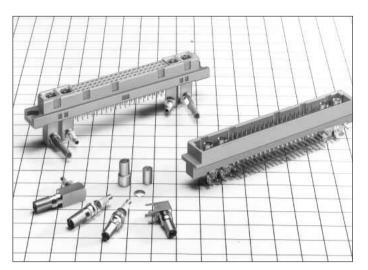
# PCN10F Series (Product Compliant with DIN Standard: Coaxial and High Current Contact Composite Type)



#### **■**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

	Current rating: 2A	Operating Temperature Range: -30 to +85°C (Note 1)	Storage Temperature Range: -10 to +60℃	(Note 2)
Rating	Voltage rating: 300V AC	Operating Relative Humidity: 40 to 80%	Operating 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/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 106M 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℃ for 3 seconds

Note 1: Includes temperature rise caused by current flow.

## 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	
Contact	Receptacle	Copper alloy	Remainder: Tin plated	

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.

## **■**Ordering Information

#### Plug

$$\frac{PCN10F}{\bullet} \quad \frac{A}{\emptyset} - \frac{*}{\bullet} \frac{P}{\emptyset} - \frac{2.54}{\bullet} \frac{DS}{\bullet}$$

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

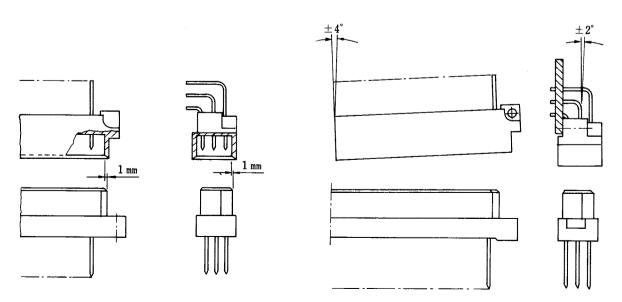
#### Receptacle

$$\frac{PCN}{0} \frac{10F}{0} \frac{A}{0} - \frac{*}{0} \frac{S}{0} - \frac{2.54}{0} \frac{DSA}{0}$$

Series name : PCN		4 Number of contacts : 24(8), 42(6), 60(4), 78(2)			
Series No. : 10F (Soldering type)		Values in parentheses indicates the number of coaxial			
	11F (Solderless connection type)	connector and high current contact mounting holes.			
3 Contact type:	Straight	S : Receptacle			
Blank : Coaxial cable connection type		6 Contact pitch : 2.54mm			
A : Coaxial connector through hole type		Contact type			
Contact type: I	Contact type: Right angle		DS : right angle type		
Α	: Board on mount type		DSA : Straight type		
B : Board edge on mount 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		

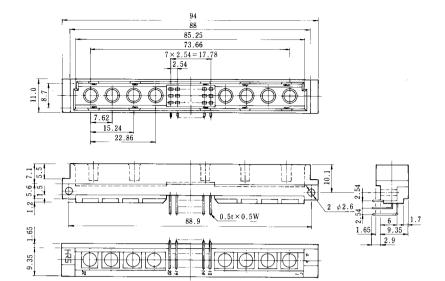
# **● DIN Connector Mating Condition**

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

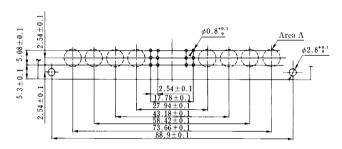


# ■Plug Right Angle Type (Board edge on mount type)



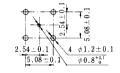


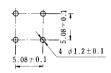
# **●**PCB mounting pattern



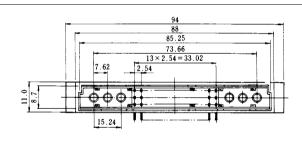
## ♠ Area A dimensions

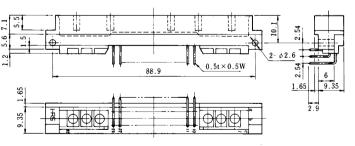
●Coaxial connector (PO51-LR-PC-1(40)) ●High current contact (Power contact PC(72), PCA(72))



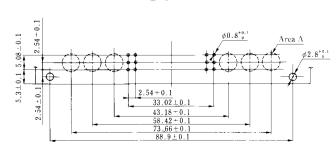






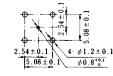


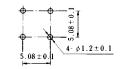
# **●**PCB mounting pattern



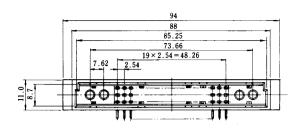
# **●** Area A dimensions

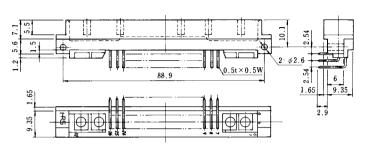
●Coaxial connector (PO51-LR-PC-1(40)) ●High current contact (Power contact PC(72), PCA(72))

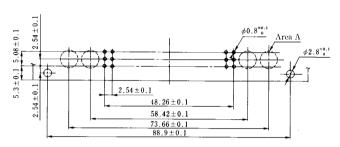






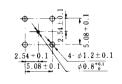


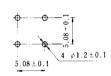




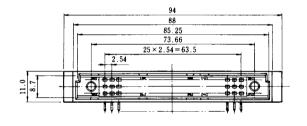
## ◆Area A dimensions

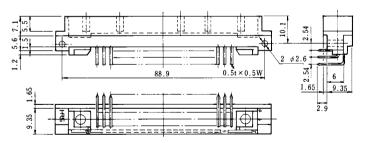
●Coaxial connector (PO51-LR-PC-1(40)) ●High current contact (Power contact PC(72), PCA(72))



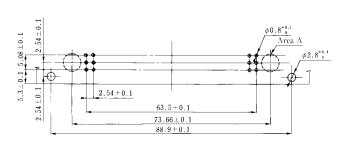






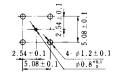


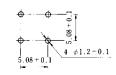
# **●**PCB mounting pattern



# **●** Area A dimensions

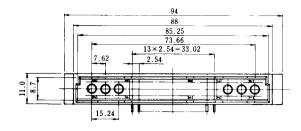
●Coaxial connector (PO51-LR-PC-1(40)) ●High current contact (Power contact PC(72), PCA(72))

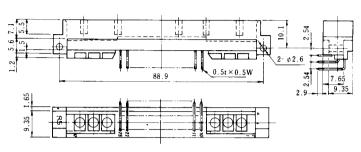




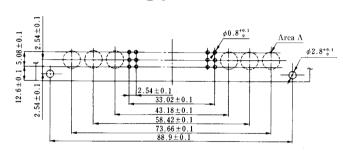
# ■Plug Right Angle Type (Board on mount type)





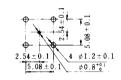


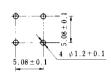
# **●**PCB mounting pattern



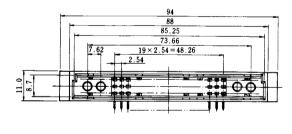
## Area A dimensions

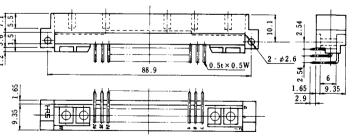
●Coaxial connector (PO51-LR-PC-A(40)) ●High current contact (Power contact PC(72), PCA(72))



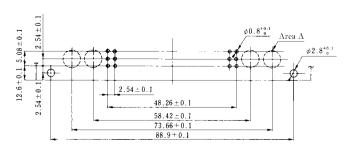






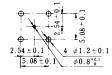


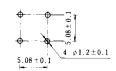
# **▶**PCB mounting pattern



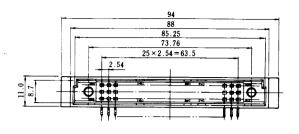
# **●** Area A dimensions

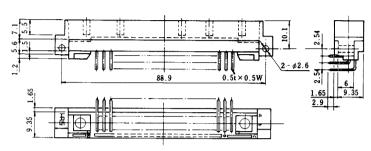
●Coaxial connector (PO51-LR-PC-A(40)) ●High current contact (Power contact PC(72), PCA(72))

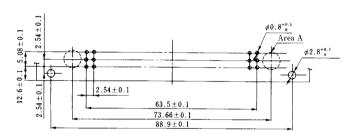






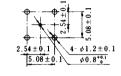


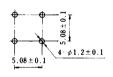




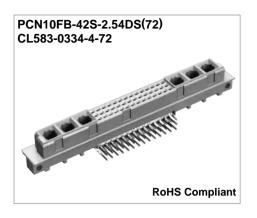
## **◆**Area A dimensions

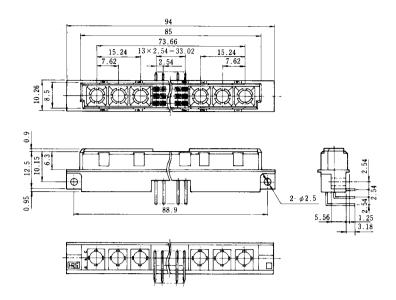
●Coaxial connector (PO51-LR-PC-1(40)) ●High current contact (Power contact PC(72), PCA(72))



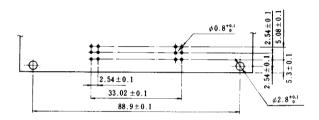


# ■ Receptacle Right Angle Type (Board edge on mount type)



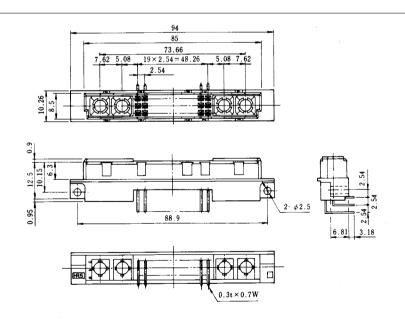


# **●**PCB mounting pattern

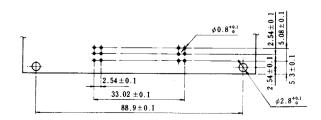


# ■ Receptacle Right Angle Type (Board on mount type)



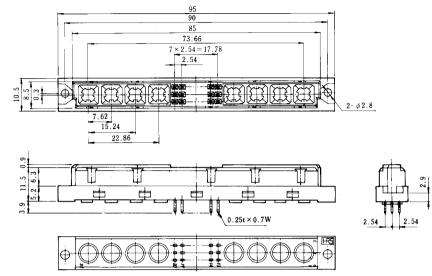


# **▶**PCB mounting pattern

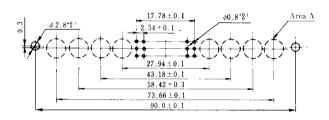


# ■ Receptacle Straight Type (Coaxial connector/high current cable)

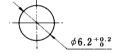


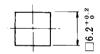


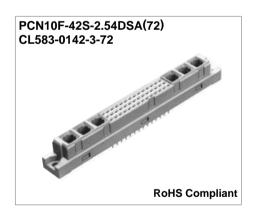
## **▶**PCB mounting pattern

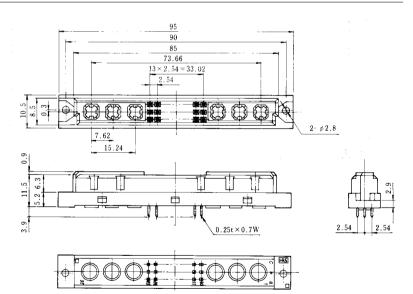


#### **♦** Area A dimensions

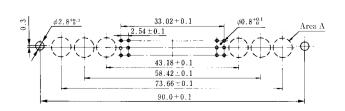




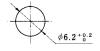




# **▶**PCB mounting pattern

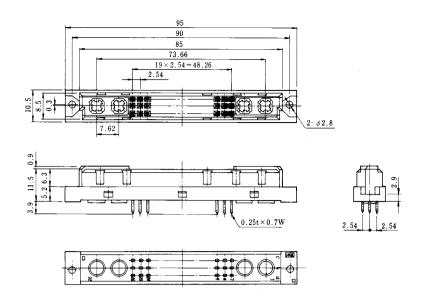


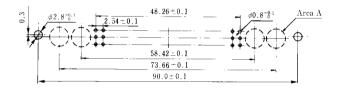
# **◆**Area A dimensions









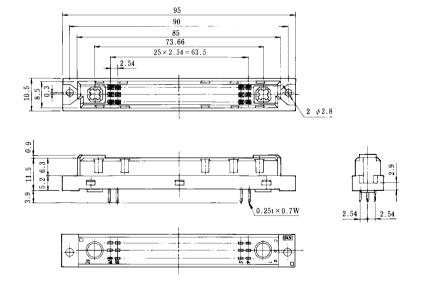


#### **◆** Area A dimensions



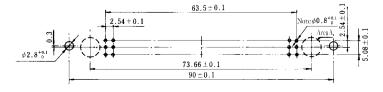






# **●**PCB mounting pattern

## ♠ Area A dimensions

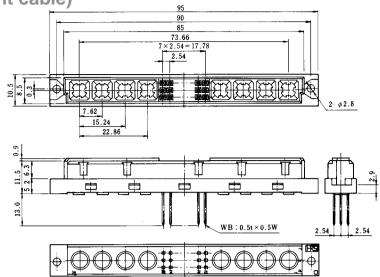




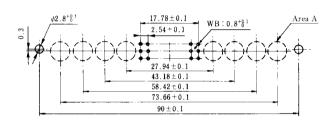


■ Receptacle Wrapping Type (Coaxial connector/high current cable)



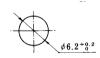


# **●** PCB mounting pattern

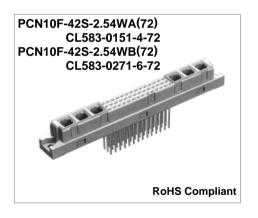


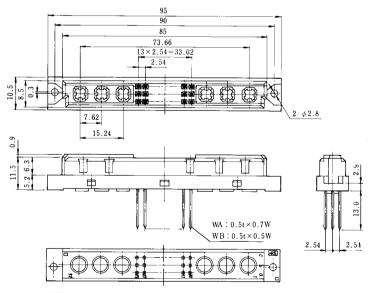
## ◆ Area A dimensions

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

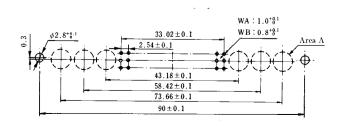




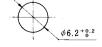




# **▶**PCB mounting pattern

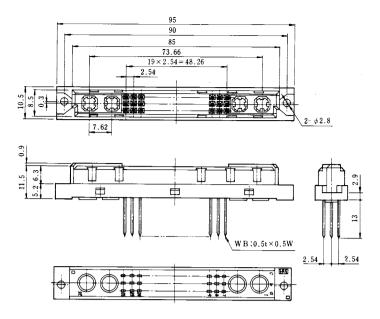


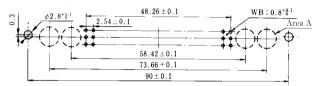
# **♠** Area A dimensions









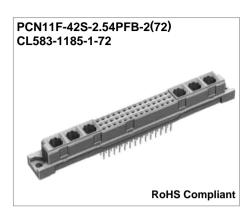


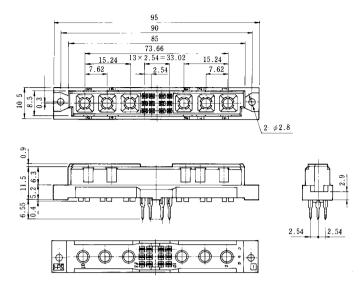
#### **♦** Area A dimensions



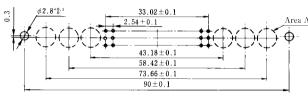


# **■** Receptacle Solderless Connection Type





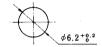
## **▶** PCB mounting pattern



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

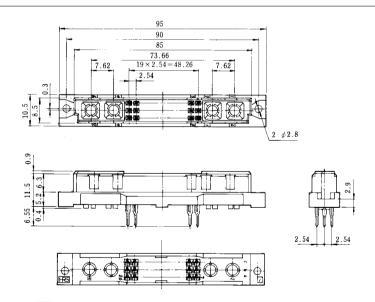
## **◆**Area A dimensions

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

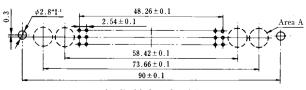






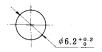


# **▶**PCB mounting pattern



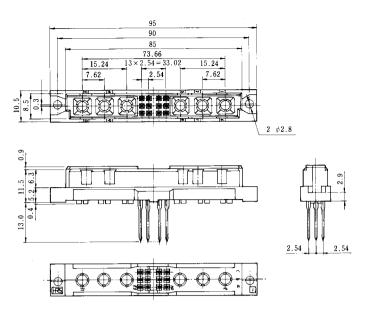
Applicable board: t=2.4mm Through-hole finish diameter:  $\phi$  0.9 $\pm$ 0.08mm (For details, refer to PCN11 series.)

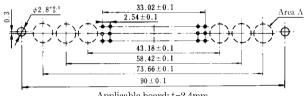
# ◆ Area A dimensions











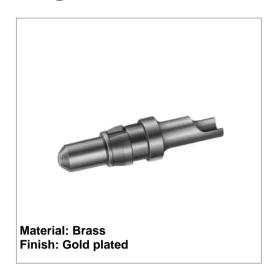
Applicable board: t=2.4mm Through-hole finish diameter:  $\phi$  0.9 $\pm$ 0.08mm (For details, refer to PCN11 series.)

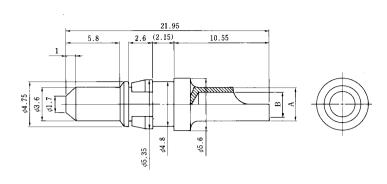
## **♦** Area A dimensions





# **■** High Current Contact

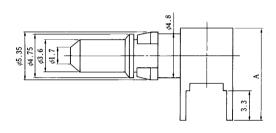


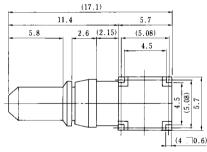


Part Number	CL No.	Operating Current	Α	В	RoHS
POWERCONTACT-20P(72)	CL583-0369-9-72	20A(70°C)	φ3.7	<i>φ</i> 2.8	ν <b>Γ</b> ς
POWERCONTACT-10P(72)	CL583-0449-6-72	10A(85℃)	<i>φ</i> 2.55	φ1.7	YES



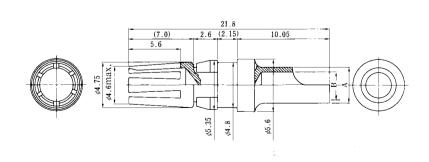
Note: Power contact -P is for PCN10F-\*P-2.54DS(72).
Power contact -PCA is for PCN10FA-\*P-2.54DS(72).





Part Number	CL No.	Operating Current	Α	RoHS	
POWERCONTACT-PC(72)	CL583-0370-8-72	20A(70°C)	10.1	\/F0	
POWERCONTACT-PCA(72)	CL583-0371-0-72	20A(70°C)	11.75	YES	





Part Number	CL No.	Operating Current	Α	В	RoHS
Power Contact -20S	583-0374-9	20A (70°C)	φ3.7	<i>φ</i> 2.8	YES