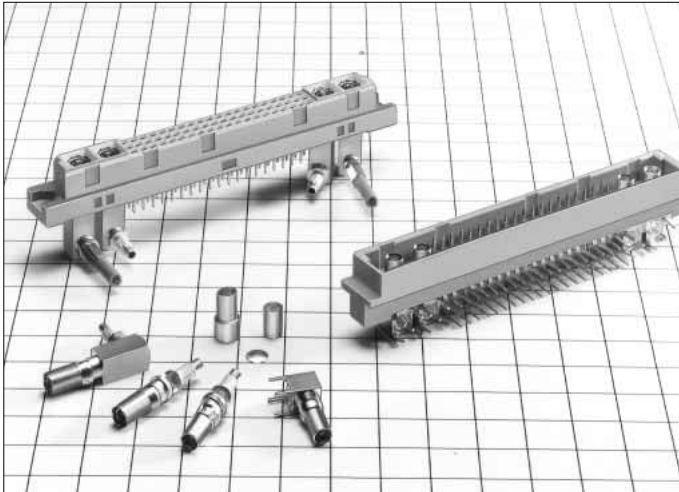


## PCN10F Series (Product Compliant with DIN Standard: Coaxial and High Current Contact Composite Type)



### ■ 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.R.1.2 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 <sup>6</sup> 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 10 $\mu$ s 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: 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	Contact area: Gold plated Remainder: Tin plated	_____
	Receptacle		

## ■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

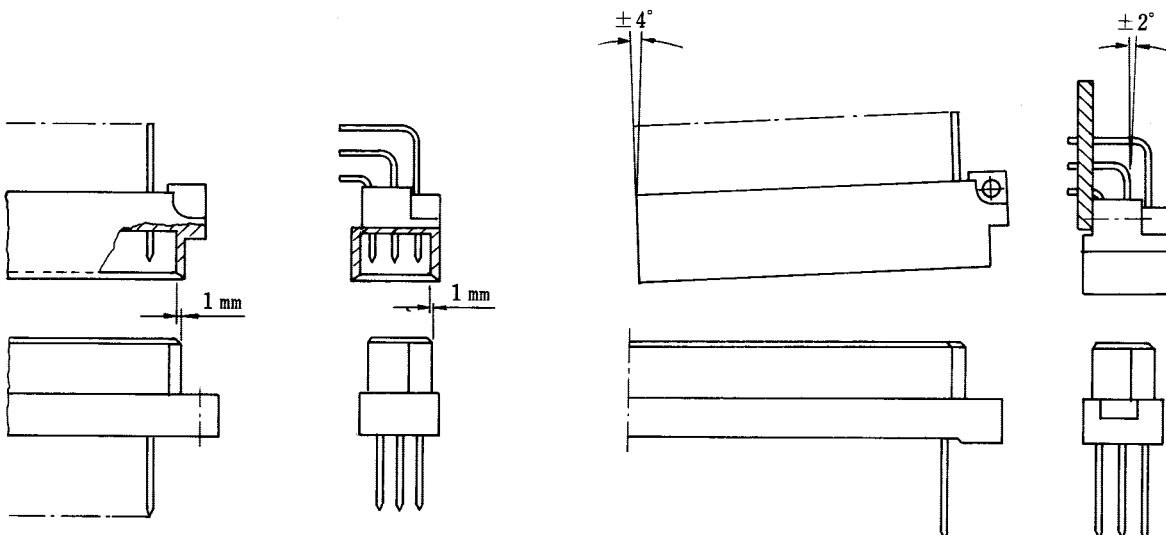
**PCN 10F A** - **\*** **S** - **2.54** **DSA**

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 (0.5x0.7W) WB : Wrapping type (0.5x0.5W) 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.

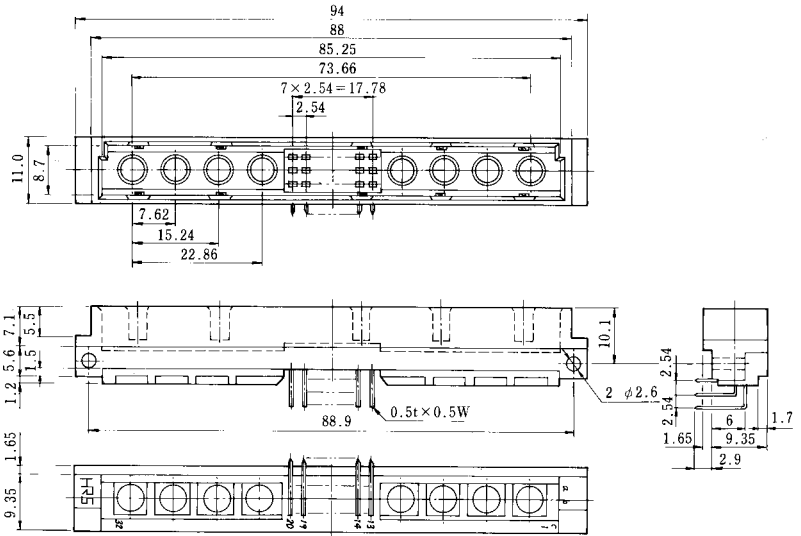


## ■ Plug Right Angle Type (Board edge on mount type)

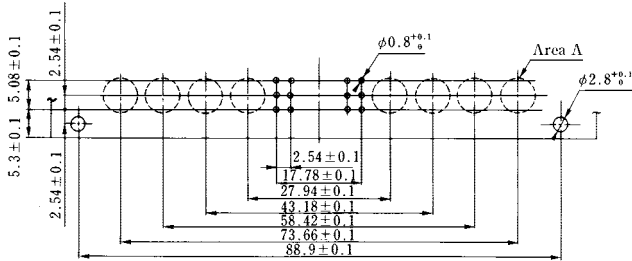
PCN10F-24P-2.54DS(72)  
CL583-0341-0-72



RoHS Compliant

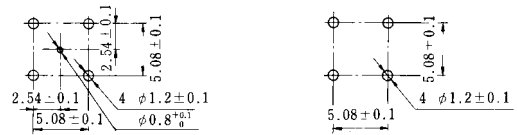


### ◆ PCB mounting pattern



### ◆ Area A dimensions

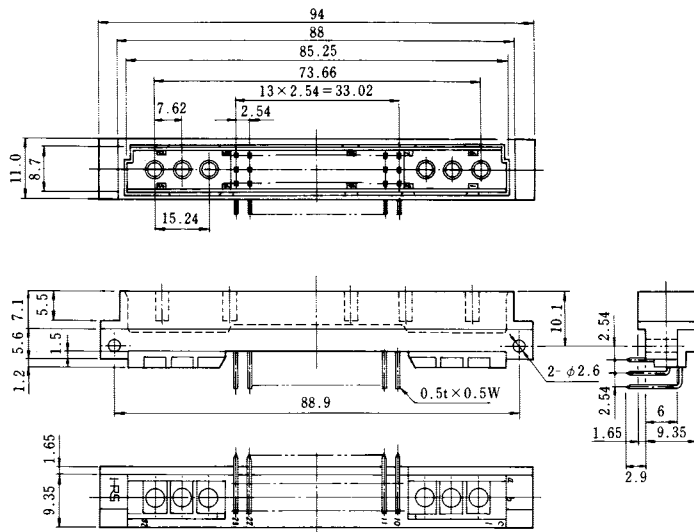
- Coaxial connector (PO51-LR-PC-1(40))
- High current contact (Power contact PC(72), PCA(72))



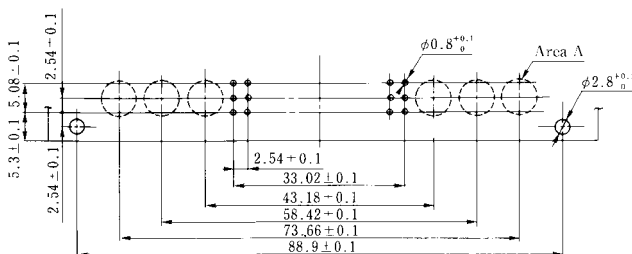
PCN10F-42P-2.54DS(72)  
CL583-0145-1-72



RoHS Compliant

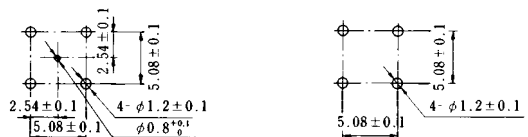


### ◆ PCB mounting pattern



### ◆ Area A dimensions

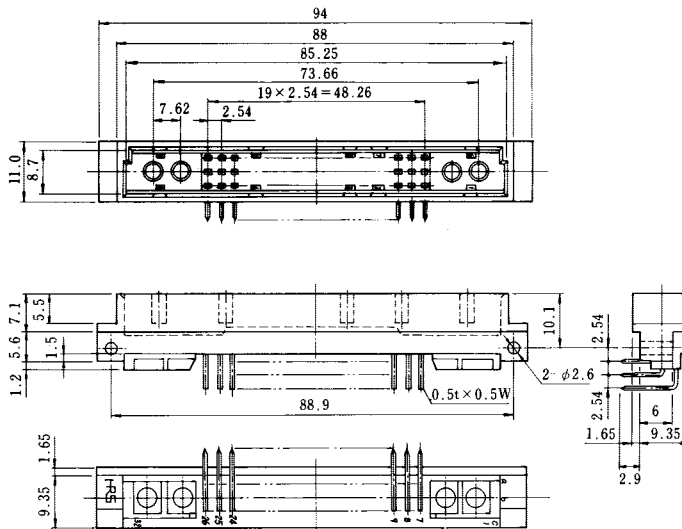
- Coaxial connector (PO51-LR-PC-1(40))
- High current contact (Power contact PC(72), PCA(72))



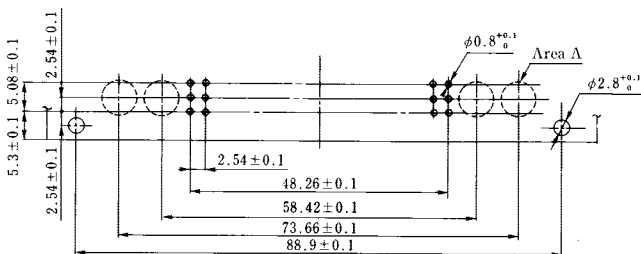
**PCN10F-60P-2.54DS(72)**  
**CL583-0303-0-72**



RoHS Compliant

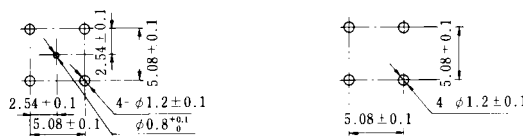


◆ PCB mounting pattern



◆ Area A dimensions

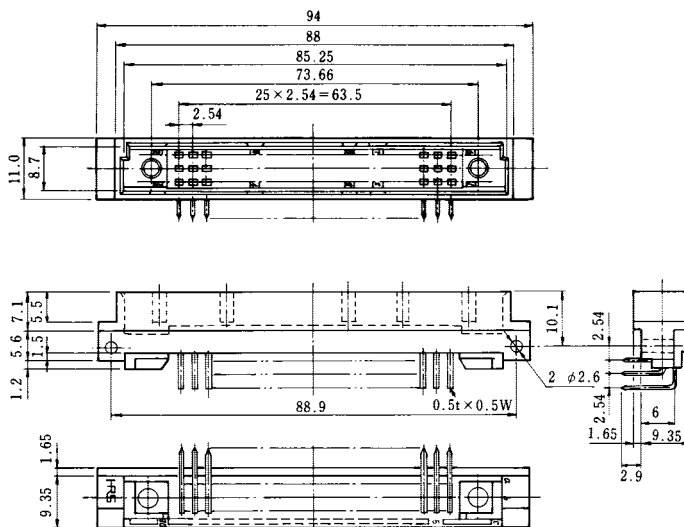
- Coaxial connector (PO51-LR-PC-1(40))
- High current contact (Power contact PC(72), PCA(72))



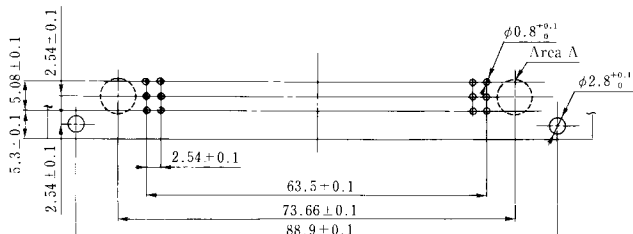
**PCN10F-78P-2.54DS(72)**  
**CL583-0321-2-72**



RoHS Compliant

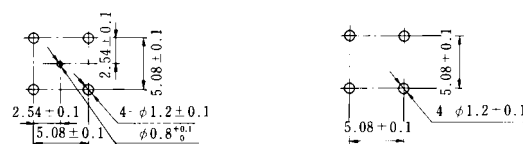


◆ PCB mounting pattern



◆ Area A dimensions

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

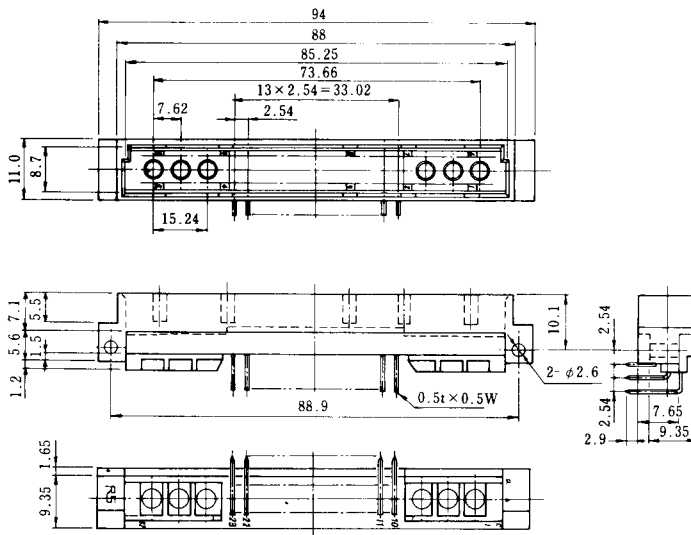


## ■ Plug Right Angle Type (Board on mount type)

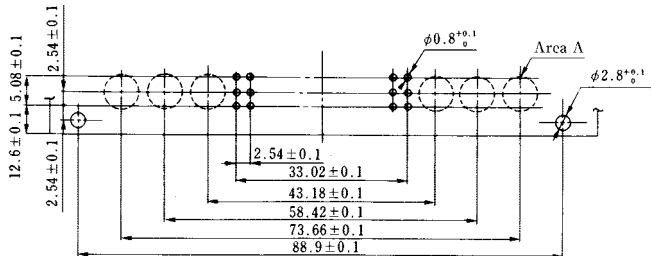
**PCN10FA-42P-2.54DS(72)**  
**CL583-0148-0-72**



RoHS Compliant

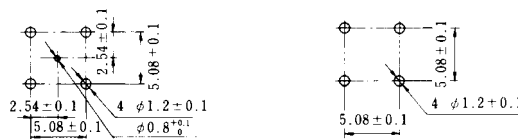


### ◆ PCB mounting pattern



### ◆ Area A dimensions

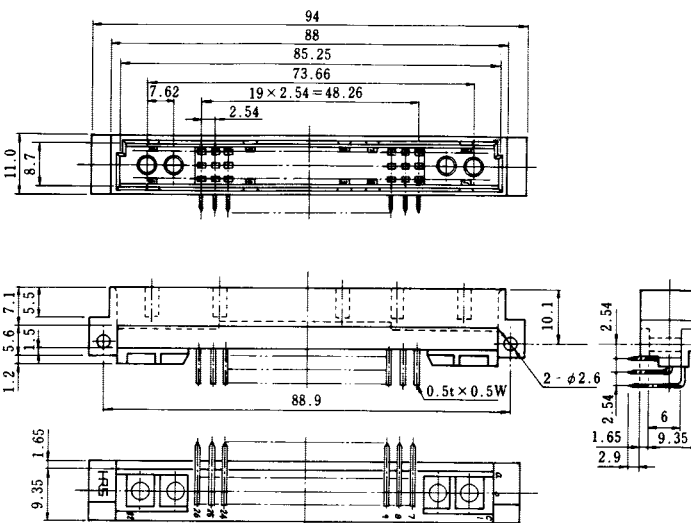
- Coaxial connector (PO51-LR-PC-A(40))
- High current contact (Power contact PC(72), PCA(72))



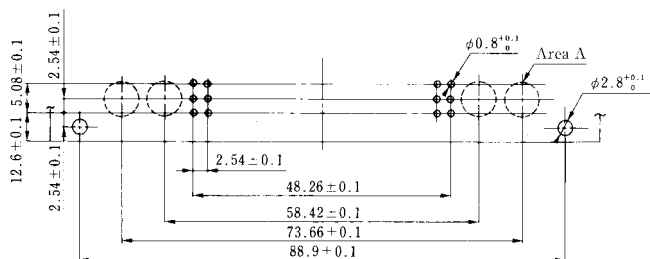
**PCN10FA-60P-2.54DS(72)**  
**CL583-0304-3-72**



RoHS Compliant

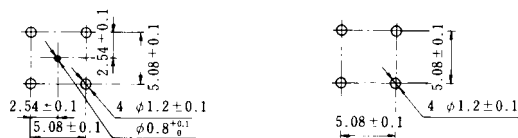


### ◆ PCB mounting pattern



### ◆ Area A dimensions

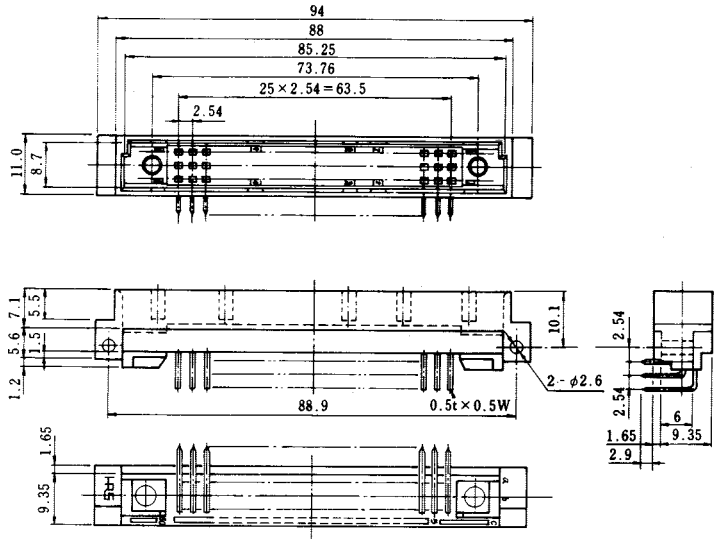
- Coaxial connector (PO51-LR-PC-A(40))
- High current contact (Power contact PC(72), PCA(72))



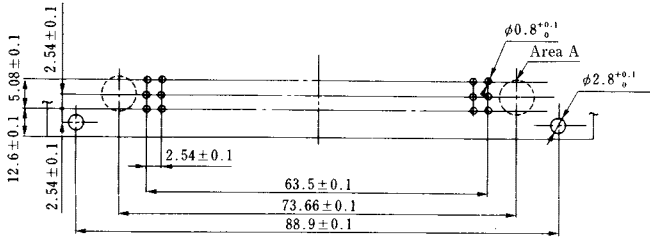
PCN10FA-78P-2.54DS(72)  
CL583-0322-5-72



RoHS Compliant

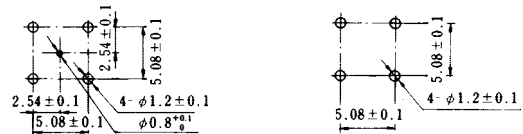


◆ PCB mounting pattern



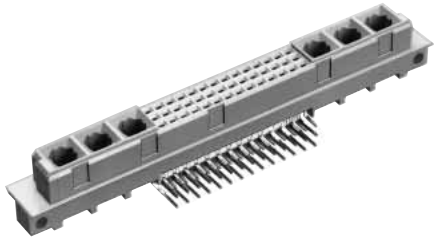
◆ Area A dimensions

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

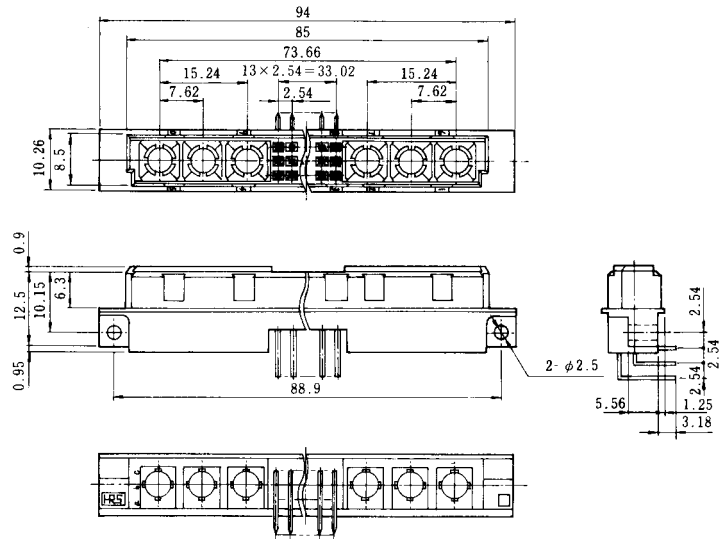


## ■ Receptacle Right Angle Type (Board edge on mount type)

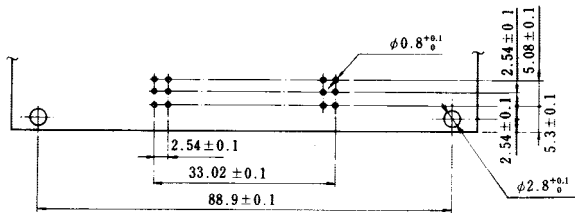
PCN10FB-42S-2.54DS(72)  
CL583-0334-4-72



RoHS Compliant



### ◆ PCB mounting pattern

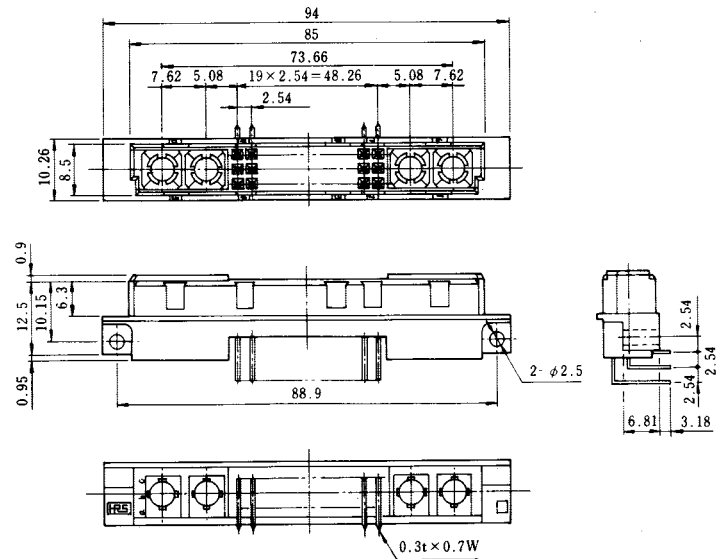


## ■ Receptacle Right Angle Type (Board on mount type)

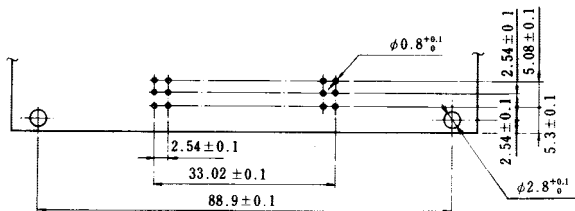
PCN10FA-60S-2.54DS(72)  
CL583-0337-2-72



RoHS Compliant

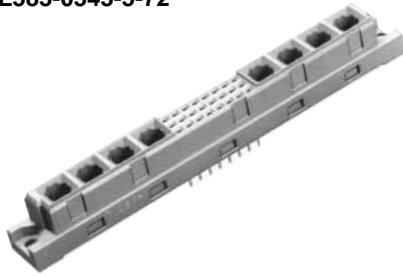


### ◆ PCB mounting pattern

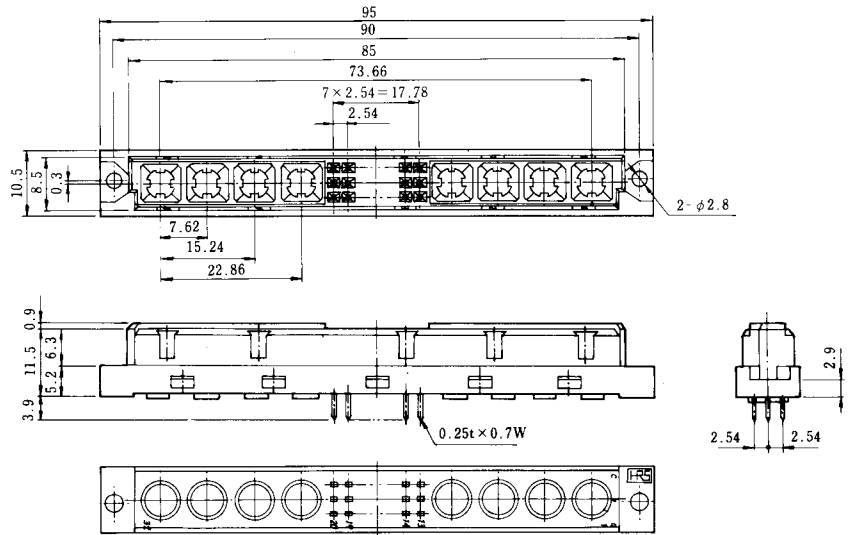


## ■ Receptacle Straight Type (Coaxial connector/high current cable)

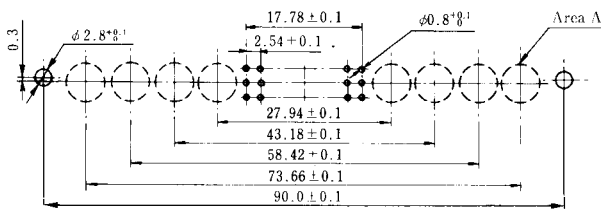
**PCN10F-24S-2.54DSA(72)**  
**CL583-0343-5-72**



RoHS Compliant

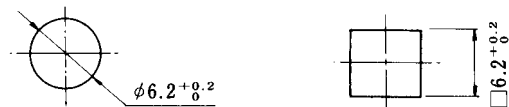


### ◆ PCB mounting pattern



### ◆ Area A dimensions

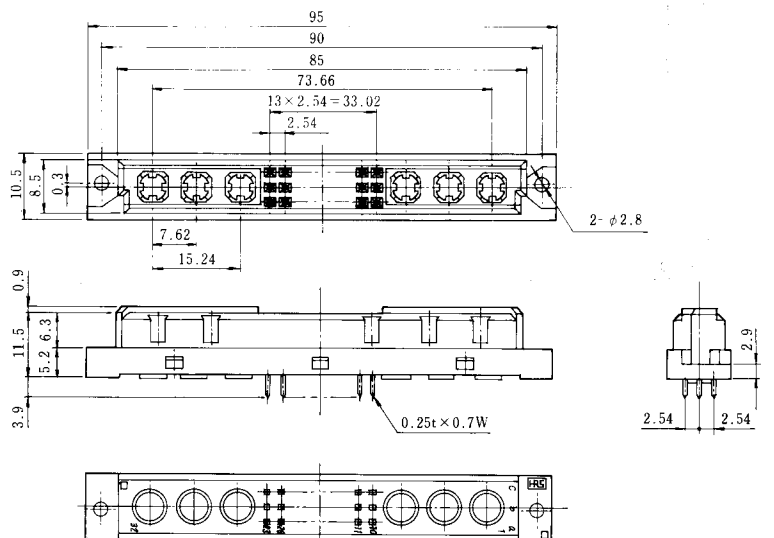
- Coaxial connector (PO51-P-1.5-1A(40))
- Coaxial connector High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



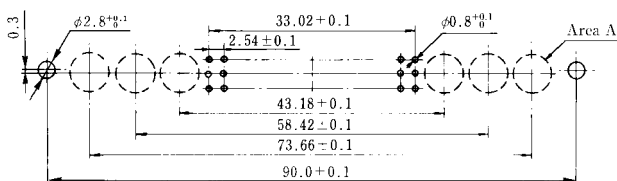
**PCN10F-42S-2.54DSA(72)**  
**CL583-0142-3-72**



RoHS Compliant



### ◆ PCB mounting pattern



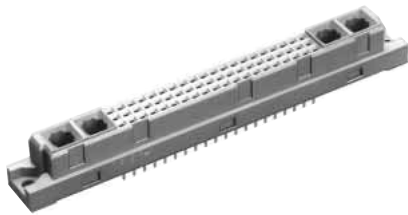
### ◆ Area A dimensions

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

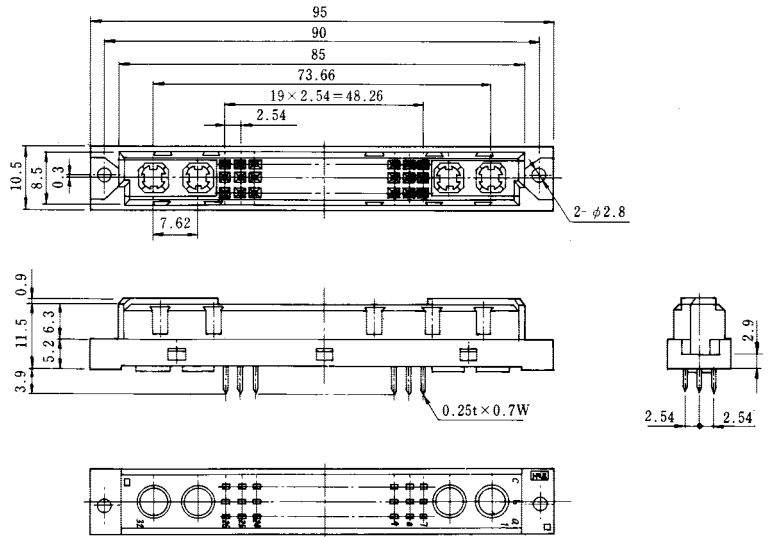




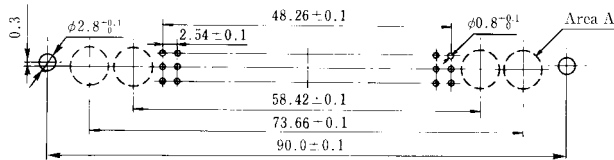
**PCN10F-60S-2.54DSA(72)**  
**CL583-0305-6-72**



RoHS Compliant



◆ PCB mounting pattern

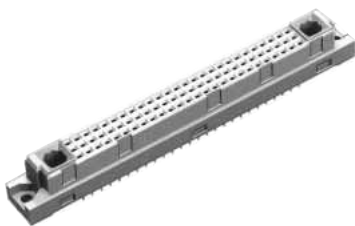


◆ Area A dimensions

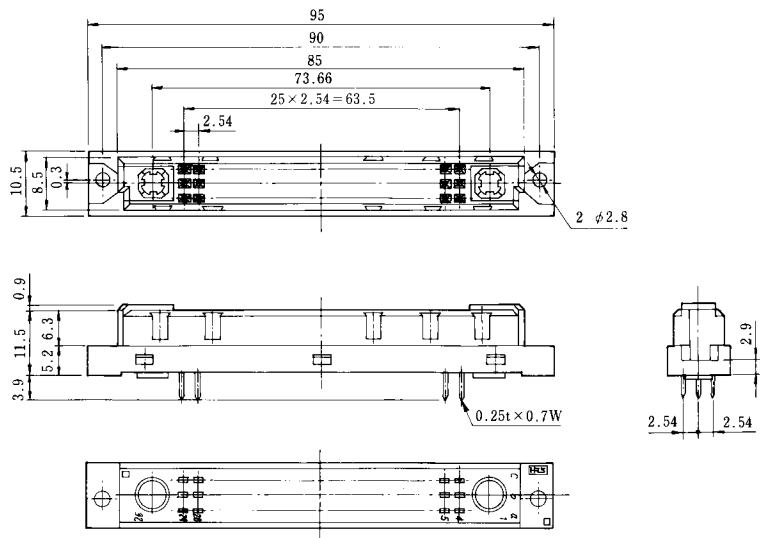
- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



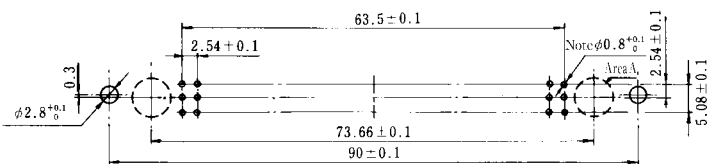
**PCN10F-78S-2.54DSA(72)**  
**CL583-0323-8-72**



RoHS Compliant



◆ PCB mounting pattern



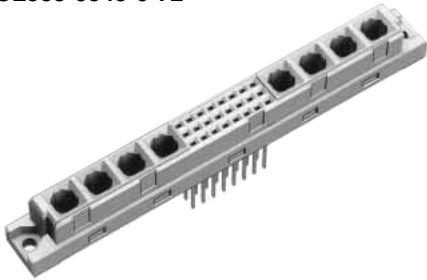
◆ Area A dimensions

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

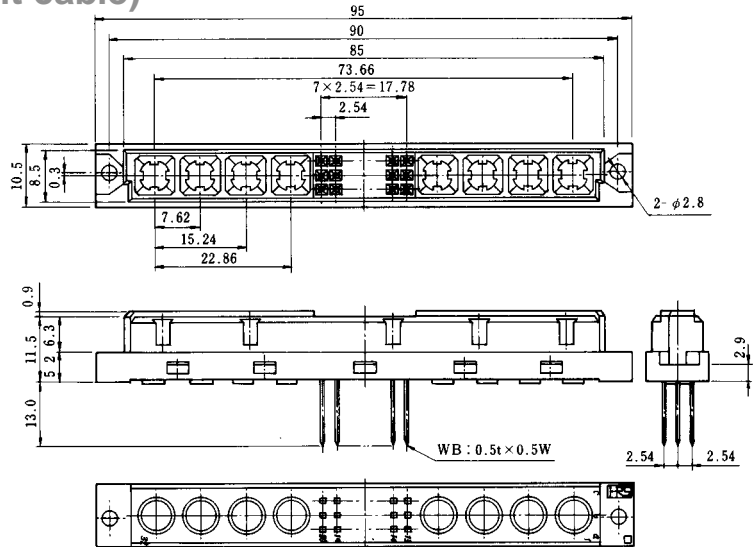


## ■ Receptacle Wrapping Type (Coaxial connector/high current cable)

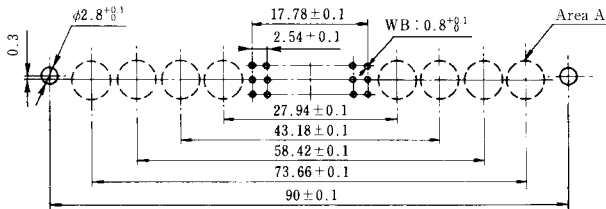
PCN10F-24S-2.54WB(72)  
CL583-0345-0-72



RoHS Compliant

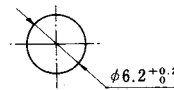


### ◆ PCB mounting pattern



### ◆ Area A dimensions

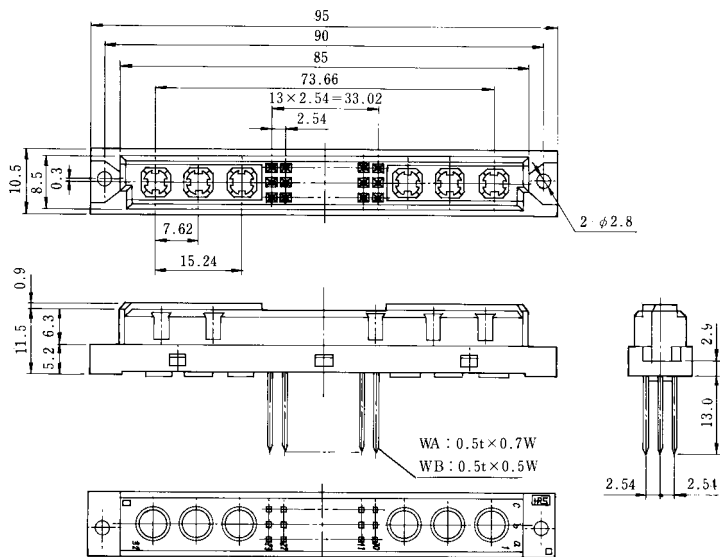
- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



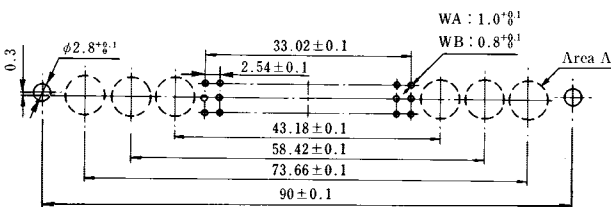
PCN10F-42S-2.54WA(72)  
CL583-0151-4-72  
PCN10F-42S-2.54WB(72)  
CL583-0271-6-72



RoHS Compliant

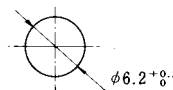


### ◆ PCB mounting pattern



### ◆ Area A dimensions

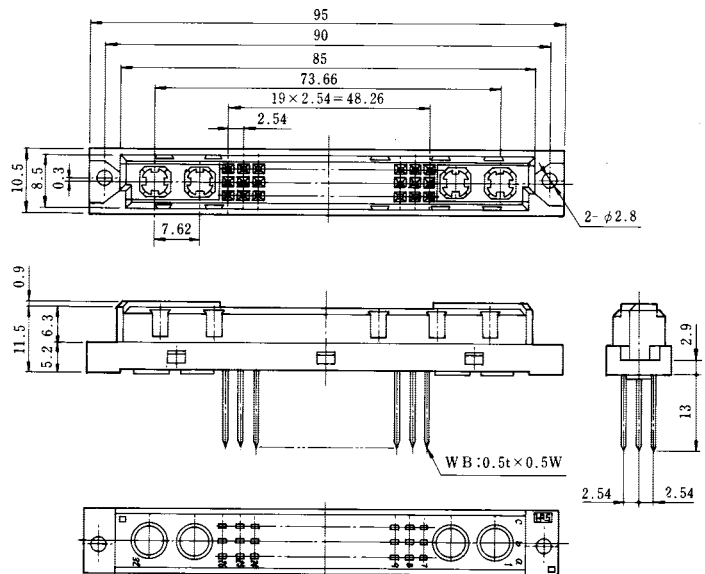
- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



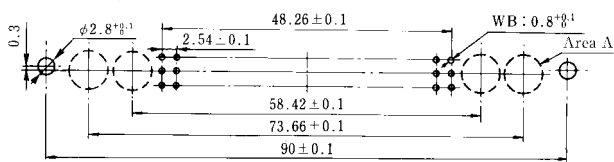
**PCN10F-60S-2.54WB(72)**  
**CL583-0307-1-72**



**RoHS Compliant**

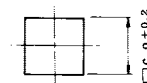
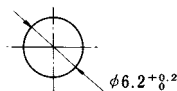


◆ PCB mounting pattern



◆ 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))

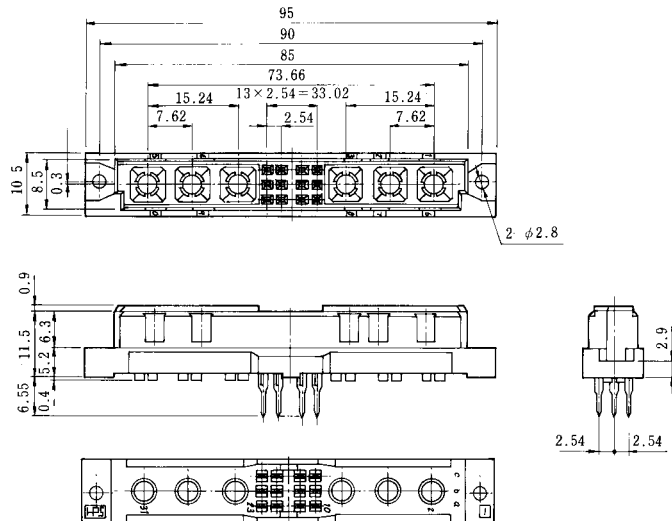


## ■ Receptacle Solderless Connection Type

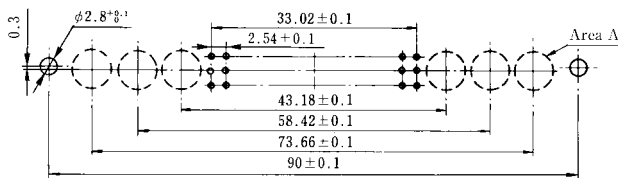
PCN11F-42S-2.54PFB-2(72)  
CL583-1185-1-72



RoHS Compliant



### ◆ PCB mounting pattern

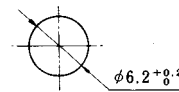


Applicable board:  $t=2.4\text{mm}$   
Through-hole finish diameter:  $\phi 0.9 \pm 0.08\text{mm}$   
(For details, refer to PCN11 series.)

### ◆ Area A dimensions

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

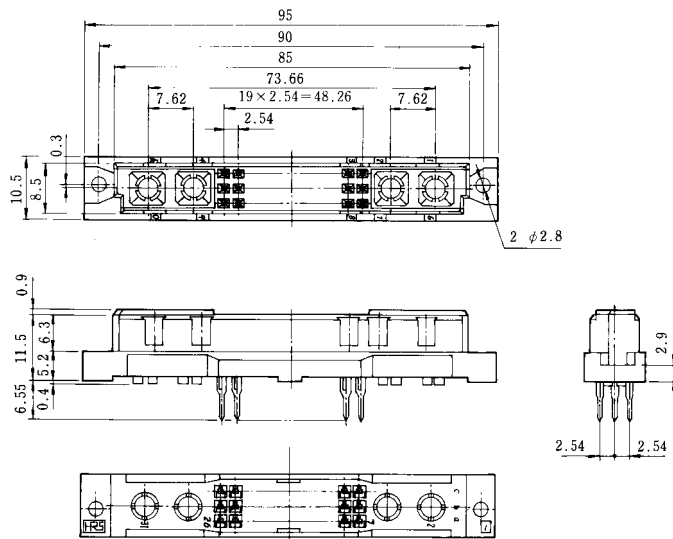
● Coaxial connector (PO51-LP-1.5-A(40))



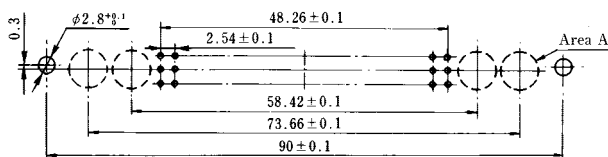
PCN11F-60S-2.54PFB-2(72)  
CL583-1187-7-72



RoHS Compliant



### ◆ PCB mounting pattern

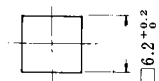
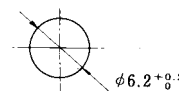


Applicable board:  $t=2.4\text{mm}$   
Through-hole finish diameter:  $\phi 0.9 \pm 0.08\text{mm}$   
(For details, refer to PCN11 series.)

### ◆ Area A dimensions

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

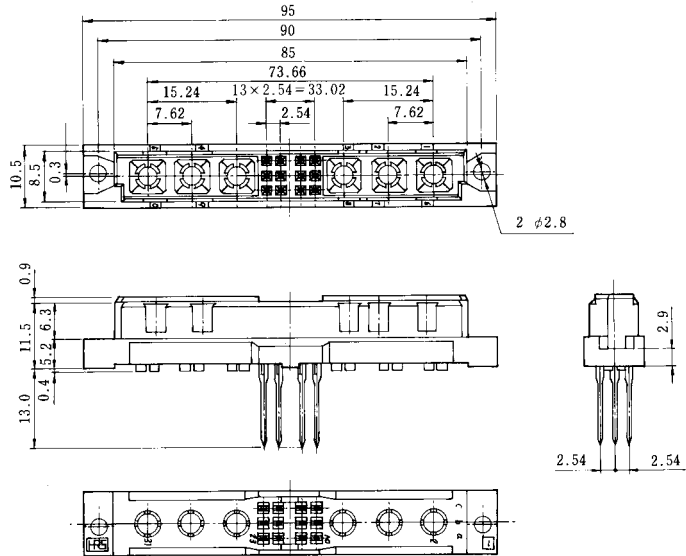
● Coaxial connector (PO51-LP-1.5-A(40))



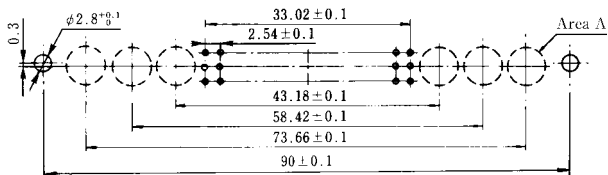
PCN11F-42S-2.54WB-2  
CL583-1186-4



RoHS Compliant



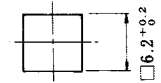
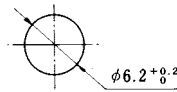
### ◆ PCB mounting pattern



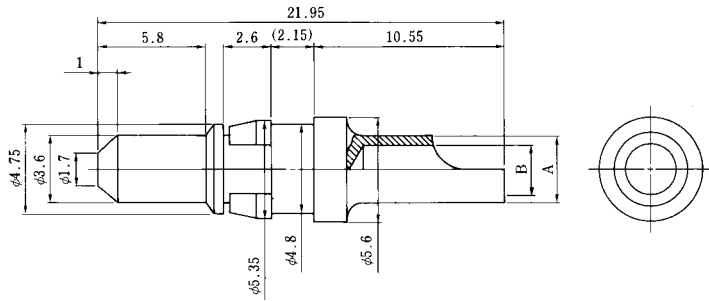
Applicable board:  $t=2.4\text{mm}$   
Through-hole finish diameter:  $\phi 0.9 \pm 0.08\text{mm}$   
(For details, refer to PCN11 series.)

### ◆ Area A dimensions

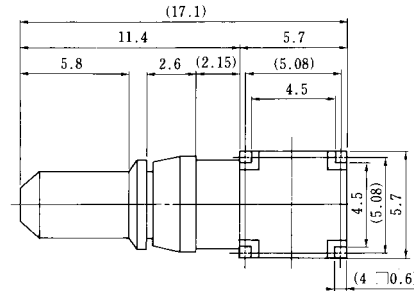
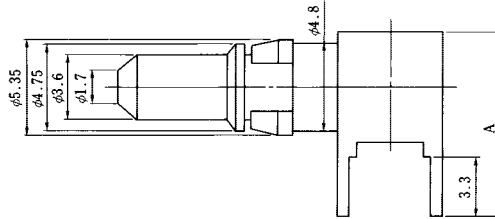
- Coaxial connector (PO51-P-1.5-1A(40)) High current contact (Power contact 10S, 20S)
- Coaxial connector (PO51-LP-1.5-A(40))



## ■ High Current Contact

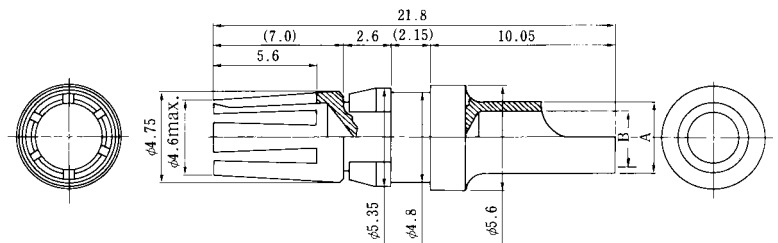


Part Number	CL No.	Operating Current	A	B	RoHS
POWERCONTACT-20P(72)	CL583-0369-9-72	20A(70°C)	φ3.7	φ2.8	YES
POWERCONTACT-10P(72)	CL583-0449-6-72	10A(85°C)	φ2.55	φ1.7	



Note: Power contact -P is for PCN10F-\*P-2.54DS(72).  
Power contact -PCA is for PCN10FA-\*P-2.54DS(72).

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



Part Number	CL No.	Operating Current	A	B	RoHS
Power Contact -20S	583-0374-9	20A (70°C)	φ3.7	φ2.8	YES

## Application

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

