

# CIRCULARS and ANTENNAS



## Circular

- SCC
- SCN/SCK
- SH
- SN
- SP
- SRC
- ST
- SU
- SW
- SXR

## RF/ Microwave

- SB
- SMA
- SMB
- MCX
- BNC75  $\Omega$

## Antenna

- SMA/SMC
- FME
- MCX
- TNC
- BNC

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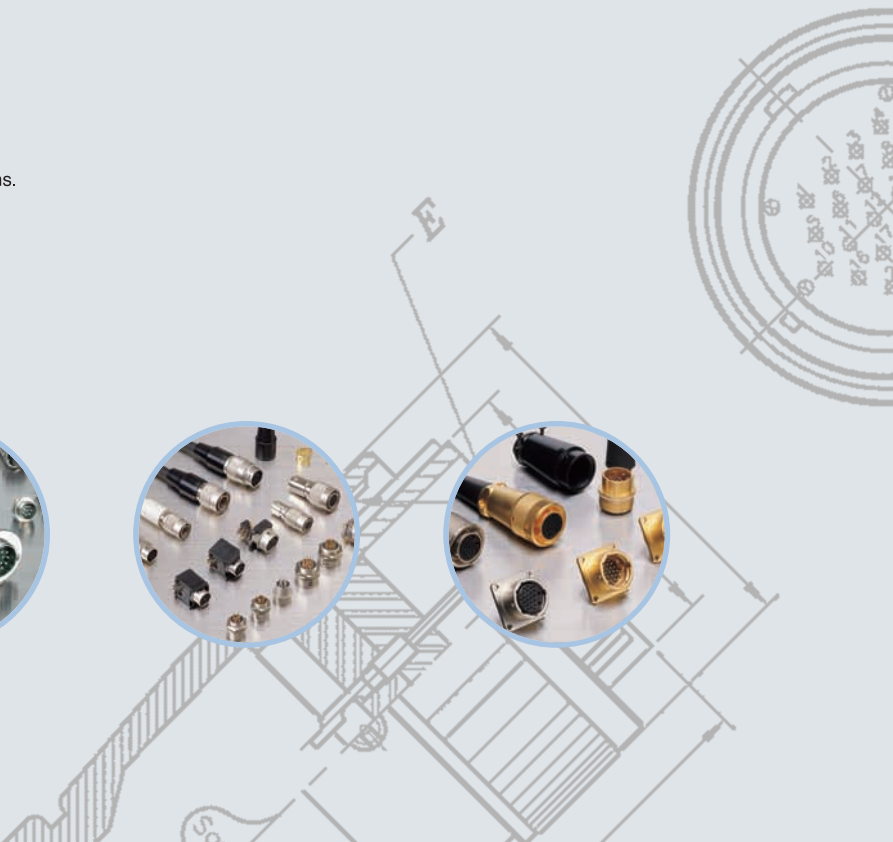
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All dimensions are in millimeters.  
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## About Sam Woo

With a strong presence in the Korean circular market for over twenty years, Sam Woo is now exploiting new markets around the world with its larger facility and skilled members in the R&D, Quality Assurance, and Marketing and Sales departments.

Certified with ISO 9001 for quality and ISO 14001 for environment, Sam Woo is taking its place as a responsible social member of the society with its high quality products and concern for the environment. The installation of ERP system allows efficient flow of task to ensure all our products and services are delivered accurately to our customers. Employees at all levels are alert and have the responsibility and ability to detect products that do not conform to Sam Woo's quality standards.

Sam Woo will maximize the economic wellbeing and quality of life of our stake-holders by creating an environment of continuous improvement through commitment to excellence; delivering value and quality by connecting equipment to equipment, equipment to people, and ultimately people to people in all corners of the world.



ISO 9001 No.K-QA-Q97137      ISO 14001 No.K-QA-E03095      eco No.LGEGP-050432

## Brief History

- 1981 Established
- 1994 Issued 20 patents for cable TV connectors
- 1997 Acquired KSA9001/ISO9001 Certificates
- 1999 Constructed a new plant in Shihwa Industrial Complex, South Korea
- 2000 Issued patent for SIM Card Connector
- 2002 Named new president
- 2002 Established partnerships with E-Valucon(USA) and Trust Components(Japan)
- 2002~4 Awarded "Government Support Program for Exporting Enterprises" for three consecutive years
- 2003 Acquired UL Certificate(E234985)
- 2003 Registered "R&D Center"(NO. 20031233) certificate by Korea Industrial Technology Association(KITA)
- 2003 Selected as one of the "Promising Small & Medium-Size Enterprises 2003" by Gyunggi Province (京畿道)
- 2004 Adapted ERP system
- 2005 Preparing for RoHS Regulation Compliance
- 2005 Recieved LG eco partner certificate
- 2006 Established partnerships with E-Valucon HK(利發光有限公司)

## Circular Connectors

SCC  
SCN/SCK  
SH  
SN  
SP  
SRC  
ST  
SU  
SW  
SXR

## RF / Microwave

Triaxial 75Ω

SB

Miniature

SMA  
SMB  
MCX

High Frequency

BNC75Ω  
BNC50Ω  
N  
M  
TNC  
F/RCA

Others

Between-Series Adapter

## Antenna

Custom Band  
SMA/SMC  
FME  
MCX  
TNC  
BNC



## Circular Connectors



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# Circular Selection Guide

## Selection by Size / Contacts / Current

Select shell diameter, number of contacts, and current rating, then go to the indicated page for details on that product.

series	contacts	2	3	4	5	6	7	8	9	10	12	14	16	18	19	20	22	24	26	30	32	Page		
	size																							
SCC	13		● 10A		● 5A																		10	
	16						● 10A			● 5A														14
	21								● 10A				● 5A											
	25												● 10A						● 5A					
SCN & SCK	12	● 4/3A		● 4/3A																			14	
	16	● 5A	● 5A	● 5A	● 4A	● 3A	● 3A	● 3A																
	20	● 7A	● 7A	● 7A	● 7A	● 4A		● 3A		● 3A							● 2A							
25	● 10A	● 10A	● 10A	● 10A	● 5A		● 5A		● 5A	● 5A														
SCK	30	● 15A	● 15A	● 15A		● 15A		● 15A		● 7A		● 5A												
	32	● 30A	● 30A	● 30A																				
	40	● 40A	● 40A	● 40A		● 20A					● 10/4A													
SH	9				● 2A																	24		
SN	8			● 2A	● 2A	● 2A																	26	
	10	● 3A	● 3A	● 3A					● 2A	● 2A	● 2A													
SP	00	●	●	●																			36	
	0	●	●	●	●	●	●																	
	1	●	●	●	●	●	●	●																
	2					●				●														
	3	●																						
SRC	21									● 10A			● 5A						● 10/5A				50	
ST	9										● 1A		● 1A			● 1A							54	
SU	20							● 5A															60	
SW	8			● 2A	● 2A	● 2A																	64	
	10	● 3A	● 3A	● 3A				● 2A	● 2A	● 2A														
SXR	10						● 2A																70	
series	size	2	3	4	5	6	7	8	9	10	12	14	16	18	19	20	22	24	26	30	32	Page		
	contacts																							

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## Application Type

Find application type. Check the available size and contact numbers. Then go to the indicated page for details on that product.

Application Type	Product Series	Available Size	No. of Contacts	Page
Audio/Video	SN	8,10	2,3,4,5,6,9,10,12	26
	SRC	21	10,16,26	50
	ST	9	12,16,20	54
	SU	20	8	60
CCTV	SN	8,10	2,3,4,5,6,9,10,12	26
Communication	SCN/SCK	12,16,20,25,30,32,40	2,3,4,5,6,7,8,10,12,14,20	14
Computers & Peripherals	SN	8,10	2,3,4,5,6,9,10,12	26
Control Engineering	SU	20	8	60
Electric / Electronic	SCN/SCK	12,16,20,25,30,32,40	2,3,4,5,6,7,8,10,12,14,20	14
Electronic Precision Equipment	SU	20	8	60
Factory Automation	SN	8,10	2,3,4,5,6,9,10,12	26
	SRC	21	10,16,26	50
	ST	9	12,16,20	54
HDTV	SP	00,0,1,2,3	1 to 10, multiple contact	36
Industrial	SCC	13,16,21,25	3,5,7,10,16,24	10
Measuring Equipment	SN	8,10	2,3,4,5,6,9,10,12	26
	SRC	21	10,16,26	50
	ST	9	12,16,20	54
Medical	SN	8,10	2,3,4,5,6,9,10,12	26
	SP	00,0,1,2,3	1 to 10, multiple contact	36
	SRC	21	10,16,26	50
	ST	9	12,16,20	54
	SU	20	8	60
Microphone	SH	9	6	24
Optical Testing	SP	00,0,1,2,3	1 to 10, multiple contact	36
Portable Wireless Radio	SN	8,10	2,3,4,5,6,9,10,12	26
	SP	00,0,1,2,3	1 to 10, multiple contact	36
Precision Equipment	SU	20	8	60
Professional Audio	SN	8,10	2,3,4,5,6,9,10,12	26
	SP	00,0,1,2,3	1 to 10, multiple contact	36
	SRC	21	10,16,26	50
	ST	9	12,16,20	54
Professional Video	SN	8,10	2,3,4,5,6,9,10,12	26
	SP	00,0,1,2,3	1 to 10, multiple contact	36
	SRC	21	10,16,26	50
	ST	9	12,16,20	54
Robotics	ST	9	12,16,20	54
Sensor	ST	9	12,16,20	54
Telecommunication	SP	00,0,1,2,3	1 to 10, multiple contact	36
Vision Testing	SP	00,0,1,2,3	1 to 10, multiple contact	36
	SRC	21	10,16,26	50
Wireless Communication	SH	9	6	24
Wireless Radio	SN	8,10	2,3,4,5,6,9,10,12	26
	SP	00,0,1,2,3	1 to 10, multiple contact	36

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# Circular Overview

## SCC Series

P.10



### Size / No. of Contacts

Size - 13,16,21,25  
Contacts - 3,5,7,10,16,24

### Material / Finish

Body - Aluminum alloy / Nickel plate  
Insulator - Thermosetting resin / Blue  
Contacts - Copper alloy / Silver plate

### Applications

Industrial

### Main Features

Rugged  
Light weight  
Low cost  
General purpose

## SCK / SCN Series

P.14



### Size / No. of Contacts

SCN Size - 12,16,20,25  
SCK Size - 12,16,20,25,30,32,40  
Contacts - 2,3,4,5,6,7,8,10,12,14,20

### Material / Finish

Body - Zinc alloy / Nickel plate  
Insulator - PA & Bakelite / Green & Black  
Contacts - Brass, Phosphor Bronze / Silver or Gold plate

### Applications

Electric & Electronic  
Communication

### Main Features

Rugged  
Simple construction  
Stable performance

## SH Series

P.24



### Size / No. of Contacts

Size - 9  
Contacts - 6

### Material / Finish

Body - Brass / Chromium plate  
Insulator - Glass filled polyacetal / White  
Contacts - Brass, Phosphor Bronze / Gold plate

### Applications

Microphone Circuitry  
Wireless Communication

### Features

Compact  
Lasting durability  
Contemporary design

## SN Series

P.26



### Size / No. of Contacts

Size - 8,10  
Contacts - 2,3,4,5,6,9,10,12

### Material / Finish

Body - Zinc alloy and Brass / Sn, Ni plate  
Insulator - PA / Black  
Contacts - Brass, Phosphor Bronze / Gold or silver plate

### Applications

Professional A/V, CCTV, Medical,  
Wireless Radio, Measuring,  
Computers and Peripherals,  
Factory Automation, etc.

### Features

Push-pull, Light weight  
Miniature circular, Low cost

## SP Series

P.36



### Size / No. of Contacts

Size - 00,0,1,2,3  
Contacts - 1 to 10, multiple

### Material of Product

Body - Brass / Chromium plate  
Insulator - PEEK, PA or Teflon / Beige  
Contacts - Beryllium or Brass / Gold plate

### Applications

Telecommunication, HDTV,  
Professional A/V, Optical Testing,  
Vision Testing, Portable Wireless  
Radio, Medical, etc.

### Features

Ultimate performance  
Aerodynamic and aesthetic

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



## SRC Series

P.50



### Size / No. of Contacts

Size - 21  
Contacts - 10,16,26

### Material / Finish

Body - Aluminum alloy / Ni or Ni-Au plate  
Insulator - Thermosetting resin /  
Black or Blue  
Contacts - Brass, Phosphor Bronze/Gold  
or Silver plate

### Applications

Professional A/V, Vision Testing,  
Factory Automation, Measuring,  
Medical, etc.

### Features

Bayonet locking system  
Rugged, Light-weight, Low cost  
General purpose

## ST Series

P.54



### Size / No. of Contacts

Size - 9  
Contacts - 12,16,20

### Material / Finish

Body - Brass & Zinc alloy / Ni plate  
Insulator - PPS resin / Black  
Contacts - Brass, Phosphor Bronze /  
Gold plate

### Applications

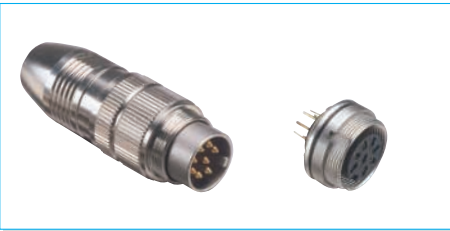
Professional A/V  
Measuring  
Sensors  
Wireless Radio  
Medical, etc.

### Features

Super-miniature with multi-contact  
Safe insert system

## SU Series

P.60



### Size / No. of Contacts

Size - 20  
Contacts - 8

### Material / Finish

Body - ZnDC / Sn, Ni plate  
Insulator - PA GF / Black  
Contacts - Brass, Phosphor Bronze /  
Gold plate

### Applications

Electronic Precision Equipment  
Control Engineering  
Automation  
Medical

### Main Features

Waterproof(IP67)  
Electro-magnetic protection

## SW Series

P.64



### Size / No. of Contacts

Size - 8,10  
Contacts - 2,3,4,5,6,9,10,12

### Material / Finish

Body - Brass / Sn & Ni plate  
Insulator - PA / Black  
Contacts - Brass, Phosphor Bronze /  
Gold or Silver plate

### Applications

Professional Audio and Camera,  
CCTV, Medical, Wireless Radio,  
Testing & Measuring Equipment, etc

### Main Features

Excellent performance at low price  
Screw mounting  
Super-miniature with multi-contact  
Precise design

## SXR Series

P.70



Push-Puff

### Size / No. of Contacts

Size - 10  
Contacts - 8

### Material / Finish

Body - Aluminum alloy / Ni plate  
Insulator - PBT resin / Black  
Contacts - Brass, Phosphor Bronze /  
Gold plate

### Applications

Professional Audio and Camera

### Main Features

Miniature, Light weight,  
Ground function

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SCC Series – Part Numbering



## Features

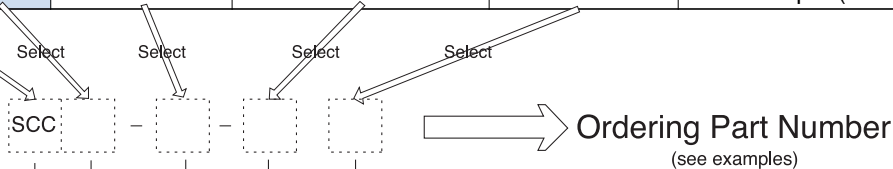
- Rugged
- Light weight
- Low cost
- General purpose

## Applications

- Industrial

## Part Numbering

Part Number		Size	Number of Contact	Suffix (Contact Type)	Notes	Page
Series	Prefix (Body)					
SCC	6A	13,16,21,25	13 size : 3 or 5	P	Plug(Pin)	12
				S	Plug(Socket)	13
	2A		16 size : 7 or 10	P	Receptacle(Pin)	13
				S	Receptacle(Socket)	12
	1A		25 size : 16 or 24	P	Adapter(Pin)	13
				S	Adapter(Socket)	12



### Connector Series (Body Type)

- SCC6A - Plug
- SCC2A - Receptacle
- SCC1A - Adapter

### Size

13,16,21,25

### No. of Contact

- 13 Size : 3 or 5
- 16 Size : 7 or 10
- 21 Size : 10 or 16
- 25 Size : 16 or 24

### Contact Type

- P : Pin
- S : Socket

### Examples

**SCC6A - 13 - 3P**

SCC series Plug - Size 13 - 3 pin

**SCC2A - 16 - 10S**

SCC series Receptacle - Size 16 - 10 socket

**SCC1A - 25 - 24P**

SCC series Adapter - Size 25 - 24 pin

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## Major Performances / Contact Arrangements

Performance	Size/No of Contacts	Size 13		Size 16	
		3	5	7	10
Withstanding Voltage (per min) <sup>1</sup>		AC 250V	AC 250V	AC 250V	AC 250V
Current		10A	5A	10A	5A
Insulation Resistance (Minimum) <sup>2</sup>		1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>		5mΩ	5mΩ	5mΩ	5mΩ
Solder Pot Inside Diameter (∅)		1.5	1.0	1.5	1.0
Contact Arrangement					
Performance	Size/No of Contacts	Size 21		Size 25	
		10	16	16	24
Withstanding Voltage (per min) <sup>1</sup>		AC 250V	AC 250V	AC 250V	AC 250V
Current		10A	5A	10A	5A
Insulation Resistance (Minimum) <sup>2</sup>		1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>		5mΩ	5mΩ	5mΩ	5mΩ
Solder Pot Inside Diameter (∅)		1.5	1.0	1.5	1.0
Contact Arrangement					

- <sup>1</sup> Withstanding voltage is the tested voltage value in this table.
- <sup>2</sup> Insulation resistance is measured at DC 100V.
- <sup>3</sup> Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics for the latest specifications.

## Material Used / Finishing Material

		Material	Finish
Body		Aluminum alloy	Ni plate
Insulator		Thermosetting resin	UL94V-0 ; Blue
Contacts	Pin	Copper alloy	Silver plate
	Socket	Copper alloy	Silver plate

## Mating & Unmating Force

Shell Size	Contacts	Force	Shell Size	Contacts	Force
13	3	< 1.4Kg	13	5	<1.5Kg
16	7	< 3.2Kg	16	10	< 3.4Kg
21	10	< 4.5Kg	21	16	< 5.5Kg
25	16	< 7.2Kg	25	24	< 8.2Kg

## SCC Series Mini-map



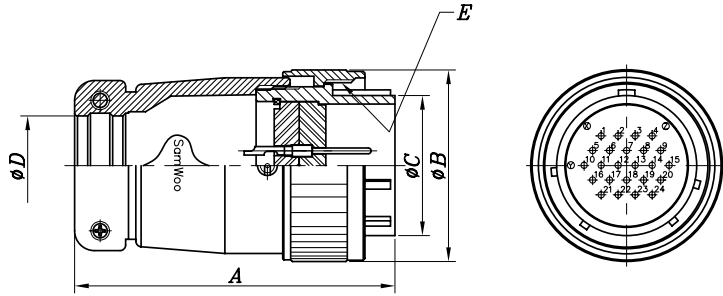
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# SCC Series – Male Plug, Female Receptacle / Adapter

## SCC6A Plug



SCC6A-25-24P



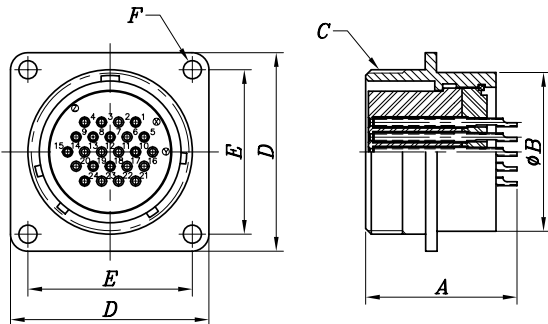
Part Number	A	ØB	ØC	ØD	E
SCC6A-13- 3P	45.7	21.5	12.7	8.0	M18×1.0P
SCC6A-13- 5P					
SCC6A-16- 7P	48.0	25.5	16.3	11.5	M22×1.0P
SCC6A-16-10P					

Part Number	A	ØB	ØC	ØD	E
SCC6A-21-10P	53.5	29.7	20.5	14.0	M26×1.0P
SCC6A-21-16P					
SCC6A-25-16P	56.5	33.8	24.7	17.5	M30×1.0P
SCC6A-25-24P					

## SCC2A Receptacle



SCC2A-25-24S



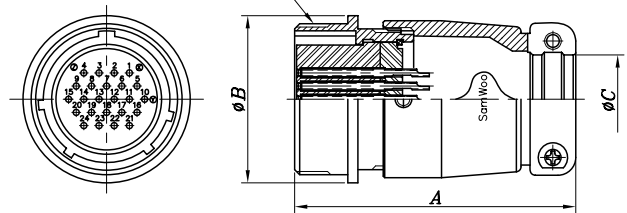
Part Number	A	ØB	C	D	E	F
SCC2A-13- 3S	27.8	16.0	M18×1.0P	26.0	20.0	4-Ø3.3
SCC2A-13- 5S	26.5					
SCC2A-16- 7S	27.6	19.8	M22×1.0P	29.0	23.0	4-Ø3.3
SCC2A-16-10S	27.0					

Part Number	A	ØB	C	D	E	F
SCC2A-21-10S	27.1	24.0	M26×1.0P	32.0	26.0	4-Ø3.3
SCC2A-21-16S	26.6					
SCC2A-25-16S	27.3	27.9	M30×1.0P	35.0	29.5	4-Ø3.3
SCC2A-25-24S	26.7					

## SCC1A Adapter



SCC1A-25-24S



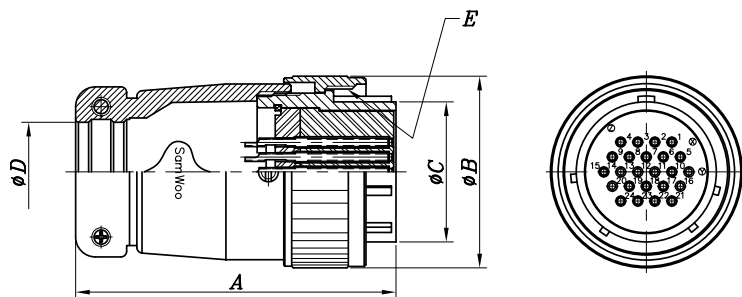
Part Number	A	ØB	ØC	ØD
SCC1A-13- 3S	45.0	21.0	8.0	M18×1.0P
SCC1A-13- 5S				
SCC1A-16- 7S	47.8	25.0	11.5	M22×1.0P
SCC1A-16-10S				

Part Number	A	ØB	ØC	ØD
SCC1A-21-10S	51.5	29.0	14.0	M26×1.0P
SCC1A-21-16S				
SCC1A-25-16S	55.5	33.0	17.5	M30×1.0P
SCC1A-25-24S				

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# Female Plug, Male Receptacle / Adapter – SCC Series

## SCC6A Plug



SCC6A-25-24S

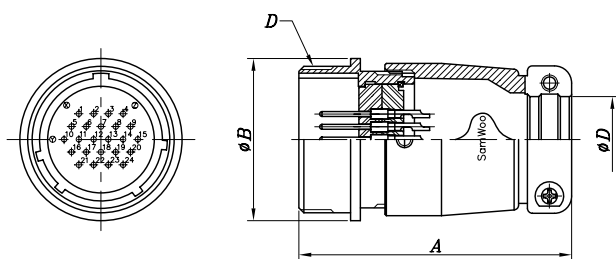
Part Number	A	ØB	ØC	ØD	E
SCC6A-13-3S	45.7	21.5	12.7	8.0	M18×1.0P
SCC6A-13-5S					
SCC6A-16-7S	48.0	25.5	16.3	11.5	M22×1.0P
SCC6A-16-10S					

Part Number	A	ØB	ØC	ØD	E
SCC6A-21-10S	53.5	29.7	20.5	14.0	M26×1.0P
SCC6A-21-16S					
SCC6A-25-16S	56.5	33.8	24.7	17.5	M30×1.0P
SCC6A-25-24S					

## SCC1A Adapter



SCC1A-25-24P



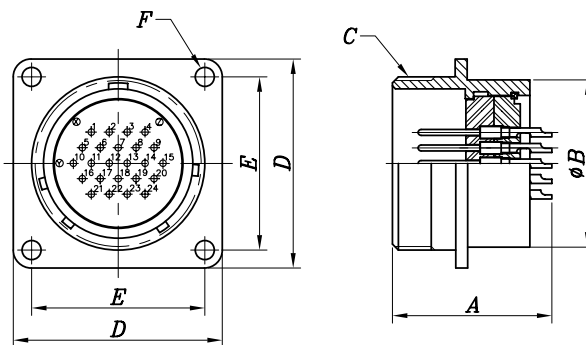
Part Number	A	ØB	ØC	ØD
SCC1A-13-3P	45.0	21.0	8.0	M18×1.0P
SCC1A-13-5P				
SCC1A-16-7P	47.8	25.0	11.5	M22×1.0P
SCC1A-16-10P				

Part Number	A	ØB	ØC	ØD
SCC1A-21-10P	51.5	29.0	14.0	M26×1.0P
SCC1A-21-16P				
SCC1A-25-16P	55.5	33.0	17.5	M30×1.0P
SCC1A-25-24P				

## SCC2A Receptacle



SCC2A-25-24P



Part Number	A	ØB	C	D	E	F
SCC2A-13-3P	26.5	16.0	M18×1.0P	26.0	20.0	4-Ø3.3
SCC2A-13-5P						
SCC2A-16-7P	26.5	19.8	M22×1.0P	29.0	23.0	4-Ø3.3
SCC2A-16-10P						

Part Number	A	ØB	C	D	E	F
SCC2A-21-10P	25.5	24.0	M26×1.0P	32.0	26.0	4-Ø3.3
SCC2A-21-16P	26.3					
SCC2A-25-16P	26.2	27.9	M30×1.0P	35.0	29.5	4-Ø3.3
SCC2A-25-24P	26.5					

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SCK Series – Part Numbering



## Features

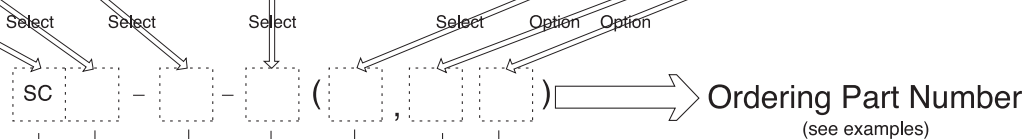
- Rugged
- Simple construction
- Stable mechanical / electrical performances

## Applications

- Electric / Electronic
- Communication

## Part Numbering

Part Number		Size	Number of Contact	Suffix (Body Type)	Option		Notes	Page	
Series	Prefix				L/T	W			
SC	K	12,16,20,25,30,32,40	12 size:2 or 4 16 size:2,3,4,5,6,7,8 20 size:2,3,4,5,6,8,10,12 25 size:2,3,4,5,6,8,10,12 30 size:2,3,4,6,8,10,14 32 size:2,3,4 40 size:2,3,4,6,12	P	●	●	SCK series plug	20	
				L			SCK series Right-angle plug	20	
				R			Receptacle (Panel type)	21	
				RC			Receptacle Cover	23	
				R		●	Receptacle (Nut type)	21	
	N	12,16,20,25	12,16,20,25	12 size:2 or 4 16 size:2,3,4,5,6,7,8 20 size:2,3,4,5,6,8,10,12 25 size:2,3,4,5,6,8,10,12 30 size:2,3,4,6,8,10,14 32 size:2,3,4 40 size:2,3,4,6,12	RPCB			Receptacle (PCB type)	21
					P			Plug (Reverse contact)	23
					R			Receptacle (Reverse contact)	23
					R			Receptacle (Reverse contact)	23
					A			Adapter (Socket Adapter)	22
KH	16,25,30	16,25,30	12 size:2 or 4 16 size:2,3,4,5,6,7,8 20 size:2,3,4,5,6,8,10,12 25 size:2,3,4,5,6,8,10,12 30 size:2,3,4,6,8,10,14 32 size:2,3,4 40 size:2,3,4,6,12	P			Adapter (Pin Adapter)	22	
				A			Adapter (Pin Adapter)	22	
NH	16,20	16,20	Check each product for more detail	R			Receptacle (Reverse contact)	23	
				R			Receptacle (Reverse contact)	23	



### Examples

**SCK - 12 - 4 ( P )**

SCK series - Size 12 - 4 contacts ( Plug )

**SCN - 20 - 10 ( R )**

SCN series - Size 20 - 10 contacts ( Nut Type Receptacle )

**SCKH - 25 - 12 ( P )**

SCKH series(reverse contact) - Size 25 - 12 contacts ( Plug )

**SCA - 30 - 2 ( P )**

SCA series - Size 30 - 2 contacts ( Adapter - female contact )

**SCA - 40 - 16 ( A )**

SCA series - Size 40 - 16 contacts ( Adapter - male contact )

**SCK - 16 - 4 ( P , L/T )**

SCK series - Size 16 - 4 contacts ( Plug , Lock Type )

**SCK - 20 - 5 ( L )**

SCK series - Size 20 - 5 contacts ( Right Angle Plug )

**SCN - 16 - 7 ( RPCB )**

SCN series - Size 16 - 7 contacts ( PCB Receptacle )

### Connector Series (Body Type)

SCK - Plug(Socket) / Receptacle(Pin)

SCN - Nut type receptacle(Pin)

SCKH - Plug(Pin) / Receptacle(Socket)

SCNH - Receptacle(Socket)

SCA - Adapter

### Size

12,16,20,25,30,32,40

### No. of Contact

12 Size : 2 or 4

16 Size : 2,3,4,5,6,7,8

20 Size : 2,3,4,5,6,8,10,20

23 Size : 2,3,4,5,6,8,10,12

30 Size : 2,3,4,5,6,8,10,14

32 Size : 2,3,4

40 Size : 2,3,4,6,12

### Extended Body Type

P : Plug

PL : Right angle Plug

R : Receptacle

RPCB : PCB Receptacle

RC : Receptacle Cap

A : Adapter

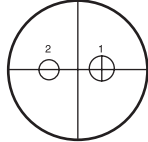
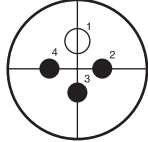
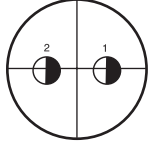
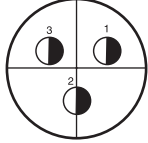
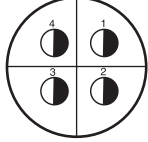
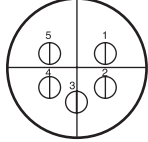
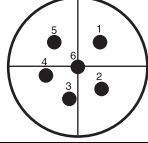
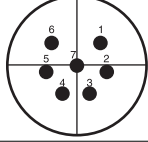
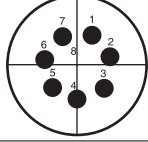
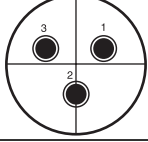
### Option

L/T : Lock type (available for size 16 with 4,5,6,7,8 contacts only)

W : Waterproof (only available in size 12, 4 contacts)

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

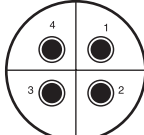
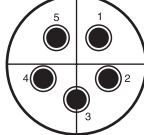
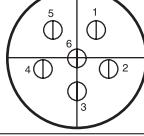
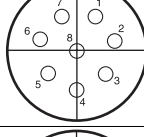
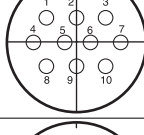
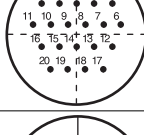
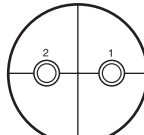
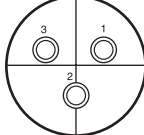
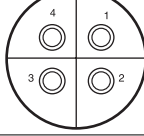
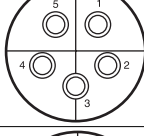
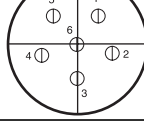
## Major Performances / Contact Arrangements

Performance Size / No. of Contacts		Withstanding Voltage/min	Current	Insulation Resistance (Minimum)	Contact Resistance (Maximum)	Contact Ø	Solder Pot Ø	Contact Arrangement
12	2	AC 500V	4A	1,000MΩ	5mΩ	2.0	1.2	
			3A			1.5	1.2	
	4	AC 500V	4A	1,000MΩ	5mΩ	2.0	1.2	
			3A			1.0	1.0	
16	2	AC 500V	5A	1,000MΩ	5mΩ	2.5	1.5	
	3	AC 500V	5A	1,000MΩ	5mΩ	2.5	1.5	
	4	AC 500V	5A	1,000MΩ	5mΩ	2.5	1.5	
	5	AC 500V	4A	1,000MΩ	5mΩ	2.0	1.2	
	6	AC 500V	3A	1,000MΩ	5mΩ	1.2	1.0	
	7	AC 500V	3A	1,000MΩ	5mΩ	1.2	1.0	
	8	AC 500V	3A	1,000MΩ	5mΩ	1.2	1.0	
	20	2	AC 1000V	7A	1,000MΩ	5mΩ	3.0	2.2
3		AC 1000V	7A	1,000MΩ	5mΩ	3.0	2.2	

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SCK Series – Specifications

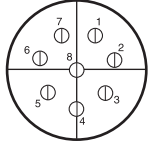
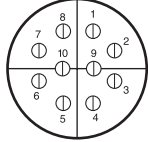
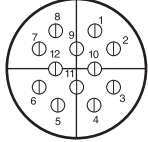
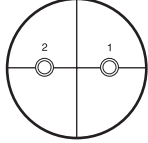
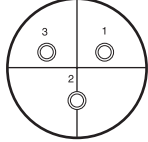
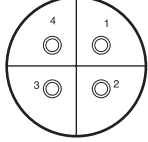
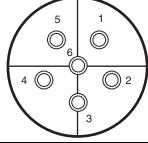
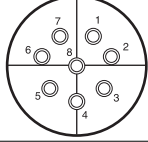
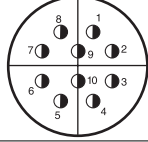
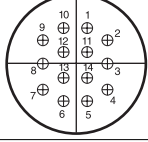
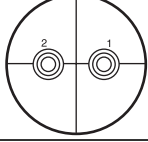
## Major Performances / Contact Arrangements

Performance Size / No. of Contacts	Withstanding Voltage/min	Current	Insulation Resistance (Minimum)	Contact Resistance (Maximum)	Contact Ø	Solder Pot Ø	Contact Arrangement	
20	4	AC 1000V	7A	1,000MΩ	5mΩ	3.0	2.2	
	5	AC 1000V	7A	1,000MΩ	5mΩ	3.0	2.2	
	6	AC 1000V	4A	1,000MΩ	5mΩ	2.0	1.5	
	8	AC 1000V	3A	1,000MΩ	5mΩ	1.5	1.0	
	10	AC 1000V	3A	1,000MΩ	5mΩ	1.5	1.0	
	20	AC 1000V	2A	1,000MΩ	5mΩ	0.7	0.8	
25	2	AC 1000V	10A	1,000MΩ	5mΩ	3.5	2.7	
	3	AC 1000V	10A	1,000MΩ	5mΩ	3.5	2.7	
	4	AC 1000V	10A	1,000MΩ	5mΩ	3.5	2.7	
	5	AC 1000V	10A	1,000MΩ	5mΩ	3.5	2.7	
	6	AC 1000V	4A	1,000MΩ	5mΩ	2.0	1.5	

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



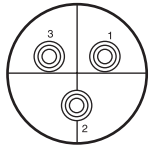
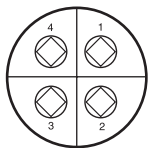
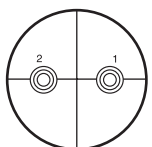
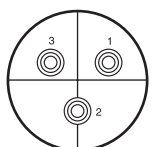
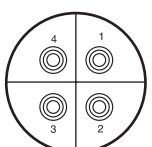
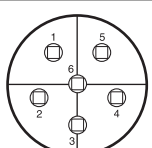
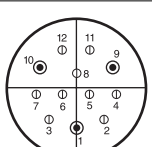
## Major Performances / Contact Arrangements

Performance Size / No. of Contacts		Withstanding Voltage/min	Current	Insulation Resistance (Minimum)	Contact Resistance (Maximum)	Contact Ø	Solder Pot Ø	Contact Arrangement
25	8	AC 1000V	4A	1,000MΩ	5mΩ	2.0	1.5	
	10	AC 1000V	4A	1,000MΩ	5mΩ	2.0	1.5	
	12	AC 1000V	4A	1,000MΩ	5mΩ	2.0	1.5	
30	2	AC 500V	15A	1,000MΩ	5mΩ	3.5	2.7	
	3	AC 500V	15A	1,000MΩ	5mΩ	3.5	2.7	
	4	AC 500V	15A	1,000MΩ	5mΩ	3.5	2.7	
	6	AC 1000V	15A	1,000MΩ	5mΩ	3.5	2.7	
	8	AC 1000V	15A	1,000MΩ	5mΩ	3.5	2.7	
	10	AC 1000V	5A	1,000MΩ	5mΩ	2.5	2.2	
	14	AC 1000V	4A	1,000MΩ	5mΩ	1.8	1.2	
32	2	AC 1000V	40A	1,000MΩ	5mΩ	7.0	4.1	

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SCK Series – Specifications

## Major Performances / Contact Arrangements














Performance Size / No. of Contacts		Withstanding Voltage/min	Current	Insulation Resistance (Minimum)	Contact Resistance (Maximum)	Contact Ø	Solder Pot Ø	Contact Arrangement	
32	3	AC 1000V	40A	1,000MΩ	5mΩ	7.0	4.1		
	4	AC 1000V	30A	1,000MΩ	5mΩ	6.0	4.2		
40	2	AC 1000V	40A	1,000MΩ	5mΩ	7.0	4.5		
	3	AC 1000V	40A	1,000MΩ	5mΩ	7.0	4.5		
	4	AC 1000V	40A	1,000MΩ	5mΩ	7.0	4.5		
	6	AC 1000V	20A	1,000MΩ	5mΩ	4.5	3.5		
	12		AC 1000V	10A	1,000MΩ	5mΩ	3.0	2.0	
				4A			2.0	1.5	

- <sup>1</sup> Withstanding voltage is the tested voltage value in this table.  
<sup>2</sup> Insulation resistance is measured at DC 100V.  
<sup>3</sup> Contact resistance is measured at DC 1A.  
 • Values are from tested items and may not apply to all connectors.

## Material Used / Finishing Material

		Material	Finish
Body		Zinc alloy	Nickel
Insulator	Size 12	PA & Bakelite	Green
	Size 16	Bakelite	Black
	Size 20,25,30	Bakelite	Green
	Size 32,40	Epoxy	Green
Contacts	Pin	Brass	Silver of Gold
	Socket	Brass, Phosphor Bronze	Silver of Gold

## Symbol of Contact Diameter

Mark								
Diameter	0.7	1.0	1.2	1.5	1.8	2.0	2.5	3.0
Mark								
Diameter	3.5	4.0	4.5	6.0	7.0			

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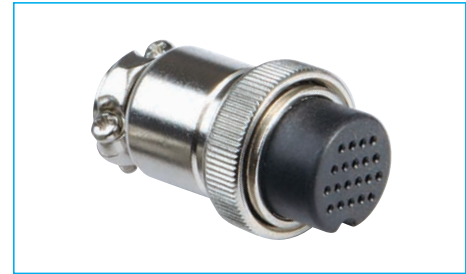
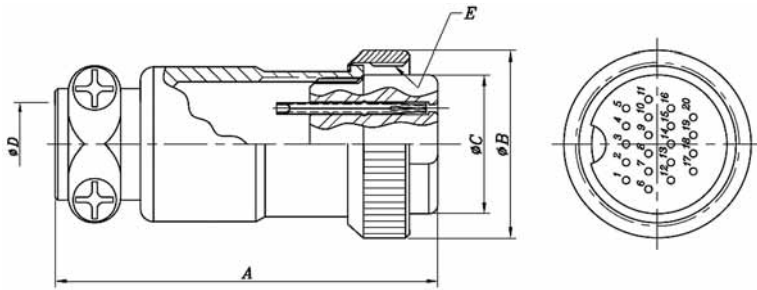
## SCK / SCN Series Mini-map



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SCK Series – SCK Plug, Lock-Type Plug, Right-Angle Plug

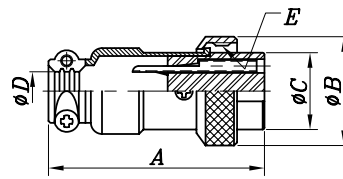
## SCK Plug



SCK-20-20(P)

Part Number	A	ØB	ØC	ØD	E					
SCK-12-2(P)	28.6	14.5	9.2	5.0	M13×0.75P					
SCK-12-4(P)										
SCK-16-2(P)										
SCK-16-3(P)	35.7	18.2	12.6	6.4	M16×1.0P					
SCK-16-4(P)										
SCK-16-5(P)										
SCK-16-6(P)										
SCK-16-7(P)										
SCK-16-8(P)										
SCK-20-2(P)	42.5	21.8	15.5	8.2	M19×1.0P					
SCK-20-3(P)										
SCK-20-4(P)										
SCK-20-5(P)										
SCK-20-6(P)										
SCK-20-8(P)										
SCK-20-10(P)										
SCK-20-20(P)										
SCK-25-2(P)						50.0	28.2	21.5	11.0	M25×1.25P
SCK-25-3(P)										
SCK-25-4(P)										
SCK-25-5(P)										
SCK-25-6(P)										
SCK-25-8(P)										
SCK-25-10(P)										
SCK-25-12(P)										
SCK-30-2(P)	53.5	33.0	25.0	13.0	M29×1.0P					
SCK-30-3(P)										
SCK-30-4(P)										
SCK-30-6(P)										
SCK-30-8(P)										
SCK-30-10(P)										
SCK-30-14(P)										
SCK-32-2(P)	59.0	38.2	28.0	15.0	M34×1.0P					
SCK-32-3(P)										
SCK-32-4(P)										
SCK-40-2(P)	67.7	45.5	34.8	18.0	M41.5×1.5P					
SCK-40-3(P)										
SCK-40-4(P)										
SCK-40-6(P)										
SCK-40-12(P)										

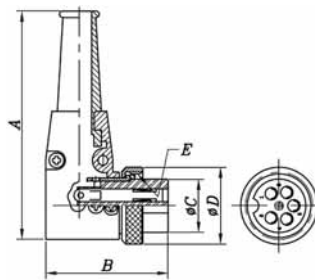
## SCK Series Plug (Lock Type)



SCK-16-6(P, L/T)

Part Number	A	ØB	ØC	ØD	E
SCK-16-4(P, L/T)	36.0	18.2	12.6	6.4	M16×1.0P
SCK-16-5(P, L/T)					
SCK-16-6(P, L/T)					
SCK-16-7(P, L/T)					
SCK-16-8(P, L/T)					
SCK-16-8(P, L/T)					

## SCK Right-Angle Plug



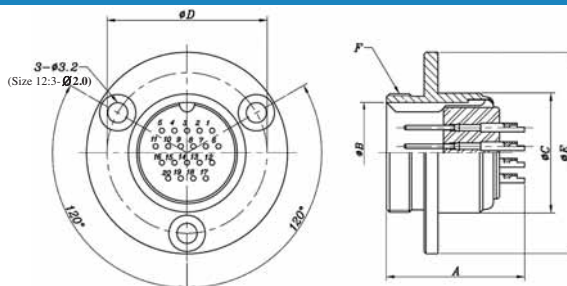
SCK-16-5(L)

Part Number	A	ØB	ØC	ØD	E
SCK-16-4(L)	54.0	29	12.6	18.2	M16×1.0P
SCK-16-5(L)					
SCK-16-6(L)					

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

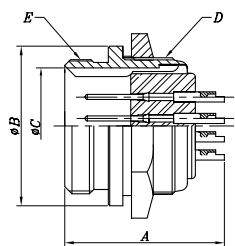
## SCK Receptacle

SCK-20-20(R)



## SCN Receptacle

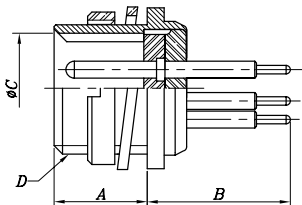
SCN-20-20(R)



Part Number	A	ØB	ØC	ØD	E
SCN-12-2(R)	17.3	15.0	9.6	M12×0.75P	M13×0.75P
SCN-12-4(R)					
SCN-16-2(R)					
SCN-16-3(R)					
SCN-16-4(R)	20.6	18.8	13.0	M16×0.75P	M16×1.0P
SCN-16-5(R)					
SCN-16-6(R)					
SCN-16-7(R)					
SCN-16-8(R)	22.0	23.0	15.9	M19×0.75P	M19×1.0P
SCN-20-2(R)					
SCN-20-3(R)					
SCN-20-4(R)					
SCN-20-5(R)	22.0	23.0	15.9	M19×0.75P	M19×1.0P
SCN-20-6(R)					
SCN-20-8(R)					
SCN-20-10(R)					
SCN-20-20(R)	22.0	23.0	15.9	M19×0.75P	M19×1.0P
SCN-25-2(R)					
SCN-25-3(R)					
SCN-25-4(R)					
SCN-25-5(R)					
SCN-25-6(R)					
SCN-25-8(R)					
SCN-25-10(R)					
SCN-25-12(R)					

## SCN PCB Receptacle

SCN-16-8(RPCB)



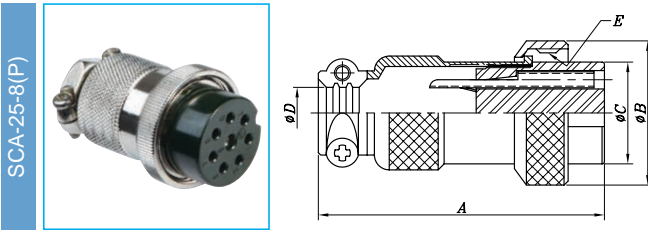
Part Number	A	B	ØC	D
SCN-16-2(RPCB)	11.0	11.7~17.7 (Customizable)	13	M16×1.0P
SCN-16-3(RPCB)				
SCN-16-4(RPCB)				
SCN-16-5(RPCB)				
SCN-16-6(RPCB)				
SCN-16-7(RPCB)				
SCN-16-8(RPCB)	12.5	11.7~17.7 (Customizable)	16	M19×1.0P
SCN-20-3(RPCB)				
SCN-20-4(RPCB)				

Part Number	A	ØB	ØC	ØD	ØE	F						
SCK-12-2(R)	17.3	11.8	9.6	17.0	22.0	M13×0.75P						
SCK-12-4(R)												
SCK-16-2(R)												
SCK-16-3(R)												
SCK-16-4(R)	21.0	15.9	13.0	24.0	30.7	M16×1.0P						
SCK-16-5(R)												
SCK-16-6(R)												
SCK-16-7(R)												
SCK-16-8(R)	22.0	9.0	16.0	25.5	32.0	M19×1.0P						
SCK-20-2(R)												
SCK-20-3(R)												
SCK-20-4(R)												
SCK-20-5(R)	22.0	9.0	16.0	25.5	32.0	M19×1.0P						
SCK-20-6(R)												
SCK-20-8(R)												
SCK-20-10(R)												
SCK-20-20(R)	27.5	25.0	21.9	34.0	42.0	M25×1.25P						
SCK-25-2(R)												
SCK-25-3(R)												
SCK-25-4(R)												
SCK-25-5(R)												
SCK-25-6(R)												
SCK-25-8(R)												
SCK-25-10(R)												
SCK-25-12(R)												
SCK-30-2(R)							27.2	29.0	25.7	37.0	45.5	M29×1.0P
SCK-30-3(R)												
SCK-30-4(R)												
SCK-30-6(R)												
SCK-30-8(R)												
SCK-30-10(R)												
SCK-30-14(R)	33.5	32.0	28.9	42.0	50.8	M34×1.0P						
SCK-32-2(R)												
SCK-32-3(R)												
SCK-32-4(R)												
SCK-40-2(R)	39.5	40.0	35.5	50.0	58.0	M41.5×1.5P						
SCK-40-3(R)												
SCK-40-4(R)												
SCK-40-6(R)												
SCK-40-12(R)												

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

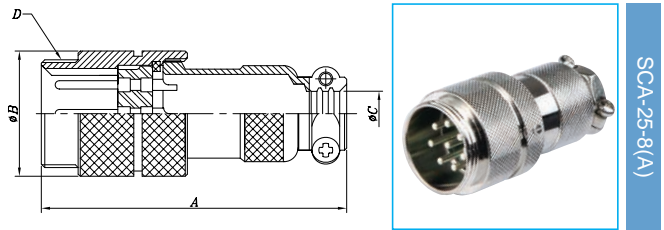
# SCK Series – SCA Adapter

## SCA Adapter (Socket Contact)



Part Number	A	ØB	ØC	ØD	E
SCA-16-2(P)	35.7	18.2	12.6	6.4	M16×1.0P
SCA-16-3(P)					
SCA-16-4(P)					
SCA-16-5(P)					
SCA-16-6(P)					
SCA-16-8(P)					
SCA-20-2(P)	42.5	21.8	15.5	8.2	M19×1.0P
SCA-20-3(P)					
SCA-20-4(P)					
SCA-20-5(P)					
SCA-20-6(P)					
SCA-20-8(P)					
SCA-20-10(P)	50.0	28.2	21.5	11.0	M25×1.25P
SCA-20-20(P)					
SCA-25-2(P)					
SCA-25-3(P)					
SCA-25-4(P)					
SCA-25-5(P)					
SCA-25-6(P)					
SCA-25-8(P)					
SCA-25-10(P)	53.5	33.0	25.0	13.0	M29×1.0P
SCA-25-12(P)					
SCA-30-2(P)					
SCA-30-3(P)					
SCA-30-4(P)					
SCA-30-6(P)					
SCA-30-8(P)	59.0	38.2	28.0	15.0	M34×1.0P
SCA-32-2(P)					
SCA-32-3(P)					
SCA-32-4(P)					
SCA-40-2(P)	67.7	45.5	34.8	18.0	M41.5×1.5P
SCA-40-3(P)					
SCA-40-4(P)					
SCA-40-6(P)					
SCA-40-12(P)					

## SCA Adapter (Pin Contact)



Part Number	A	ØB	ØC	D
SCA-16-2(A)	43.7	18.2	6.4	M16×1.0P
SCA-16-3(A)				
SCA-16-4(A)				
SCA-16-5(A)				
SCA-16-6(A)				
SCA-16-8(A)				
SCA-20-2(A)	49.0	21.8	8.2	M19×1.0P
SCA-20-3(A)				
SCA-20-4(A)				
SCA-20-5(A)				
SCA-20-6(A)				
SCA-20-8(A)				
SCA-20-10(A)	56.2	28.2	11.0	M25×1.25P
SCA-20-20(A)				
SCA-25-2(A)				
SCA-25-3(A)				
SCA-25-4(A)				
SCA-25-5(A)				
SCA-25-6(A)				
SCA-25-8(A)	62.0	33.0	13.0	M29×1.0P
SCA-25-10(A)				
SCA-25-12(A)				
SCA-30-2(A)				
SCA-30-3(A)				
SCA-30-4(A)				
SCA-30-6(A)	67.5	38.2	15.0	M34×1.0P
SCA-30-8(A)				
SCA-32-2(A)				
SCA-32-3(A)				
SCA-32-4(A)	74.5	45.5	18.0	M41.5×1.5P
SCA-40-2(A)				
SCA-40-3(A)				
SCA-40-4(A)				
SCA-40-6(A)				
SCA-40-12(A)				

## SCA Adapter (Set)



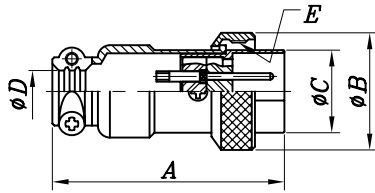
SCA Adapter sets are available.  
SCA sets include both Pin and Socket adapter.  
To order a set, choose **(P.A)** at the end of part number.

ex) To order SCA-25-10(P) and SCA-25-10(A),  
Select **SCA-25-10(P.A)**

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SCKH Plug

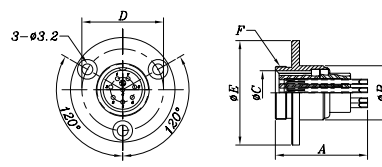
SCKH-16-8(P)



Part Number	A	ØB	ØC	ØD	E
SCKH-16-4(P)	36.0	18.2	12.7	6.4	M16×1.0P
SCKH-16-5(P)					
SCKH-16-8(P)					
SCKH-25-2(P)	50.0	28.2	21.5	11.0	M25×1.25P
SCKH-25-3(P)					
SCKH-25-4(P)					
SCKH-30-2(P)	54.0	33.0	25.0	13.0	M29×1.0P
SCKH-30-3(P)					
SCKH-30-8(P)					

## SCKH Receptacle

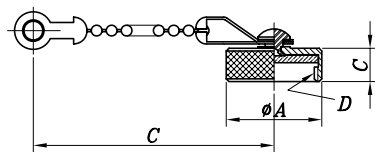
SCKH-16-8(R)



Part Number	A	ØB	ØC	ØD	ØE	F
SCKH-16-4(R)	28.2	15.9	13.0	24.0	30.7	M16×1.0P
SCKH-16-5(R)						
SCKH-16-8(R)						
SCKH-25-2(R)	31.0	25.0	21.9	34.0	42.0	M25×1.25P
SCKH-25-3(R)						
SCKH-25-4(R)						
SCKH-30-2(R)	31.0	29.0	25.7	37.0	45.5	M29×1.0P
SCKH-30-3(R)						
SCKH-30-8(R)						

## SCK Receptacle Cap

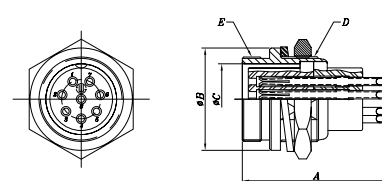
SCK-16(RC)



Part Number	A	ØB	ØC	ØD
SCK-12(RC)	14.0	4.6	130	M12P×0.75
SCK-16(RC)	17.0	6.2	130	M16P×1.0
SCK-20(RC)	21.8	7.2	150	M19P×1.0
SCK-25(RC)	28.0	7.4	150	M25P×1.25
SCK-30(RC)	32.8	7.7	150	M39P×1.0
SCK-32(RC)	37.8	9.0	170	M34P×1.0
SCK-40(RC)	45.0	9.5	170	M41.5P×1.5

## SCNH Receptacle

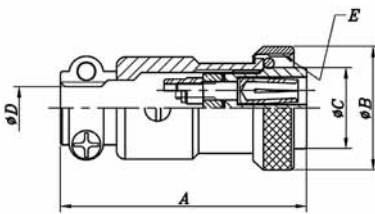
SCNH-16-8(R)



Part Number	A	ØB	ØC	D	E
SCNH-16-4(R)	20.6	18.8	13.0	M16×0.75P	M16×1.0P
SCNH-16-5(R)					
SCNH-16-8(R)					
SCNH-25-2(R)	22.0	23.0	15.9	M19×0.75P	M19×1.0P
SCNH-25-4(R)					

## SCK Waterproof Plug

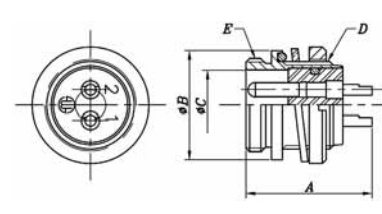
SCK-12-2(P,W)



Part Number	A	ØB	ØC	ØD	E
SCK-12-2(P,W)	28.6	14.5	9.2	5.0	M13×0.75P
SCK-12-4(P,W)					

## SCN Waterproof Receptacle

SCN-12-2(R,W)



Part Number	A	ØB	ØC	D	E
SCN-12-2(R,W)	17.3	15.0	9.6	M12×0.75P	M13×0.75P
SCN-12-4(R,W)					

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SH Series – Part Numbering / Specifications



## Features

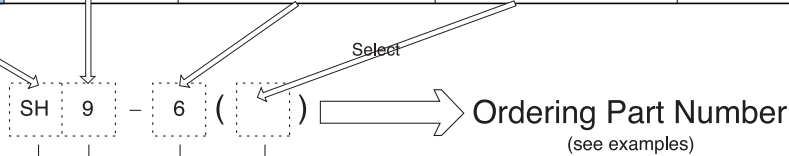
- Compact
- Lasting durability
- Contemporary design

## Applications

- Microphone circuitry
- Wireless communication

## Part Numbering

Part Number	Size	Number of Contact	Suffix (Contact Type)	Notes
SH	9	6	P	Plug(Pin contact)
			R	Receptacle(Socket contact)



### Examples

SH - 9 - 6 ( P )

SH series - Size 9 - 6 contacts - ( Plug )

SH - 9 - 6 ( R )

SH series - Size 9 - 6 contacts ( Receptacle )

### Connector Series

SH Series

### Size

9

### No. of Contacts

6

### Body Type

P : Plug

R : Receptacle

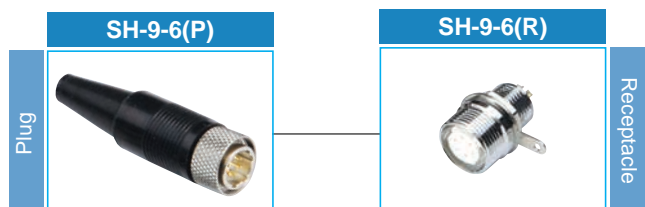
## Major Performances / Contact Arrangements

Performance Size/No. of Contacts		Rated Voltage	Withstanding Voltage/min	Current	Insulation Resistance (Minimum)	Contact Resistance (Maximum)	Contact Ø	Solder Pot Ø	Contact Arrangement
9	6	AC 100V DC 140V	AC 300V	2A	200MΩ	10mΩ	Ø0.7	Ø0.7	

## Material Used / Finishing Material

		Material	Finish
Body		Brass	Chromium plate
Insulator		Glass-filled polyacetal	White
Contacts	Pin	Brass	Gold plate
	Socket	Phosphor bronze	Gold plate

## SH-9-6 Mini-map

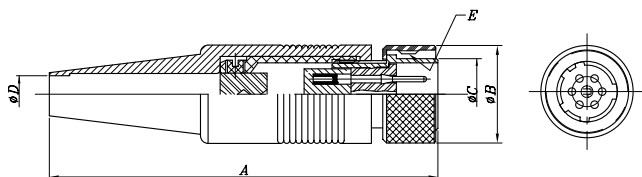


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



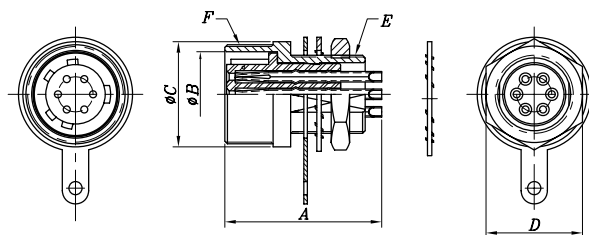
# SH Plug / Receptacle, Cable Assembly Instruction – SH Series

## SH-9-6(P)



Part Number	A	ØB	ØC	ØD	E
SH-9-6(P)	51.0	12.9	9.4	4.9	M11×0.75P

## SH-9-6(R)



Part Number	A	ØB	ØC	D	E
SH-9-6(R)	190	9.7	12.0	M9×0.75P	M11.5×0.75P

## Cable Assembly Instruction

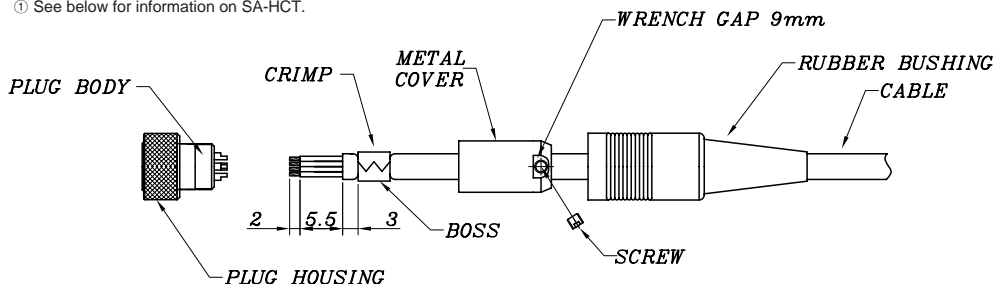
### General Instruction / Information

- Soldering must be done as quickly and carefully as possible to prevent damage to insulator.
- Receptacles do not require additional instructions.

### Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0.129mm<sup>2</sup>(AWG#26).
- ② Insert **RUBBER BUSHING** to cable.
- ③ Insert **METAL COVER** to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure **PLUG BODY** to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten **CRIMP** using hand crimp tool (SA-HCT<sup>①</sup>).
- ⑧ Screw **PLUG HOUSING** and **METAL COVER**.
- ⑨ Tighten **SCREW** using 0.3N force onto one of two embossed parts of **CRIMP**.
- ⑩ Cover **RUBBER BUSHING** onto **METAL COVER**.

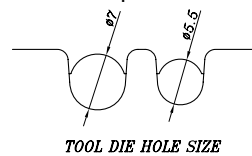
① See below for information on SA-HCT.



## SA-HCT (Hand Crimp Tool)



Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results. Use Ø7.0 for SH series.



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SN Series – Part Numbering



## Features

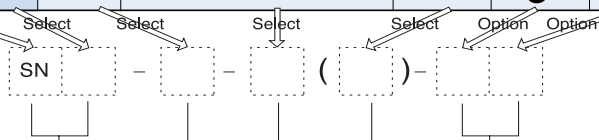
- Push-pull technology
- Miniature circular
- Light weight
- Low cost

## Applications

- Professional audio and video
- CCTV system
- Portable wireless radio
- Factory Automation
- Computers and peripherals
- Medical, and much more.

## Part Numbering

Part Number Series	Prefix	Size	Number of Contact	Suffix	Optional Suffix		Contact Type	Notes	Page	
					S	B				
SN	H	8 or 10	8 size : 4,5,6 10 size : 2,3,4,9,10,12	P / PS		●	P	Plug	30	
				PL		●	P	Right-angle plug	30	
				R	●	●	S	Receptacle	31	
				RPCB	●	●	S	PCB receptacle	31	
				LRPCB	●	●	S	Right-angle PCB receptacle	31	
				P / PS		●	S	Plug	32	
				PL		●	S	Right-angle plug	32	
				R	●	●	P	Receptacle	33	
	RPCB	●	●	P	PCB receptacle	33				
	LRPCB	●	●	P	Right-angle PCB receptacle	33				
	1			P		●	P	Plug (Clamp type)	30	
	1H			P		●	S	Plug (Clamp type)	32	
	A					●	S	Adapter	31	
	HA					●	P	Adapter	33	
	2			P			●	P	Plug (Screw-on type)	29
	2A			R	●	●	S	Receptacle (Screw-on type)	29	
					●	●	S	Adapter (Screw-on type)	29	



Ordering Part Number  
(see examples)

### Examples

SN - 8 - 4 ( P )

SN series - Size 8 - 4 contacts ( Plug )

SNA - 8 - 6 ( RPCB )

SNA series - Size 8 - 6 contacts ( PCB Receptacle )

SN - 8 - 6 ( P ) - SB

SN series - Size 8 - 6 contacts ( Plug ) - Silver contact & Black plug housing

SN1 - 10 - 12 ( R ) - S

SN1 series - Size 10 - 12 contacts ( Receptacle ) - Silver contact

SN2A - 10 - 2 - S

SN2A series - Size 10 - 2 contacts - Silver contact

SN - 8 - 4 ( LRPCB ) - S

SN series - Size 8 - 4 contacts ( Right-angle PCB receptacle ) - Silver contact

### Connector Series (Prefix)

SN - SN series

SNH - Reverse contact

SN1 - Clamp type plug

SN1H - Clamp type & reverse contact plug

SNA - Adapter for SN series

SNHA - Adapter for SHN series

SN2 - Screw-on type

SN2A - Adapter for SN2 series

### Size

8, 10

### No. of Contact

8 Size : 4,5,6

10 Size : 2,3,4,9,10,12

### Body Type

P : Plug

PL : Right-angle plug

PS : Short Plug Housing

R : Receptacle (solder termination)

RPCB : Receptacle (PCB termination)

LRPCB : Right-angle Receptacle (PCB)

blank : Adapter










### Option

S : Silver contacts

B : Black plug housing

Specifications subject to change without notice.  
Consult Sam Woo Electronics for the latest specifications.

## Major Performances / Contact Arrangements

Performance	Size / No of Pin		Size 8			
	4	5	6			
Withstanding Voltage (per min) <sup>1</sup>	AC 300V	AC 300V	AC 300V			
Current	2A	2A	2A			
Insulation Resistance (Minimum) <sup>2</sup>	1,000MΩ	1,000MΩ	1,000MΩ			
Contact Resistance (Maximum) <sup>3</sup>	10mΩ	10mΩ	10mΩ			
Solder Pot Inside Diameter	∅0.8	∅0.8	∅0.8			
Contact Arrangement						
Performance	Size / No of Pin		Size 10			
	2	3	4	9	10	12
Withstanding Voltage (per min) <sup>1</sup>	AC 500V	AC 500V	AC 500V	AC 300V	AC 300V	AC 300V
Current	3A	3A	3A	2A	2A	2A
Insulation Resistance (Minimum) <sup>2</sup>	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>	10mΩ	10mΩ	10mΩ	10mΩ	10mΩ	10mΩ
Solder Pot Inside Diameter	∅1.0	∅1.0	∅1.0	∅0.8	∅0.8	∅0.8
Contact Arrangement						

- <sup>1</sup> Withstanding voltage is the tested voltage value in this table.  
<sup>2</sup> Insulation resistance is measured at DC 100V.  
<sup>3</sup> Contact resistance is measured at DC 1A.  
 • Values are from tested items and may not apply to all connectors.  
 • Specifications subject to change without notice.  
 • Consult Sam Woo Electronics for the latest specifications.

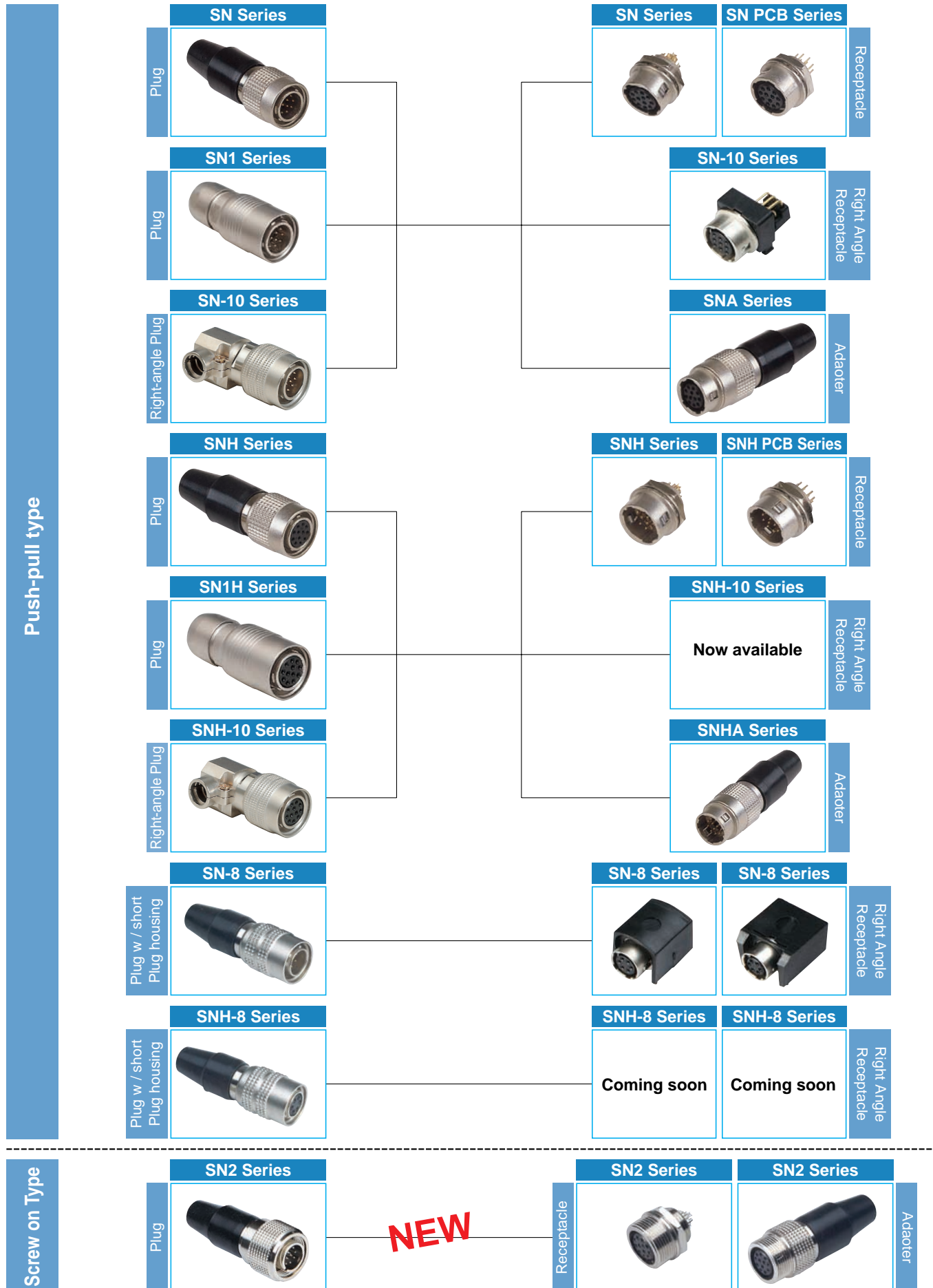
**Contact Diameter**  
 ○ 0.8mm ● 1.0mm

## Material Used / Finishing Material

	Material	Finish
Body	Zinc alloy and brass	Sn, Ni plate
Insulator	PA	Black
Contacts	Pin	Brass
	Socket	Phosphor bronze

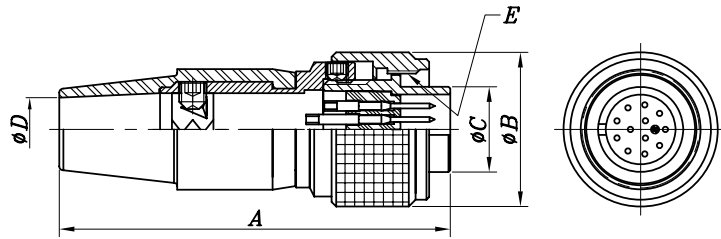
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SN Series – Mini-map



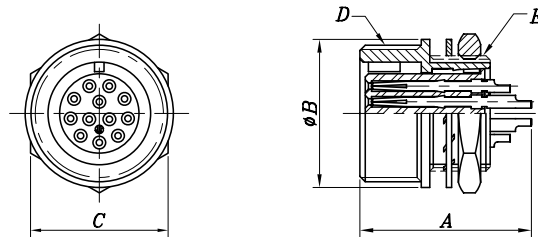
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SN2 Plug



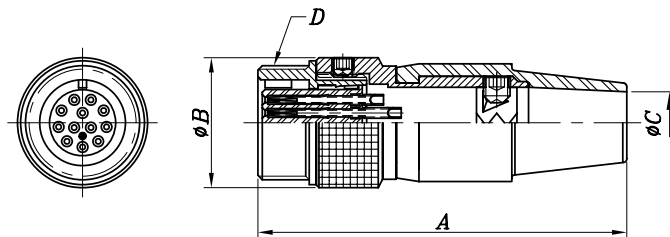
Part Number	A	ØB	ØC	ØD	E	Part Number	A	ØB	ØC	ØD	E
SN2-8-4 (P)		Coming soon				SN2-10-2 (P)	43.0	17.0	9.4	7.0	M13×0.75P
SN2-8-5 (P)						SN2-10-3 (P)					
SN2-8-6 (P)						SN2-10-4 (P)					
					SN2-10-9 (P)						
					SN2-10-10 (P)						
					SN2-10-12 (P)						

## SN2 Receptacle



Part Number	A	ØB	ØC	ØD	E	Part Number	A	ØB	ØC	ØD	ØE
SN2-8-4 (R)		Coming soon				SN2-10-2 (R)	16.5	14	13	M130.75P	M11×0.75P
SN2-8-5 (R)						SN2-10-3 (R)					
SN2-8-6 (R)						SN2-10-4 (R)					
					SN2-10-9 (R)						
					SN2-10-10 (R)						
					SN2-10-12 (R)						

## SN2A Adapter

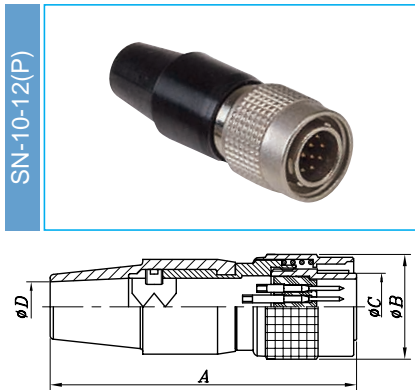


Part Number	A	ØB	ØC	ØD	Part Number	A	ØB	ØC	ØD
SN2A-8-4 (P)		Coming soon			SN2A-10-2 (R)	41.7	14.7	7.0	M13×0.75P
SN2A-8-5 (P)					SN2A-10-3 (R)				
SN2A-8-6 (P)					SN2A-10-4 (R)				
				SN2A-10-9 (R)					
				SN2A-10-10 (R)					
				SN2A-10-12 (R)					

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

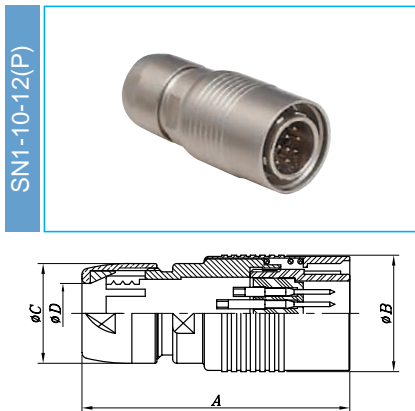
# SN Series – SN Plug

## SN Plug



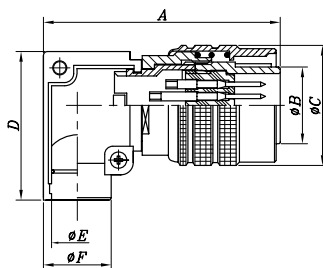
Part Number	A	ØB	ØC	ØD
SN-8-4(P)	35	11.5	7	5
SN-8-5(P)				
SN-8-6(P)				
SN-10-2(P)	43	14.9	9.4	7
SN-10-3(P)				
SN-10-4(P)				
SN-10-9(P)				
SN-10-10(P)				
SN-10-12(P)				

## SN1 Plug



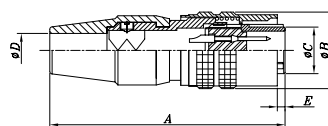
Part Number	A	ØB	ØC	ØD
SN1-8-4(P)	28	11.0	9.0	5.2
SN1-8-5(P)				
SN1-8-6(P)				
SN1-10-2(P)	32	14.0	12.0	7.2
SN1-10-3(P)				
SN1-10-4(P)				
SN1-10-9(P)				
SN1-10-10(P)				
SN1-10-12(P)				

## SN Right-Angle Plug



Part Number	A	ØB	ØC	D	ØE	ØF
SN-10-9(PL)	29.0	14.9	9.4	18.2	6.3	8.3
SN-10-10(PL)						
SN-10-12(PL)						

## SN Plug (Short plug housing)



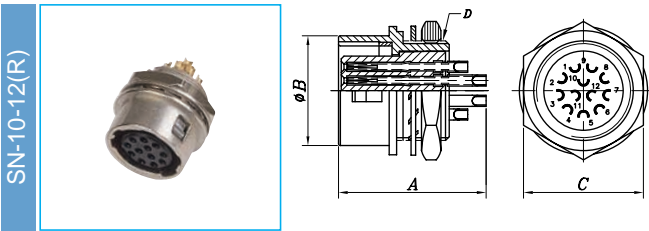
Part Number	A	ØB	ØC	ØD	E
SN-8-4(PS)	35.0	11.5	7.0	5.1	0.6
SN-8-6(PS)					

! SN Plug (Short plug housing) only mates with SN-8-4(LRPCB)K, SN-8-6(LRPCB)K, SN-8-4(LRPCB)K1, SN-8-6(LRPCB)K1.

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

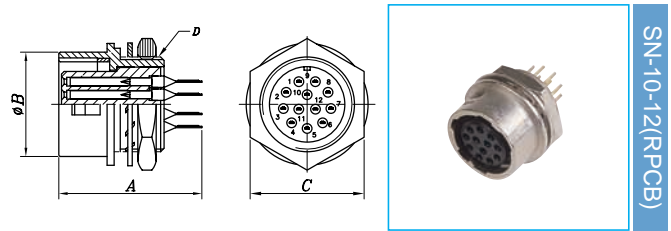
# SN Receptacle / Adapter – SN Series

## SN Receptacle



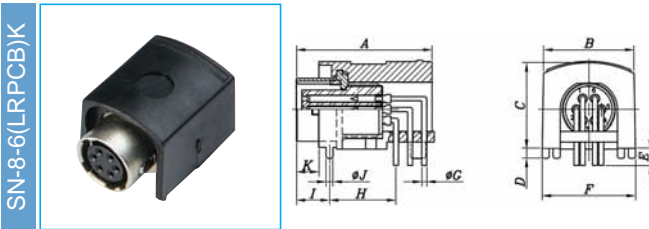
Part Number	A	ØB	C	D
SN-8-4 (R)	14.5	8.8	10.0	M18×1.0
SN-8-5 (R)				
SN-8-6 (R)				
Part Number	A	ØB	C	D
SN-10-2 (R)	15	11.9	13.0	M11×0.75
SN-10-3 (R)				
SN-10-4 (R)				
SN-10-9(R)				
SN-10-10(R)				
SN-10-12(R)				

## SN PCB Receptacle



Part Number	A	ØB	C	D
SN-8-4 (RPCB)	15.7	8.8	10	M8×0.5
SN-8-5 (RPCB)				
SN-8-6 (RPCB)				
Part Number	A	ØB	C	D
SN-10-2 (RPCB)	16.2	11.9	13	M11×0.75
SN-10-3 (RPCB)				
SN-10-4 (RPCB)				
SN-10-9(RPCB)				
SN-10-10(RPCB)				
SN-10-12(RPCB)				

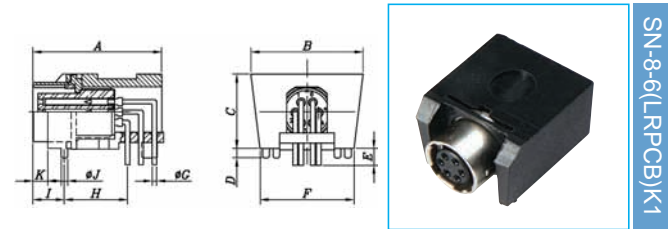
## SN Right Angle PCB Receptacle (Any Type)



Part Number	A	B	C	D	E	F	ØG	H	I	ØJ	K
SN-8-4 (LRPCB)K	19.2	12.8	12.0	1.3	2.4	13.2	0.7	9.4	4.7	1.0	3.2
SN-8-6 (LRPCB)K											

! SN-8-4(LRPCB)K, SN-8-6(LRPCB)K only mates with SN-8-4(PS), SN-8-6(PS) plugs.

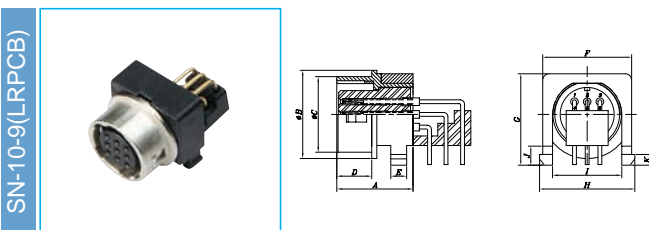
## SN Right Angle PCB Receptacle (Magic Type)



Part Number	A	B	C	D	E	F	ØG	H	I	ØJ	K
SN-8-4(LRPCB)K1	19.2	16.7	11.0	1.3	2.4	14.0	0.7	9.4	4.7	1.0	2.2
SN-8-6(LRPCB)K1											

! SN-8-4(LRPCB)K1, SN-8-6(LRPCB)K1 only mates with SN-8-4(PS), SN-8-6(PS) plugs.

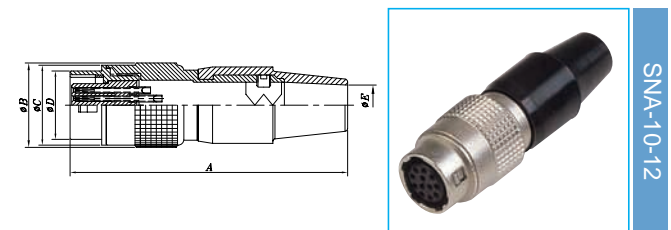
## SN Right Angle PCB Receptacle



Part Number	A	ØB	ØC	D	E	F	G	H	I	J	K
SN-10-9(LRPCB)	12	13.9	11.9	5.5	2.5	14	19.3	15	11	3	1

! SN-10-12(LRPCB) now available

## SNA Adapter

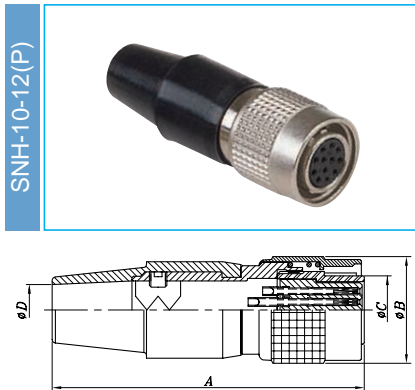


Part Number	A	ØB	ØC	ØD	ØE
SNA-8-4	40.2	11.5	10.9	8.8	5.1
SNA-8-5					
SNA-8-6					
Part Number	A	ØB	ØC	ØD	ØE
SNA-10-2	48.0	14.9	13.9	11.9	7.0
SNA-10-3					
SNA-10-4					
SNA-10-9					
SNA-10-10					
SNA-10-12					

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

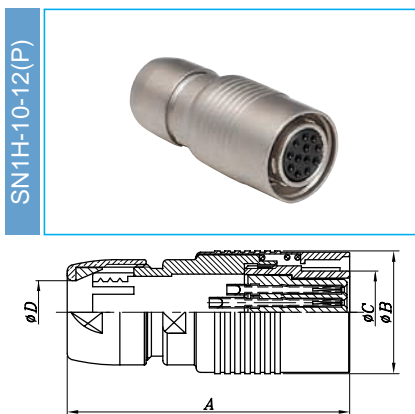
# SN Series – SNH Plug

## SNH Plug



Part Number	A	$\phi B$	$\phi C$	$\phi D$
SNH-8-4(P)	35	11.5	7	5
SNH-8-5(P)				
SNH-8-6(P)				
SNH-10-2(P)	43	14.9	9.4	7
SNH-10-3(P)				
SNH-10-4(P)				
SNH-10-9(P)				
SNH-10-10(P)				
SNH-10-12(P)				

## SN1H Plug



Part Number	A	$\phi B$	$\phi C$	$\phi D$
SN1H-8-4(P)	28	11.0	9.0	5.2
SN1H-8-5(P)				
SN1H-8-6(P)				
SN1H-10-2(P)	32	14.0	12.0	7.2
SN1H-10-3(P)				
SN1H-10-4(P)				
SN1H-10-9(P)				
SN1H-10-10(P)				
SN1H-10-12(P)				

## SNH Right Angle Plug



Part Number	A	$\phi B$	$\phi C$	D	$\phi E$	$\phi F$
SNH-10-9(PL)	29.0	14.9	9.4	18.2	6.3	8.3
SNH-10-10(PL)						
SNH-10-12(PL)						

## SNH Plug (Short plug housing)



Part Number	A	$\phi B$	$\phi C$	$\phi D$	E
SNH-8-4(PS)	35.0	11.5	7.0	5.1	0.6
SNH-8-6(PS)					

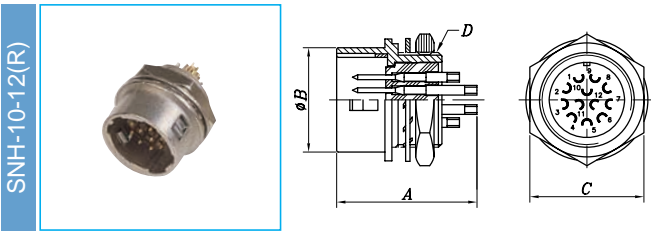
! SNH Plug (Short plug housing) only mates with SNH-8-4(LRPCB)K, SNH-8-6(LRPCB)K, SNH-8-4(LRPCB)K1, SNH-8-6(LRPCB)K1.

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



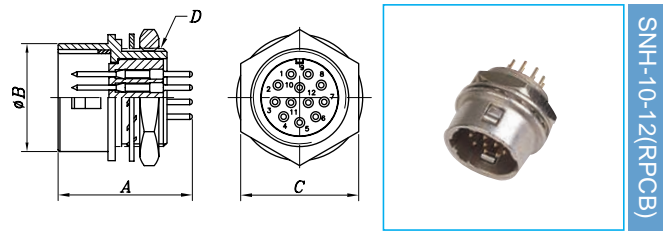
# SNH Receptacle / Adapter – SN Series

## SNH Receptacle



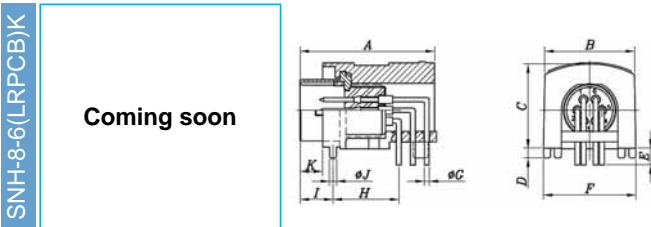
Part Number	A	ØB	C	D	Part Number	A	ØB	C	D
SNH-8-4 (R)	14.2	8.8	10.0	M8×0.5	SNH-10-2(R)	16.2	11.9	13.0	M11×0.75
SNH-8-5 (R)					SNH-10-3(R)				
SNH-8-6 (R)					SNH-10-4(R)				
	SNH-10-9(R)								
	SNH-10-10(R)								
	SNH-10-12(R)								

## SNH PCB Receptacle



Part Number	A	ØB	C	D	Part Number	A	ØB	C	D
SNH-8-4(RPCB)	15	8.8	10	M8×0.5	SNH-10-2(RPCB)	15	11.9	13	M11×0.75
SNH-8-5(RPCB)					SNH-10-3(RPCB)				
SNH-8-6(RPCB)					SNH-10-4(RPCB)				
	SNH-10-9(RPCB)								
	SNH-10-10(RPCB)								
	SNH-10-12(RPCB)								

## SNH Right Angle PCB Receptacle (Any Type)

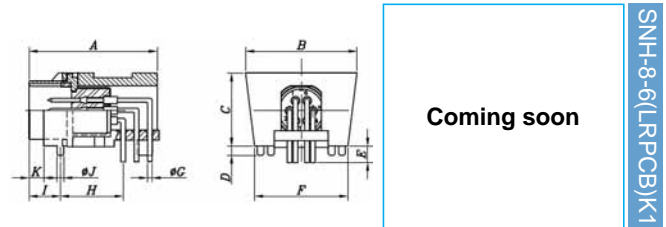


Coming soon

Part Number	A	B	C	D	E	F	ØG	H	I	ØJ	K
SNH-8-4(LRPCB)K	19.2	12.8	12.0	1.3	2.4	13.2	0.7	9.4	4.7	1.0	3.2
SNH-8-6(LRPCB)K											

! SNH-8-4(LRPCB)K, SNH-8-6(LRPCB)K only mates with SNH-8-4(PS), SNH-8-6(PS) plugs.

## SNH Right Angle PCB Receptacle (Magic Type)

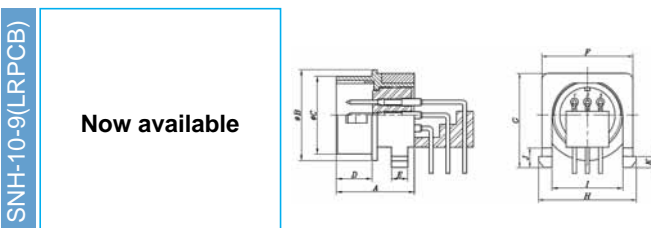


Coming soon

Part Number	A	B	C	D	E	F	ØG	H	I	ØJ	K
SNH-8-4(LRPCB)K1	19.2	16.7	11.0	1.3	2.4	14.0	0.7	9.4	4.7	1.0	2.2
SNH-8-6(LRPCB)K1											

! SNH-8-4(LRPCB)K1, SNH-8-6(LRPCB)K1 only mates with SNH-8-4(PS), SNH-8-6(PS) plugs.

## SNH Right Angle PCB Receptacle

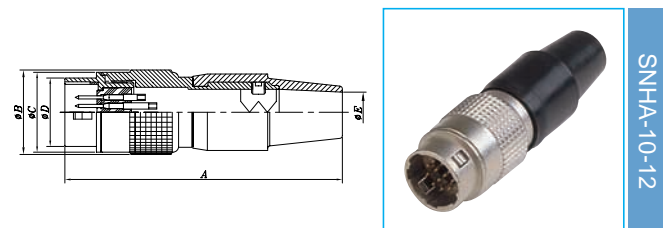


Now available

Part Number	A	ØB	ØC	D	E	F	G	H	I	J	K
SNH-10-9(LRPCB)	12	13.9	11.9	5.5	2.5	14	19.3	15	11	3	1

! SNH-10-12(LRPCB) now available

## SNHA Adapter



Part Number	A	ØB	ØC	ØD	ØE	Part Number	A	ØB	ØC	ØD	ØE
SNHA-8-4	40.2	11.5	10.9	8.8	5.1	SNHA-10-2	48.0	14.9	13.9	11.9	7.0
SNHA-8-5						SNHA-10-3					
SNHA-8-6						SNHA-10-4					
	SNHA-10-9										
	SNHA-10-10										
	SNHA-10-12										

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SN Series – Cable Assembly Instruction

## General Instruction / Information

- Diagram 1 show a sample wiring for SN series.
- Soldering must be done as quickly and carefully as possible to prevent damage to insulator.
- Receptacles do not require additional instructions.

## Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0.129mm<sup>2</sup>(**AWG#26**).
- ② Insert RUBBER BUSHING to cable.
- ③ Insert PLUG HOUSING to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure PLUG BODY to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten CRIMP using hand crimp tool (SA-HCT<sup>①</sup>)
- ⑧ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑨ Tighten WRENCH BOLT using 0.3N force onto one of two embossed parts of crimp.
- ⑩ Cover RUBBER BUSHING onto PLUG HOUSING.

<sup>①</sup> See below for information on SA-HCT.

Diagram 1

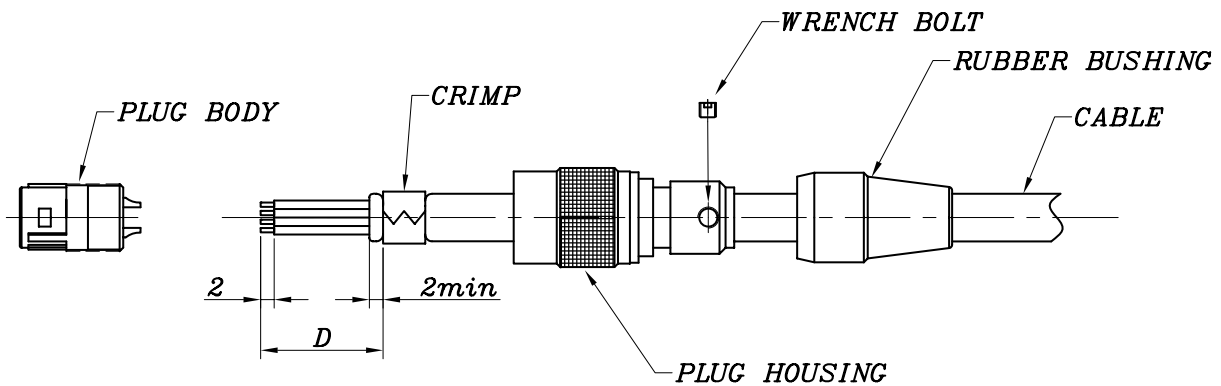


Table 1

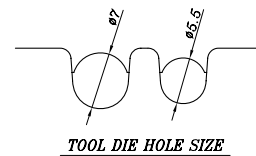
unit : mm

Size	Spanner Jaw	D (Dimension)	Tightening Force	Notes
SN - 8	8	10	1.5N · m (15kg · cm)	SA-HCT size Ø5.5
SN - 10	10	16	2.0N · m (20kg · cm)	SA-HCT size Ø7.0

## SA-HCT (Hand Crimp Tool)

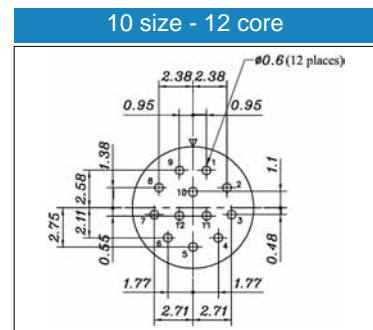
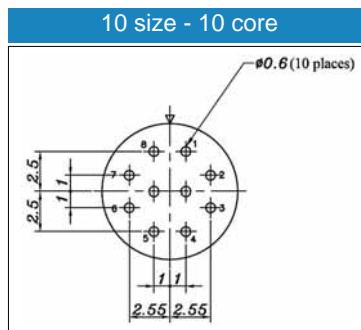
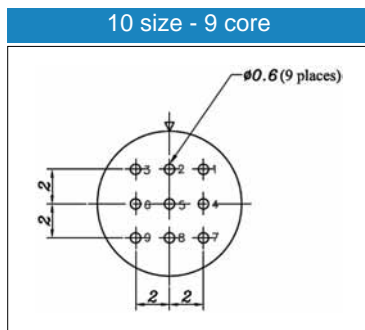
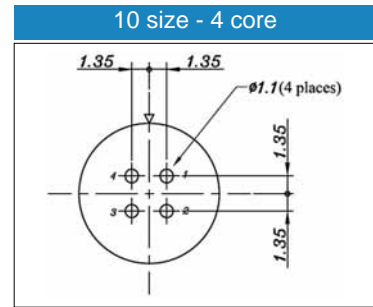
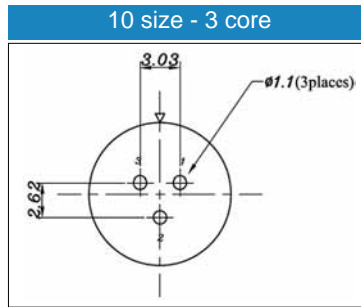
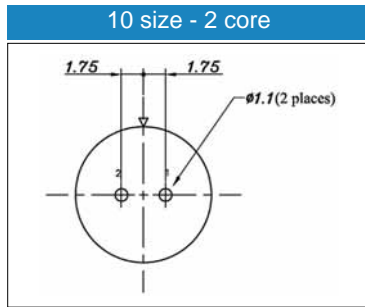
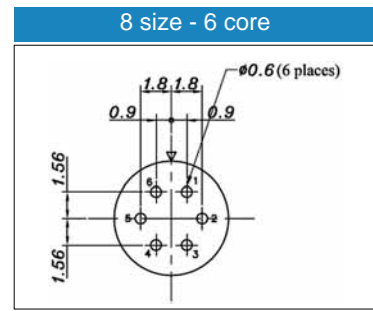
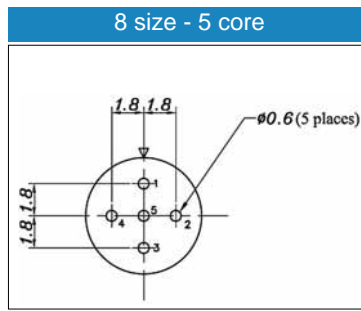
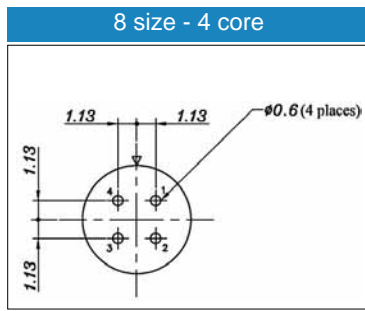


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

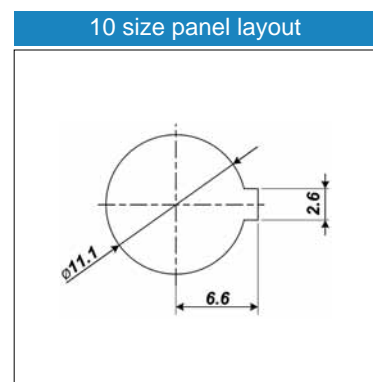
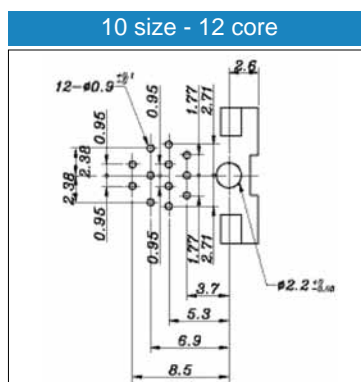
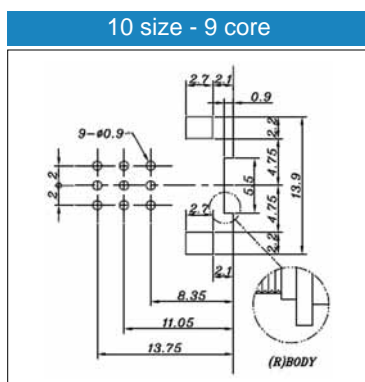
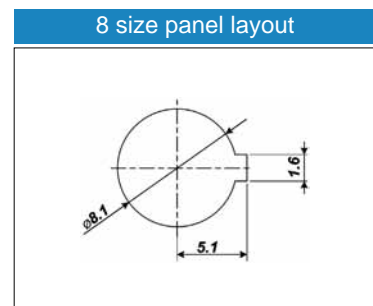
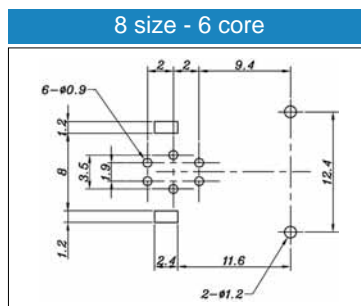
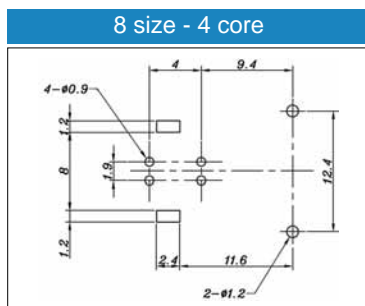


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SN Receptacle PCB Hole Layout



## SN Receptacle Right Angle PCB Hole Layout



## SN Receptacle Panel Layout

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SP Series – Part Numbering



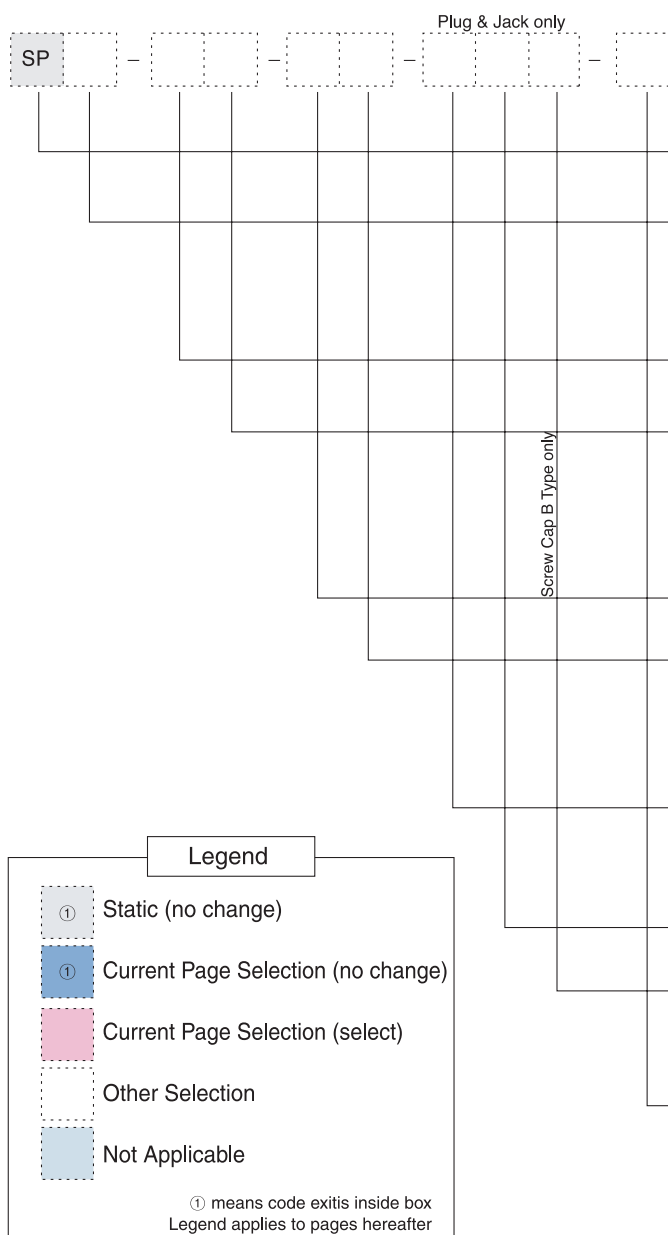
## Features

- Push-pull self latching technology
- Ultra precision
- High contact density
- High reliability / durability
- High vibration and outer force resistance

## Applications

- Telecommunications
- Professional A/V
- HDTV panel system
- Vision related equipment and much more
- Optical testing equipment
- Portable wireless radio
- CCTV
- Medical equipment

## Part Numbering



Ordering Part Number  
(see examples)

### Connector Series

SP - Series, multi-contact connector

### Model Type

B - Mechanical keying  
S - Hermaphroditic keying  
C - Hermaphroditic keying(short dimension)

### Size

00,0,1,2,3

### Body

P - Plug PF - Fixed Plug R - Receptacle  
R9 - Two nut receptacle J - Jack PT - Plug(1key Screw)  
RT - Receptacle (1key Screw) PT1 - Plug (2key Screw)  
RT1 - Receptacle (2key Screw)

### Contact Code(Contact Arrangement and Number)

SPB - p.40 SPS - p.45 SPC - p.47

### Contact Code

P = Pin S = Socket PB = PCB Pin SB = PCB Socket  
LPB = Right angle PCB Pin LSB = Right angle PCB Socket  
SP = Socket & Pin LSPB = Right angle PCB Socket & Pin  
SPB = PCB Socket & Pin

### Screw Cap Code

A - Screw Cap Terminated  
B - Screw Cap + Boot needed  
C - Nut Terminated

### Collet Code

SPB - p.41 SPS - p.46 SPC - p.49

### Boot Color Code (Screw Cap B Type only)

BK = Black WH = White RE = Red GR = Green  
BU = Blue YE = Yellow BR = Brown  
For detailed information see pages 41, 46, 49

### Contact, Insulator Material and Cut Code

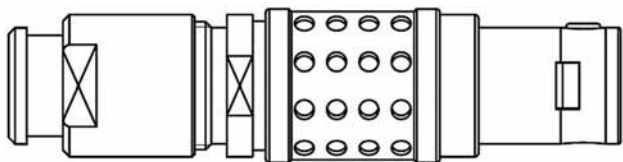
Pin		Insulator		Socket Cut		Latch Sleeve	
code 1	Material	code 2	Material	code 3	Method	code 4	Material
E	Beryllium	L	PEEK	S	Side	Y	Beryllium
A	Brass	N	PA	H	Half	R	Brass
		T	Teflon				

! none : Basic material(Pin = Beryllium, Insulator = PEEK, Cut = Side, Sleeve = Beryllium) or for custom materials choose from the above table.

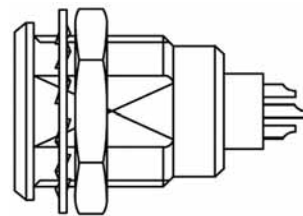
For connectors with pin contacts only, choose code 1 + code 2 + Code 4

For connectors including socket contacts, choose code 1 + code 2 + code 3 + Code 4

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



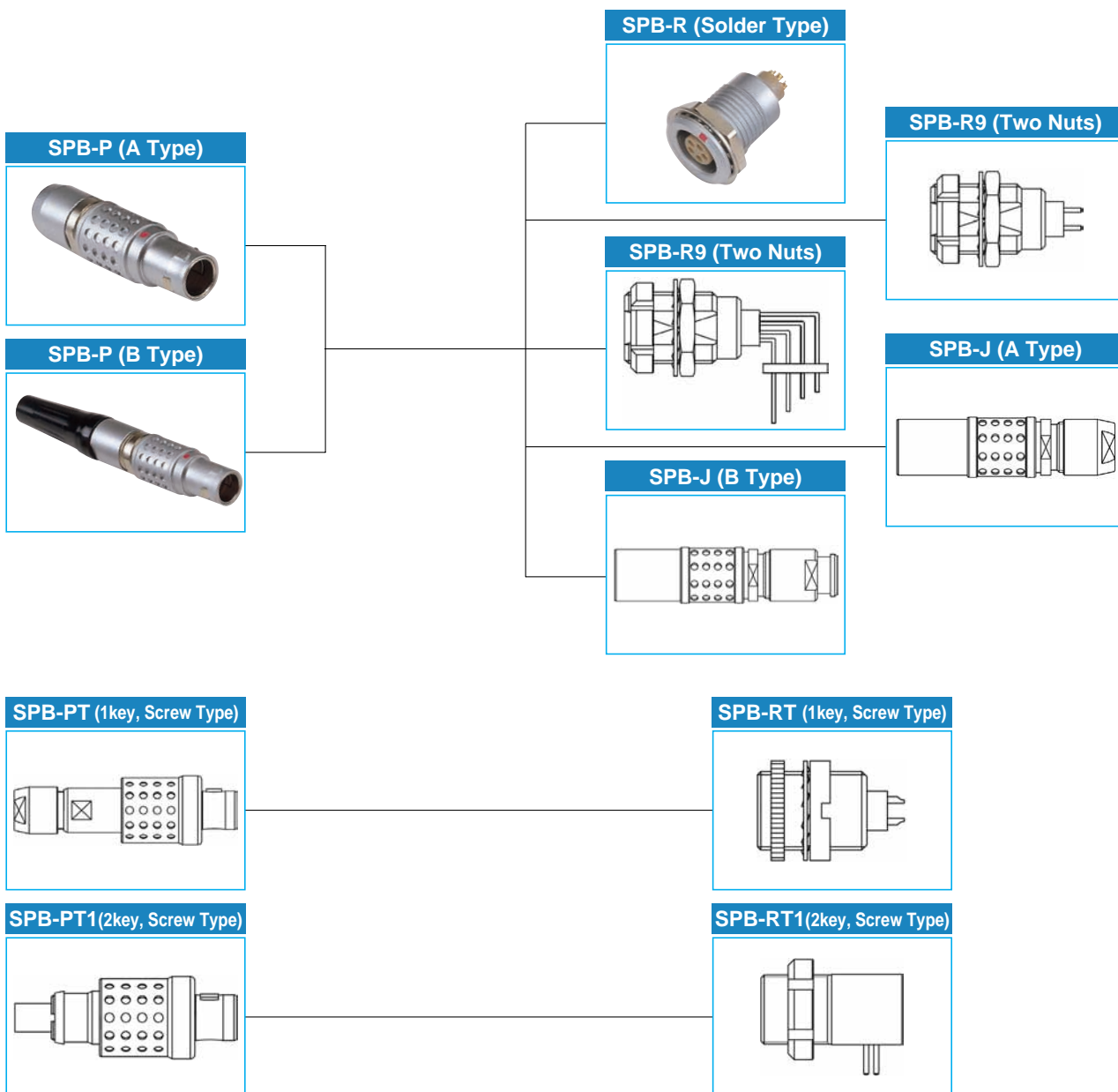
## SPB Series



### Performance

Performance	Endurance	Humidity	Temperature Range	Vibration Resistance	Shock Resistance	Corrosion Test	Mated IP Rating
Value	>5,000 cycles	95%rh 140° F	-67° F +482° F	10~2000Hz, 15g	100g, 6ms	>144h	IP50

### Mini-map

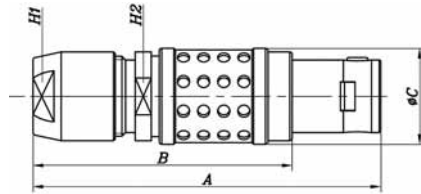


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

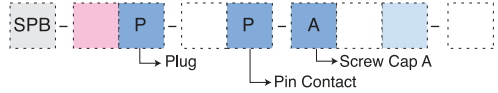
# SP Series – B Model(Size & Shell Selection)

## SPB Plug

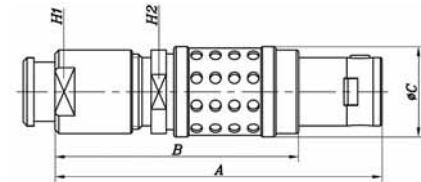
### SPB (A Type)



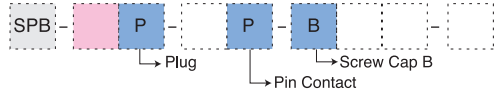
Model	A	B	C	H1	H2
SPB-00P	28.5	20.5	6.4	5.5	5.0
SPB-0P	36.0	26.0	9.5	8.0	7.0
SPB-1P	43.0	32.0	12.0	10.9	9.0
SPB-3P	58.0	43.0	18.0	15.0	14.0



### SPB (B Type)

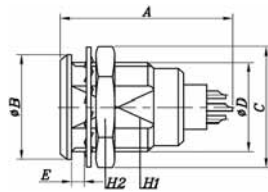


Model	A	B	C	H1	H2
SPB-0P	35.0	25.0	9.5	8.0	7.0
SPB-1P	42.0	33.0	12.0	10.0	9.0

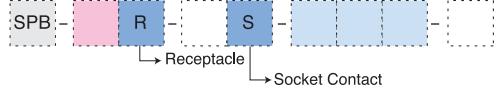


## SPB Receptacle

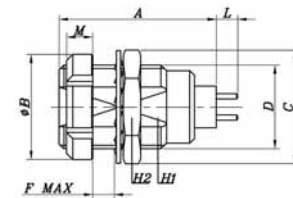
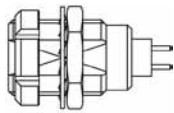
### SPB (Solder Type)



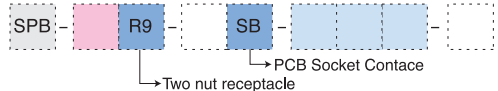
Model	A	B	C	D	E	H1	H2
SPB-00R	15.5	8.0	10.3	M7×0.5	1.0	6.3	9.0
SPB-0R	20.7	10.0	12.5	M9×0.6	1.2	7.5	11.0
SPB-1R	23.0	14.0	16.0	M12×1.0	1.5	10.5	14.0
SPB-3R	30.7	22.0	25.0	M18×1.0	2.0	16.5	22.0



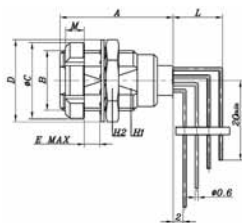
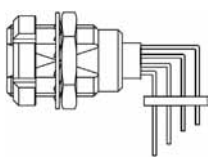
### SPB (Two Nut PCB)



Model	A	B	C	D	E	H1	H2
SPB-0R9	16.4	12.0	12.5	M9×0.6	5.5	8.2	11.0
SPB-1R9	19.8	16.0	16.0	M12×1.0	6.0	10.5	14.0
SPB-3R9	25.8	24.0	25.0	M18×1.0	9.0	16.5	17.0



### SPB (Two Nut Right-Angle-PCB)



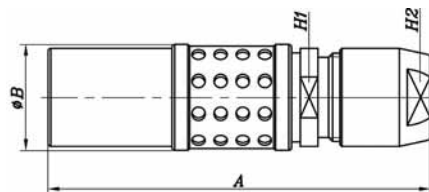
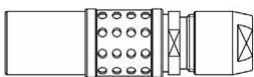
Model	A	B	C	D	E	H1	H2
SPB-0R9	18.3	12.5	12.0	M9×0.6	2.4	8.2	11.0
SPB-1R9	20.3	19.5	16.0	M12×1.0	6.0	10.5	14.0
SPB-3R9	25.8	25.0	24.0	M18×1.0	9.0	16.5	17.0



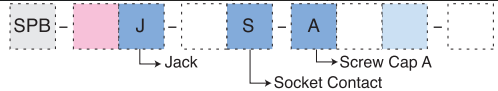
! Length (L) depends on number of contacts

## SPB Jack

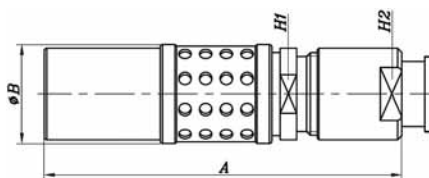
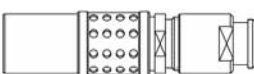
### SPB (A Type)



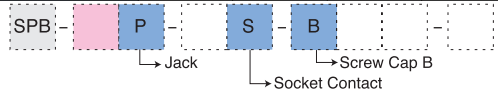
Model	A	B	H1	H2
SPB-00J	26.0	6.8	5.5	5.0
SPB-0J	35.5	9.5	8.0	7.0
SPB-1J	40.5	12.5	10.0	9.0
SPB-3J	56.0	19.0	15.0	14.0



### SPB (B Type)



Model	A	B	H1	H2
SPB-00J	26.0	6.4	5.5	5.0
SPB-0J	34.5	9.5	8.0	7.0
SPB-1J	39.5	12.5	10.0	9.0
SPB-3J	54.5	19.0	15.0	15.0



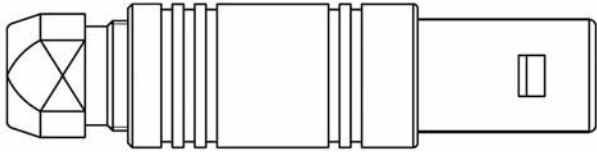




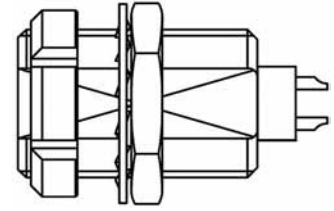




# SP Series – S Model Performance / Mini-map



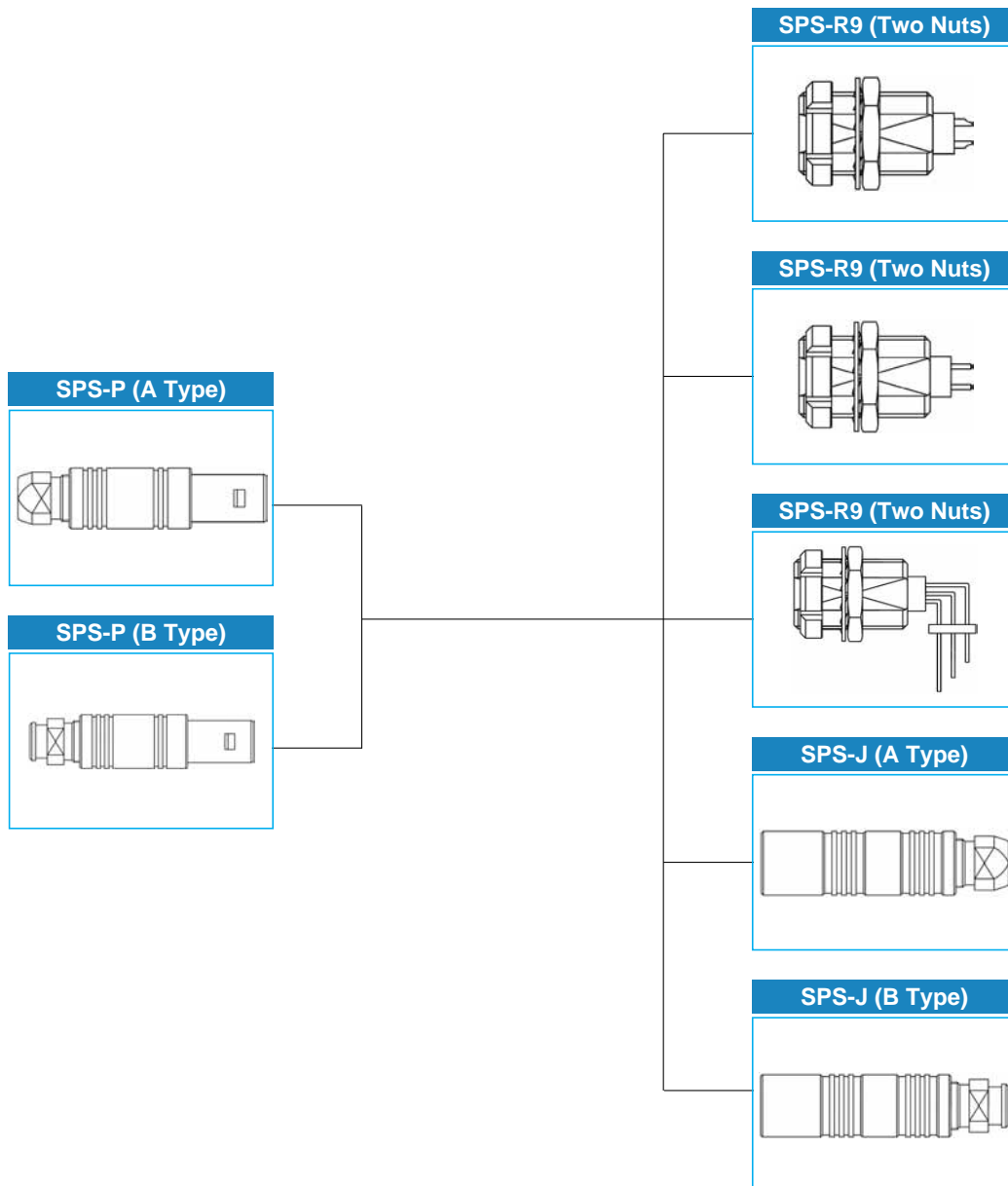
## SPS Series



### Performance

Performance	Endurance	Humidity	Temperature Range	Vibration Resistance	Shock Resistance	Corrosion Test	Mated IP Rating
Value	>5,000 cycles	95%rh 140°F	-67°F +482°F	10~2000Hz, 15g	100g, 6ms	>144h	IP50

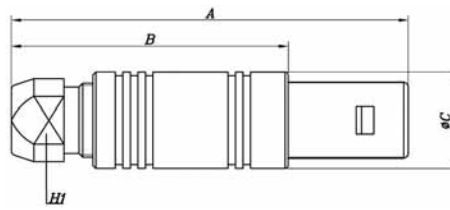
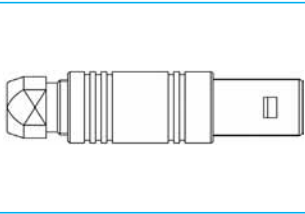
### Mini-map



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SPS Plug

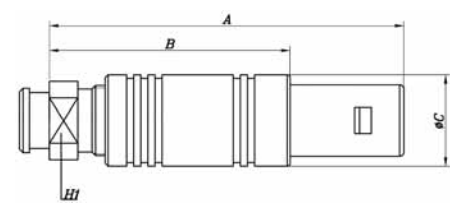
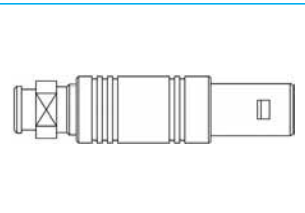
### SPS (A Type)



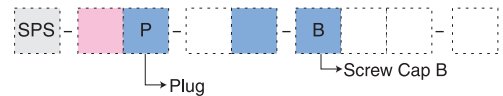
Model	A	B	C	H2
SPS-00P	26.0	18.0	6.4	4.5
SPS-0P	34.5	24.5	9.0	6.5
SPS-1P	42.5	31.5	12.0	8.5
SPS-2P	52.0	40.0	14.8	11.0
SPS-3P	61.0	46.0	17.8	14.0



### SPS (B Type)

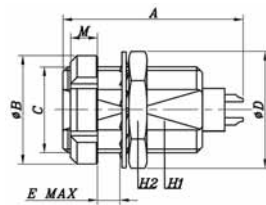
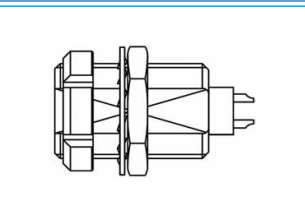


Model	A	B	C	H2
SPS-00P	26.0	18.0	6.4	6.0
SPS-0P	34.5	24.5	9.0	7.0
SPS-1P	42.5	31.5	12.0	9.0
SPS-2P	52.0	40.0	14.8	12.0
SPS-3P	61.0	46.0	17.8	14.0



## SPS Receptacle

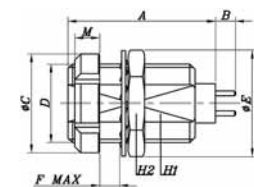
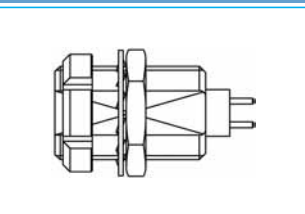
### SPS (Two Nut Solder)



Model	A	B	C	D	E	H1	H2
SPS-0R9	17.5	12.0	M9×0.6	12.5	8.5	8.2	11.0
SPS-1R9	20.2	16.0	M12×1.0	16.0	10.0	10.5	14.0
SPS-2R9	24.5	19.5	M12×1.0	20.0	11.0	13.5	17.0
SPS-3R9	29.0	24.0	M118×1.0	25.2	14.0	16.5	22.0



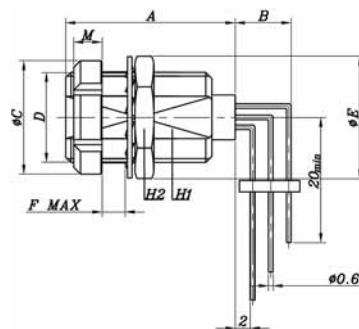
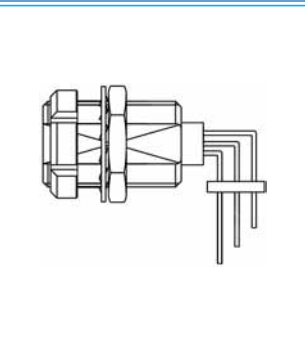
### SPS (Two Nut PCB)



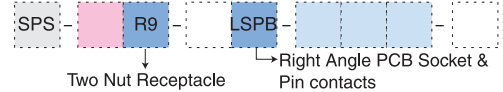
Model	A	B	C	D	E	F	H1	H2
SPS-0R9	15.0	①	12.0	M9×0.6	12.5	8.5	8.2	11.0
SPS-1R9	17.5	①	16.0	M12×1.0	16.0	10.0	10.5	14.0
SPS-2R9	20.0	①	20.0	M15×1.0	19.5	11.0	13.5	17.0
SPS-3R9	24.0	①	24.0	M18×1.0	25.2	14.0	16.5	22.0



### SPS (Two Nut Right Angle PCB)



Model	A	B	C	D	E	F	H1	H2
SPS-0R9	15.0	①	12.0	M9×0.6	12.5	8.5	8.2	11.0
SPS-1R9	17.5	①	16.0	M12×1.0	16.0	10.0	10.5	14.0
SPS-2R9	20.0	①	20.0	M15×1.0	19.5	11.0	13.5	17.0
SPS-3R9	24.0	①	24.0	M18×1.0	25.2	14.0	16.5	22.0



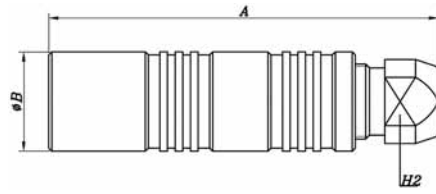
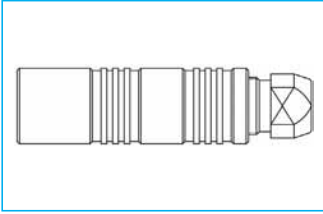
① Length depends on number of contacts

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SP Series – S Model

## SPS Jack

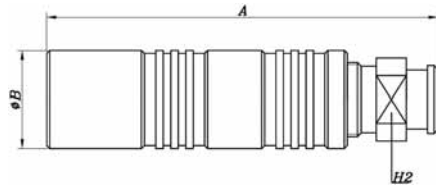
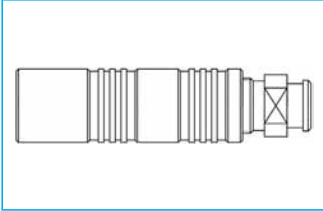
SPS (A Type)



Model	A	B	H2
SPS-00J	25.0	6.5	4.5
SPS-0J	33.5	8.9	6.5
SPS-1J	40.5	11.9	8.5
SPS-2J	50.0	14.8	11.0
SPS-3J	59.0	17.8	14.0



SPS (B Type)



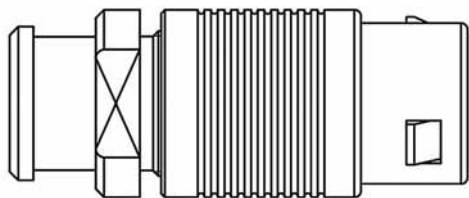
Model	A	B	H2
SPS-00J	25.0	6.5	6.0
SPS-0J	33.5	8.9	7.0
SPS-1J	40.5	11.9	9.0
SPS-2J	50.0	14.8	12.0
SPS-3J	59.0	17.8	14.0



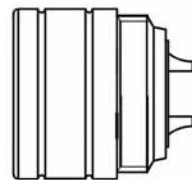
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.







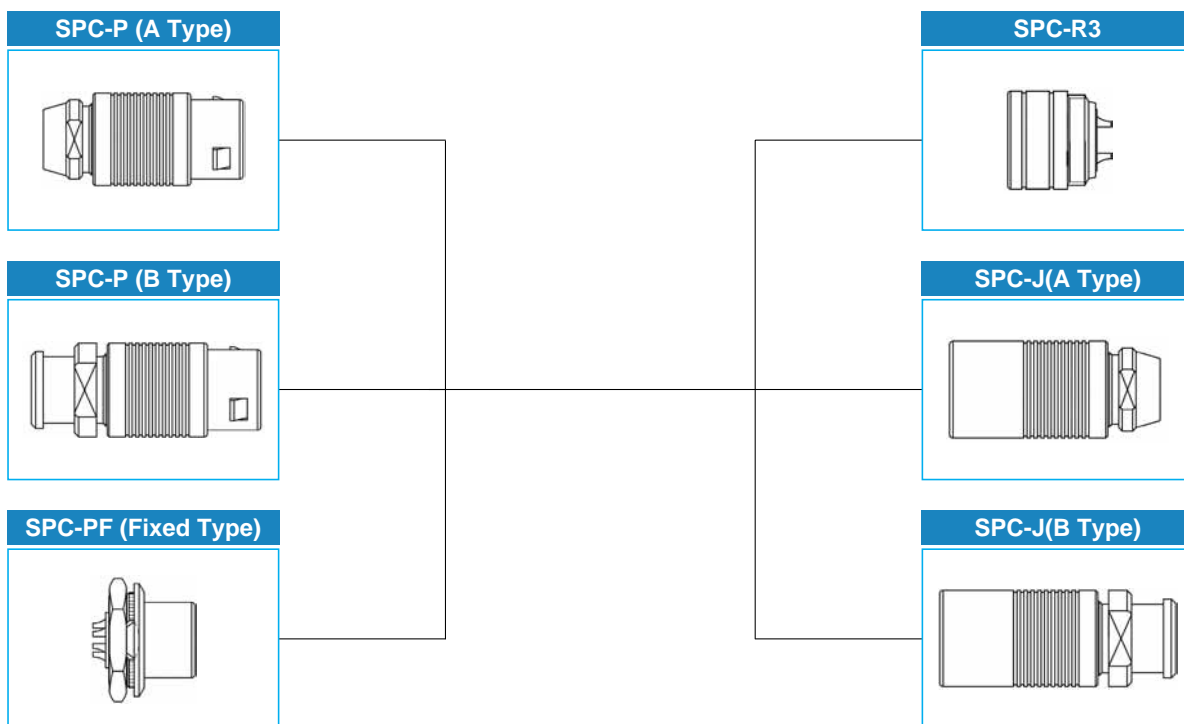
## SPC Series



### Performance

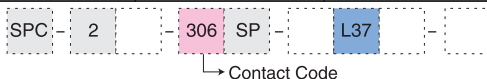
Performance	Endurance	Humidity	Temperature Range	Corrosion Test	Mated IP Rating
Value	>5,000 cycles	95%rh 140°F	-67°F +482°F	>144h	IP50

### Mini-map



### Contact Code

Series & Model	Size	Contact Code	Current	Contact Ø	No. of Contact	Contact Arrangement
SPC	2	306	12A	1.3	6	

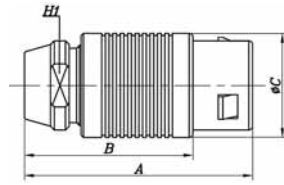
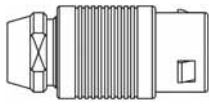


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

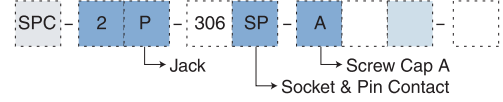
# SP Series – C Model

## SPC Plug

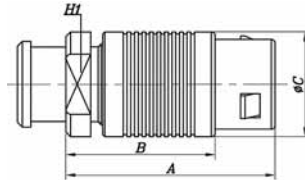
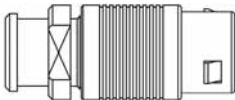
### SPC (A Type)



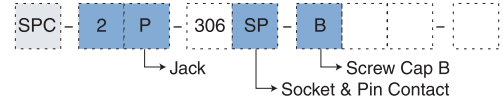
Model	A	B	ØC	H1
SPC-2P	30	22	14	10.5



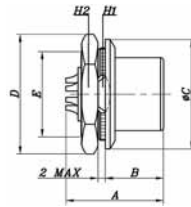
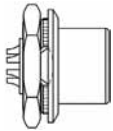
### SPC (B Type)



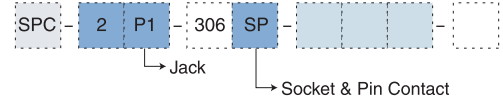
Model	A	B	ØC	H1
SPC-2P	28.4	20.4	14.	12



### SPC (Fixed Type)

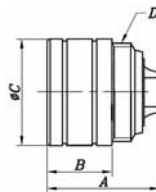
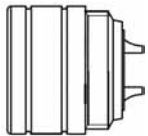


Model	A	B	ØC	ØD	E	H1	H2
SPC-2PF	17	9.5	18	19.5	M15×1	13.8	17

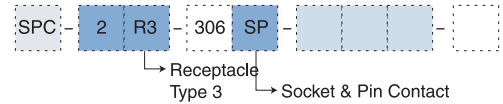


## SPC Receptacle

### SPC (Type 3)

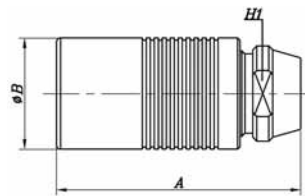
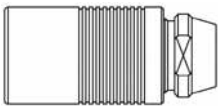


Model	A	B	ØC	D
SPC-2R3	15.6	8.5	14	M13×0.75

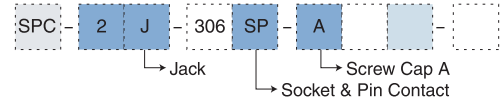


## SPC Jack

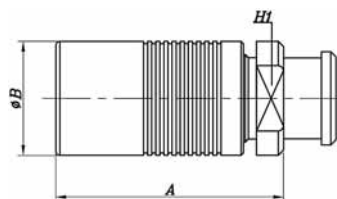
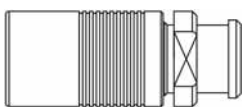
### SPC (A Type)



Model	A	B	H1
SPC-2J	28	14	10.5



### SPC (B Type)



Model	A	B	H1
SPC-2J	26.4	14	12

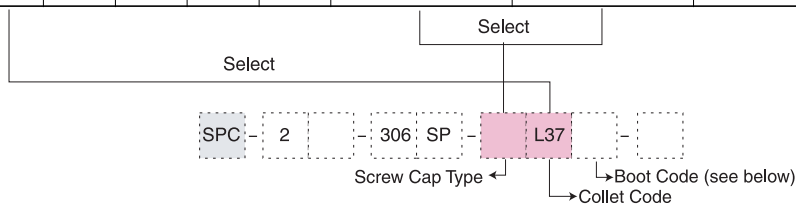


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



## Collet Code Information

Series & Model	Size	Collet Code	Collet				Screw Cap Type A	Screw Cap Type B	Boot for Collet Type B			
			Collet		Cable Ø				Dimension		Cable Ø	
			ØA	ØB	max	min			ØA	L	max	min
			SPC	2	L37	3.7				3.6	3.2	●
									6.0	36	6.5	6.0



## Boot Code

BK = Black		BU = Blue	
WH = White		YE = Yellow	
RD = Red		BR = Brown	
GN = Green		Select color and ØA	

Ex) Black boot + 4.0Ø = BK40

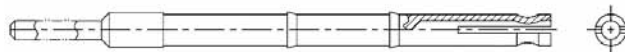
## Material Code (For all SP series)

Pin		Insulator		Socket Cut		Latch Sleeve	
code 1	Material	code 2	Material	code 3	Method	code 4	Material
E	Beryllium	L	PEEK	S	Side	Y	Beryllium
A	Brass	N	PA	H	Half	R	Brass
		T	Teflon				

## Pin cutting (Side cut)



## Pin cutting (Half cut)



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SRC Series – Part Numbering



## Features

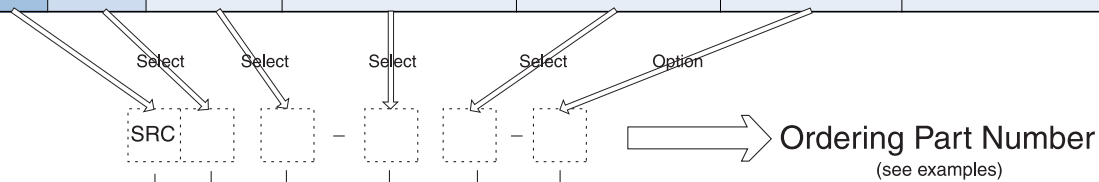
- Bayonet Locking System
- Rugged
- Light-weight
- Low cost
- General purpose

## Applications

- Professional Audio / Video
- Vision Testing
- Factory Automation
- Measuring Equipment
- Medical

## Part Numbering

Part Number		Size	Number of Contact	Suffix (Contact Type)	Optional Suffix	Notes	Page
Series	Prefix (Body)				G		
SRC	6A	21	10,16,26	P	●	Plug (Pin)	52
				S	●	Plug (Socket)	52
	2A			P	●	Receptacle (Pin)	52
				S	●	Receptacle (Socket)	52
	A			PS	●	Adapter (Round)	52
AP	PS	●	Adapter (Panel)	52			



### Connector Series

- SRC6A - Plug
- SRC2A - Receptacle
- SRCA - Adapter (Round Type)
- SRCAP - Adapter (Panel Type)

### Size

21

### No. of Contact

10,16,26

### Contact Type

- P : Pin
- S : Socket
- PS : Pin and Socket

### Shell Type

G : Gold plated contact

### Examples

**SRC6A 21 - 10 P**

SRC series Plug - Size 21 - 10 contacts pin

**SRC2A 21 - 16 S**

SRC series Receptacle - Size 21 - 16 contacts socket

**SRCA 21 - 26 PS**

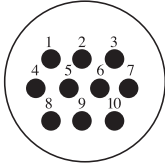
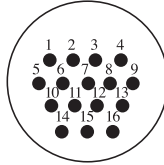
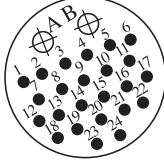
SRC series Round adapter - Size 21 - 26 contacts pin&socket

**SRCAP 21 - 16 PS - G**

SRC series Panel adapter - Size 21 - 16 contacts Pin&socket - Gold contacts

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## Major Performances / Contact Arrangements

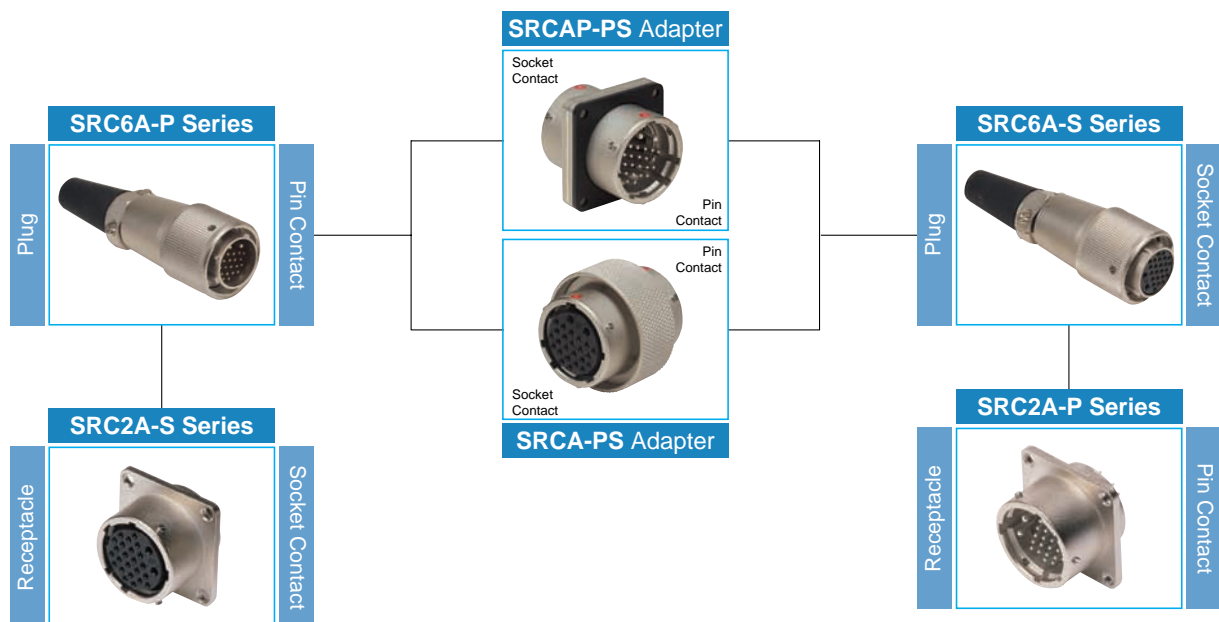
Performance	Size / No of Pin	Size 21		
		10	16	26
Withstanding Voltage (per min) <sup>1</sup>		AC 1000V	AC 1000V	AC 1000V
Current		10A	5A	5A / 10A
Insulation Resistance (Minimum) <sup>2</sup>		1,000MΩ	1,000MΩ	1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>		5mΩ	5mΩ	5mΩ
Solder Pot Inside Diameter		Ø1.5	Ø1.0	Ø1.0 / Ø1.5
Contact Arrangement				

- ! <sup>1</sup> Withstanding voltage is the tested voltage value in this table.
- ! <sup>2</sup> Insulation resistance is measured at DC 100V.
- <sup>3</sup> Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics for the latest specifications.

## Material Used / Finishing Material

	Material	Finish
Body	Alluminum alloy	Ni or Ni + Au
Insulator	Thermosetting resin	Blue or Black
Contacts	Pin	Brass
	Socket	Phosphor bronze

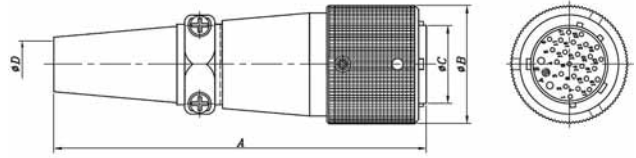
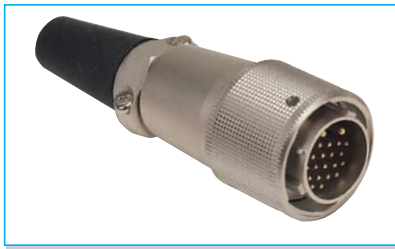
## SRC Series Mini-map



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SRC Series – Plug, Receptacle, Adapter

## SRC6A Plug



Part Number	A	ØB	ØC	ØD
SRC6A21-10P	98.0	31.0	20.4	12.2
SRC6A21-16P				
SRC6A21-26P				
SRC6A21-10P-G				
SRC6A21-16P-G				
SRC6A21-26P-G				

## SRC6A Plug

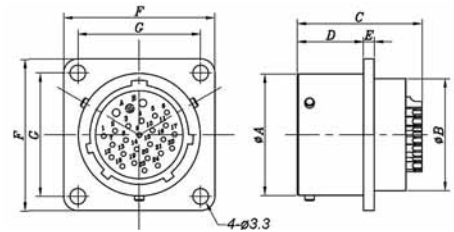


Part Number	A	ØB	ØC	ØD
SRC6A21-10S	98.0	31.0	20.4	12.2
SRC6A21-16S				
SRC6A21-26S				
SRC6A21-10S-G				
SRC6A21-16S-G				
SRC6A21-26S-G				

## SRC2A Receptacle



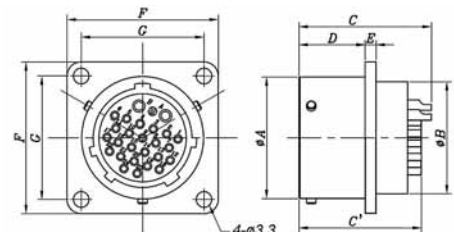
Part Number	ØA	ØB	C	D	E	F	G
SRC2A21-10P	25.6	23.6	26.4	14	2.3	32	26
SRC2A21-16P							
SRC2A21-26P							
SRC2A21-10P-G							
SRC2A21-16P-G							
SRC2A21-26P-G							



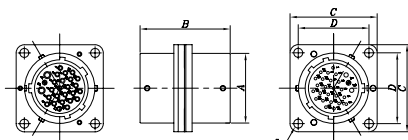
## SRC2A Receptacle



Part Number	ØA	ØB	C(C')	D	E	F	G
SRC2A21-10S	25.6	23.6	27.7 (25.5)	14	2.3	32	26
SRC2A21-16S							
SRC2A21-26S							
SRC2A21-10S-G							
SRC2A21-16S-G							
SRC2A21-26S-G							

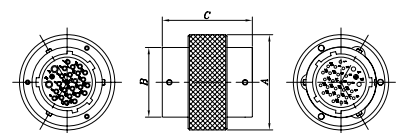


## SRCAP Adapter (Panel)



Part Number	ØA	B	C	ØD	E
SRCAP21-10PS	25.6	33	32	26	4-Ø3.3
SRCAP21-16PS					
SRCAP21-26PS					
SRCAP21-10PS-G					
SRCAP21-16PS-G					
SRCAP21-26PS-G					

## SRCA Adapter (Round)



Part Number	ØA	ØB	C
SRCA21-10PS	35	25.6	35.0
SRCA21-16PS			
SRCA21-26PS			
SRCA21-10PS-G			
SRCA21-16PS-G			
SRCA21-26PS-G			

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



# ST Series – Part Numbering



## Features

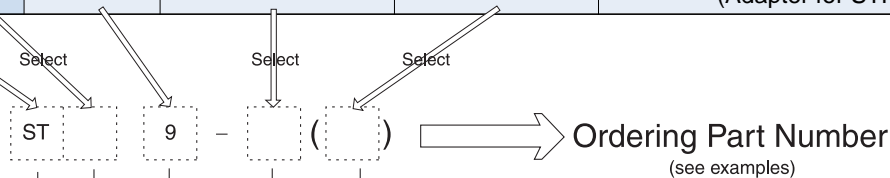
- Super-miniature size with multiple contact
- Safe insert system preventing pin damage

## Applications

- Professional A/V
- Measuring equipment
- Sensors
- Wireless radio
- Medical

## Part Numbering

Part Number		Size	Number of Contact	Suffix	Notes	Page
Series	Prefix					
ST		9	12,16,20	P	Main ST series Plug	56
				PLM1	Molding Type ST Plug	56
				R	ST Receptacle	56
	H			P	STH Series Plug	57
				PLM1	Molding Type STH Plug	57
				R	STH Receptacle	57
	A			STA Series (Adapter for ST series)	56	
	HA			STHA Series (Adapter for STH series)	57	



### Connector Series

ST series  
**STH** - reverse contact  
**STA** - adapter for ST series  
**STHA** - adapter for STH series

### Size

9

### No. of Contact

12,16,20

### Shell Type

P : Plug  
 R : Receptacle (solder termination)  
 RPCB : Receptacle (PCB termination)  
 PLM1 : Plug (Molding type)  
 blank : Adapter

### Examples

**ST - 9 - 12 ( P )**

ST series - Size 9 - 12 contact ( Plug )

**ST - 9 - 16 ( R )**

ST series - Size 9 - 16 contacts (Receptacle/Solder contact termination)

**ST - 9 - 16 ( RPCB )**

ST series - Size 9 - 16 contacts (Receptacle / PCB contact termination)

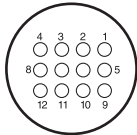
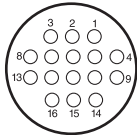
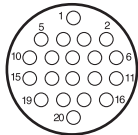
**STA - 9 - 20**

Adapter for ST series - Size 9 - 20 contacts

**STHA - 9 - 20**

Adapter for STH series - Size 9 - 20 contacts

## Major Performances / Contact Arrangements

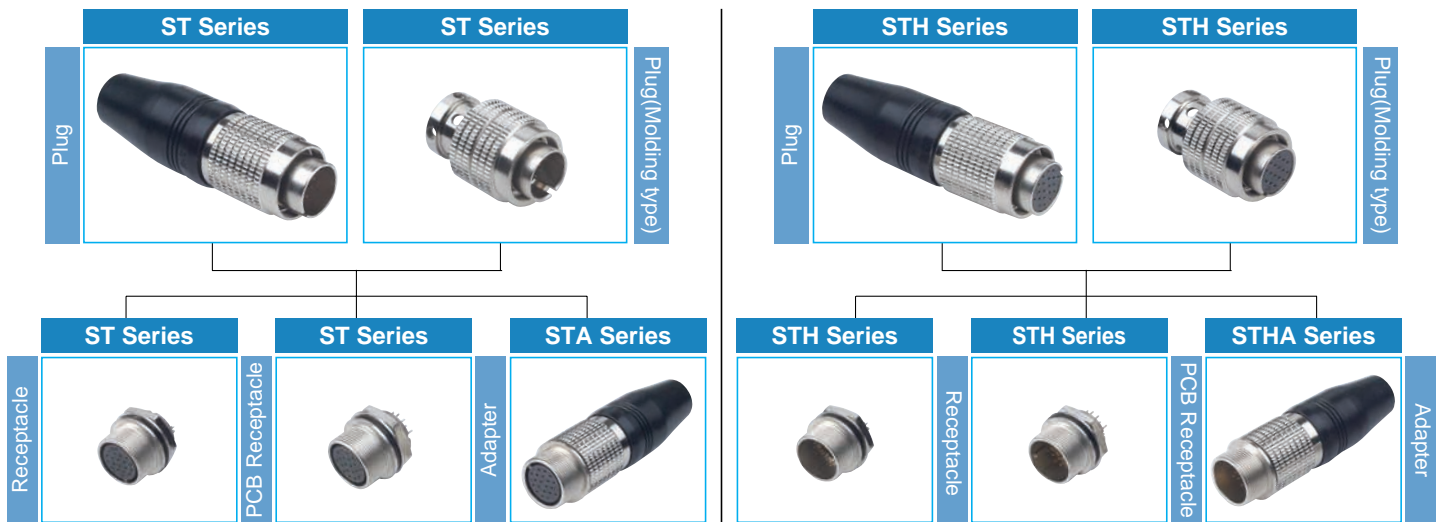
Performance	Size / No of Pin	Size 9		
		12	16	20
Withstanding Voltage (per min) <sup>1</sup>		AC 300V	AC 300V	AC 300V
Current		1A	1A	1A
Insulation Resistance (Minimum) <sup>2</sup>		1,000MΩ	1,000MΩ	1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>		30mΩ	30mΩ	30mΩ
Solder Pot Inside Diameter		Ø0.5	Ø0.5	Ø0.5
Contact Arrangement				

- <sup>1</sup> Withstanding voltage is the tested voltage value in this table.
- <sup>2</sup> Insulation resistance is measured at DC 100V.
- <sup>3</sup> Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics for the latest specifications.

## Material Used / Finishing Material

		Material	Finish
Body		Brass & Zinc alloy	Ni plate
Insulator		PPS resin	Black
Contacts	Pin	Phosphor bronze and Beryllium	Gold plate
	Socket	Phosphor bronze	Gold plate

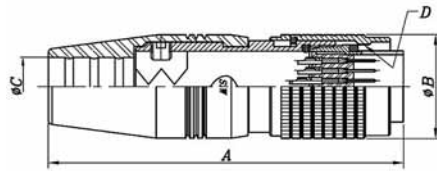
## ST Series Mini-map



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

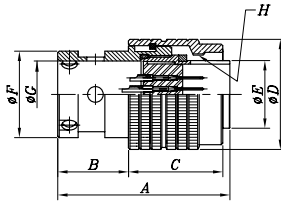
# ST Series – ST Plug, Receptacle, Adapter

## ST Plug



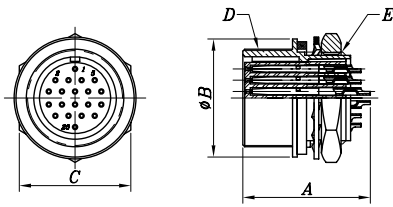
Part Number	A	ØB	ØC	D
ST-9-12(P)	43.0	12.5	7.0	M10.5×0.5P
ST-9-16(P)				
ST-9-20(P)				

## ST Molding Type Plug



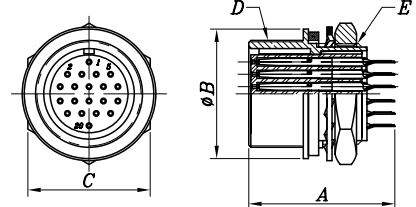
Part Number	A	B	C	ØD	ØE	ØF	ØG	H
ST-9-12(PLM1)	22	9	12	14	12.8	11	8.5	M10.5×0.5P
ST-9-16(PLM1)								
ST-9-20(PLM1)								

## ST Solder Type Receptacle



Part Number	A	ØB	C	D	E
ST-9-12(R)	13.6	12.6	12.0	M10.5×0.5P	M10×0.75P
ST-9-16(R)					
ST-9-20(R)					

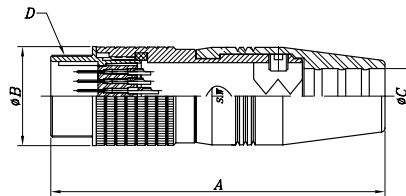
## ST PCB Type Receptacle



Part Number	A	ØB	C	D	E
ST-9-12(RPCB)	14.1	12.6	12.0	M10.5×0.5P	M10×0.75P
ST-9-16(RPCB)					
ST-9-20(RPCB)					

## STA Adapter

Part Number	A	ØB	ØC	D
STA-9-12	42.6	12.6	7.0	M10.5×0.5P
STA-9-16				
STA-9-20				



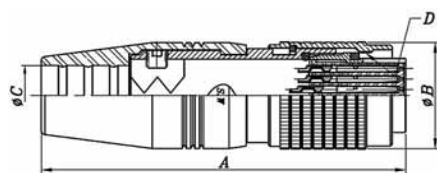
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



# STH Plug, Receptacle, Adapter – ST Series

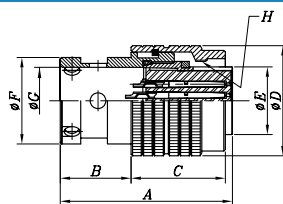
## STH Plug

Part Number	A	ØB	ØC	D
STH-9-12(P)	43.0	12.5	7.0	M10.5×0.5P
STH-9-16(P)				
STH-9-20(P)				

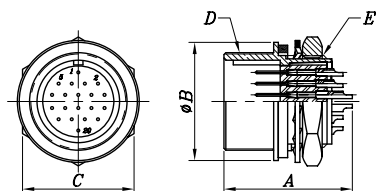


## STH Molding Type Plug

Part Number	A	B	C	ØD	ØE	ØF	ØG	H
STH-9-12(PLM1)	22	9	12	14	12.8	11	8.5	M10.5×0.5P
STH-9-16(PLM1)								
STH-9-20(PLM1)								

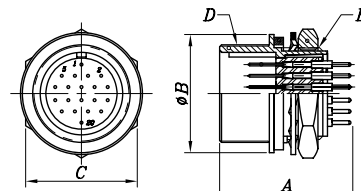


## STH Solder Type Receptacle



Part Number	A	ØB	C	D	E
STH-9-12(R)	13.6	12.6	12.0	M10.5×0.5P	M10×0.75P
STH-9-16(R)					
STH-9-20(R)					

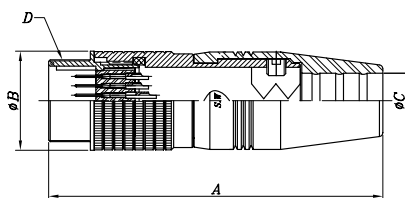
## STH PCB Type Receptacle



Part Number	A	ØB	C	D	E
STH-9-12(RPCB)	14.1	12.6	12.0	M10.5×0.5P	M10×0.75P
STH-9-16(RPCB)					
STH-9-20(RPCB)					



## STHA Adapter



Part Number	A	ØB	ØC	D
STHA-9-12	42.6	12.6	7.0	M10.5×0.5P
STHA-9-16				
STHA-9-20				

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# ST Series – Cable Assembly Instruction

## General Instruction / Information

- Diagram 1 show a sample wiring for ST series.
- Soldering must be done as quickly and carefully as possible to prevent damage to insulator.
- Receptacles do not require additional instructions.

## Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than  $0.129\text{mm}^2$ (AWG#26).
- ② Insert RUBBER BUSHING to cable.
- ③ Insert PLUG HOUSING to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure PLUG BODY to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten CRIMP using hand crimp tool (SA-HCT<sup>①</sup>)
- ⑧ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑨ Tighten WRENCH BOLT using 0.3N force onto one of two embossed parts of crimp.
- ⑩ Cover RUBBER BUSHING onto PLUG HOUSING.

<sup>①</sup> See below for information on SA-HCT.

Diagram 1

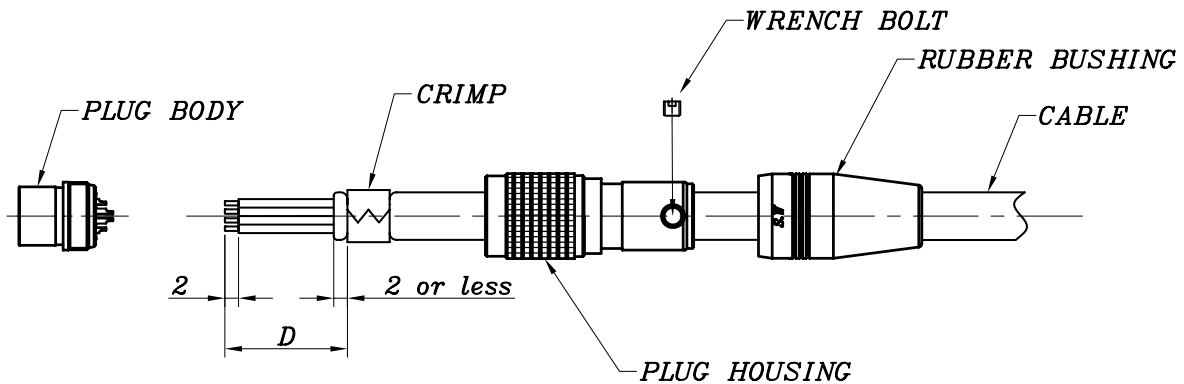


Table 1

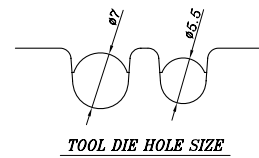
unit : mm

Size	Spanner Jaw	D (Dimension)	Tightening Force	Notes
ST	8	10	1.5N · m (15kg · cm)	SA-HCT size Ø7.0

## SA-HCT (Hand Crimp Tool)

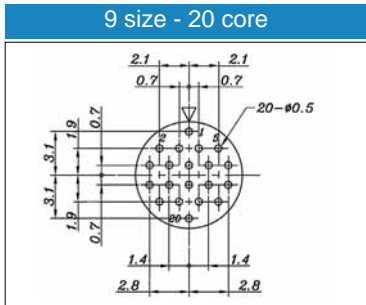
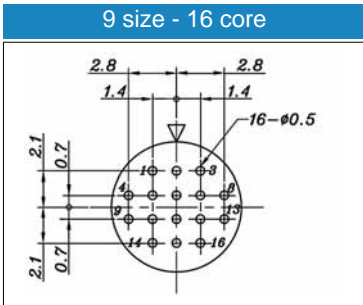
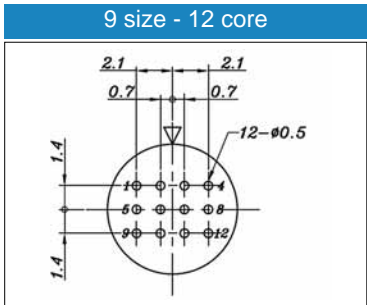


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

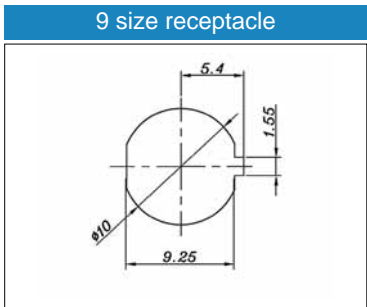


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## ST Receptacle PCB Hole Layout



## ST Receptacle Panel Layout



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SU Series – Part Numbering



## Features

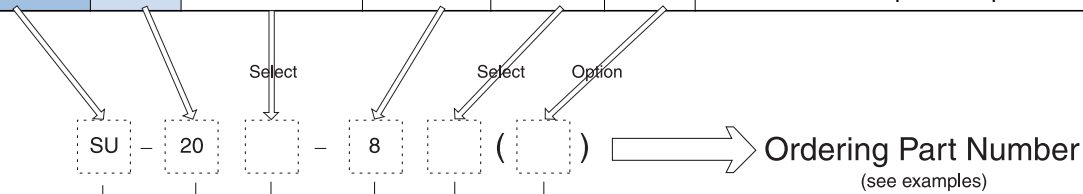
- Safe connection / Easy mounting
- Antenna Interface Standards Group(AIGS) specification
- Electro Magnetic Protection
- Protection rating of IP67
- Compatible according to IEC 60130-9

## Applications

- Electronic Precision Equipment
- Control Engineering
- Automation
- Medical

## Part Numbering

Series	Size	Body Type	No. of Contact	Contact Type	Option	Notes	Page
					PCB		
SU	20	SP	8	P		Plug	62
		P		S		Plug	62
		SBR		S	●	Receptacle	62
		BR		P	●	Receptacle	62
		BRC				Receptacle cap	63
		SBRC				Receptacle cap	63



### Connector Series

SU20 Series

### Body Type

SP : Plug  
P : Plug  
SBR : Receptacle  
BR : Receptacle  
SBRC : Receptacle cap (accessory)  
BRC : Receptacle cap (accessory)

### No. of Contact

8

### Contact Type

P : Pin  
S : Socket  
none : Receptacle cap

### Option (for receptacle)

PCB : PCB contact termination

### Examples

**SU - 20SP - 8P**

SU series - Size 20 Plug - 8 contacts pin

**SU - 20P - 8S**

SU series - Size 20 Plug - 8 contacts socket

**SU - 20SBR - 8S**

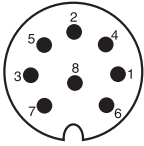
SU series - Size 20 Receptacle - 8 contacts socket

**SU - 20BR - 8P ( PCB )**

SU series - Size 20 Receptacle - 8 contacts pin ( PCB termination )

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## Major Performances / Contact Arrangements

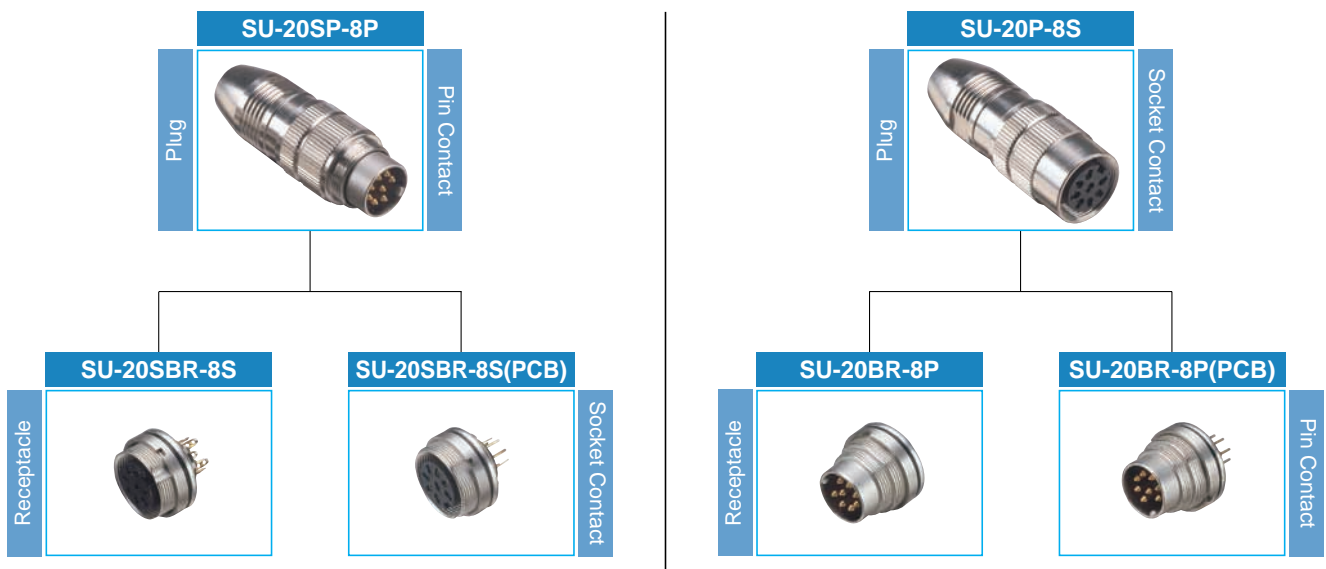
Performance	Size / No of Pin	Size 20
		8
Withstanding Voltage (per min) <sup>1</sup>		AC 1000V
Rated Current		5A
Rated Voltage		60V AC
Insulation Resistance (Minimum) <sup>2</sup>		1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>		≤5mΩ
Solder Pot Inside Diameter		∅0.8
IP Protection Rating		IP 67
Contact Arrangement		

- <sup>1</sup> Withstanding voltage is the tested voltage value in this table.
- <sup>2</sup> Insulation resistance is measured at DC 100V.
- <sup>3</sup> Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics for the latest specifications.

## Material Used / Finishing Material

	Material	Finish
Body	ZnDC, Brass	Sn, Ni plate
Insulator	PA	Black
Contacts	Pin	Brass
	Socket	Phosphor bronze

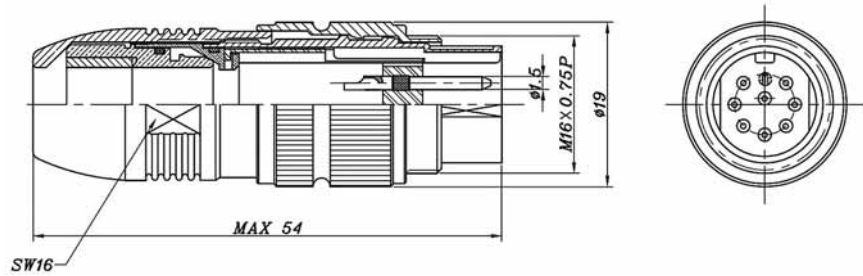
## SU Series Mini-map



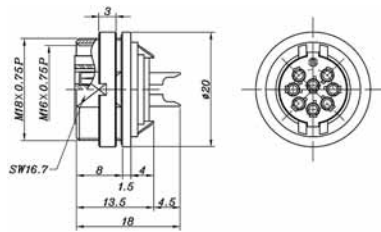
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SU Series – Plug, Receptacle

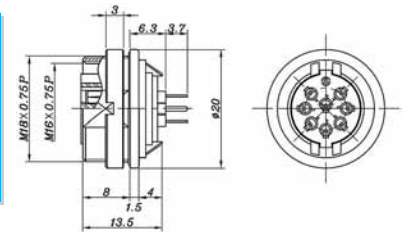
## SU-20SP-8P



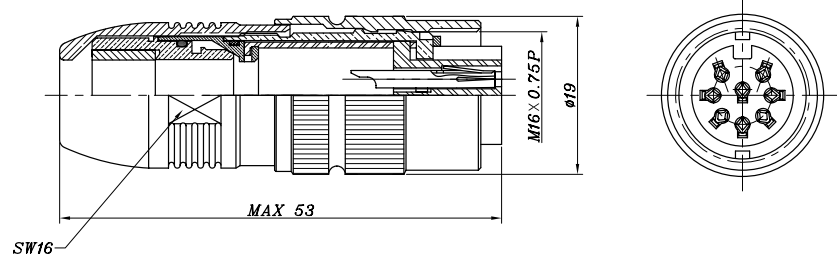
## SU-20SBR-8S



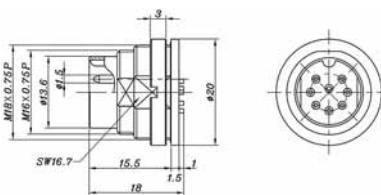
## SU-20SBR-8S(PCB)



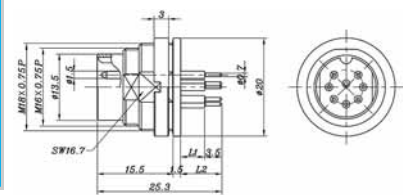
## SU-20P-8S



## SU-20BR-8P



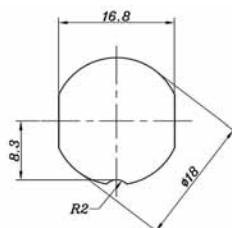
## SU-20BR-8P(PCB)



L1 and L2 customizable upon request.

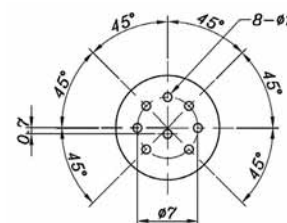
L <sub>1</sub>	L <sub>2</sub>
4.8	8.3

## SU Receptacle Panel Layout



Used for SU-20SBR-8S and SU-20BR-9P

## SU Receptacle PCB Layout



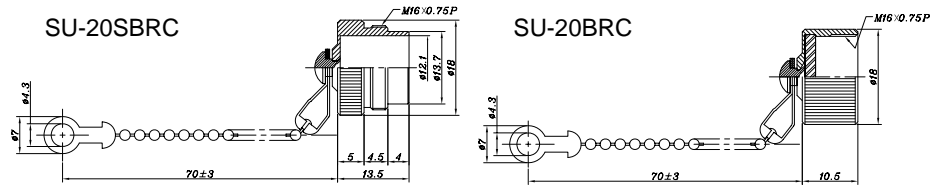
Used for SU-20SBR-8S(PCB) and SU-20BR-9P(PCB)

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

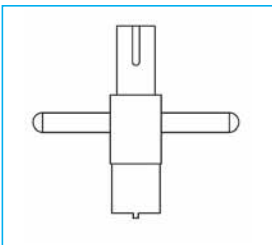
## Receptacle Cap



SU-20BRC / SU-20SBRC



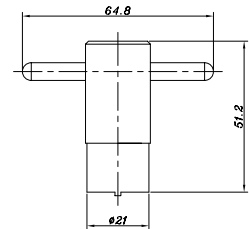
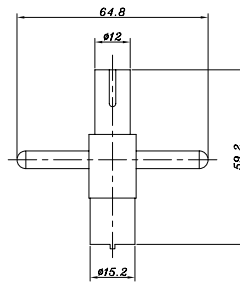
## Wrench



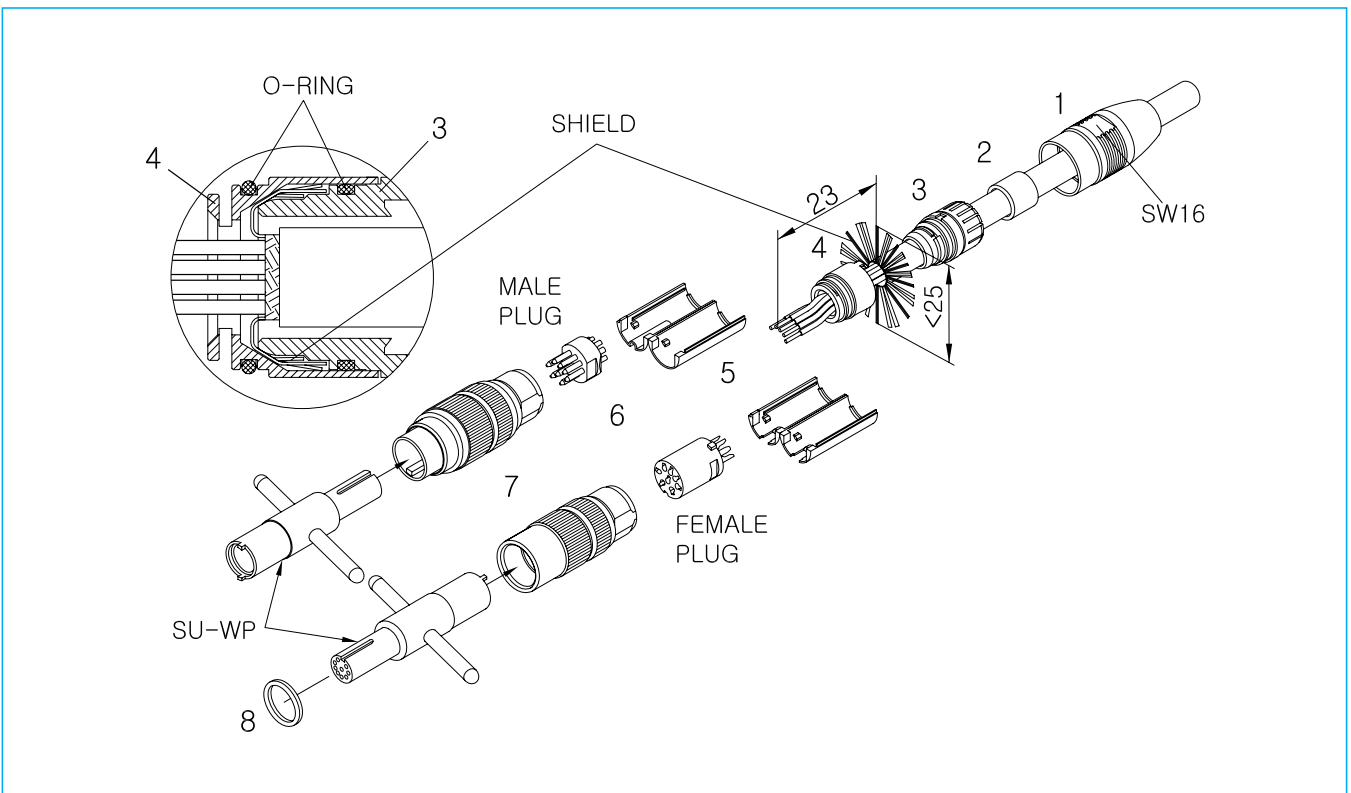
SU-WP



SU-WR



## Cable Assembly Instruction



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SW Series – Part Numbering



## Features

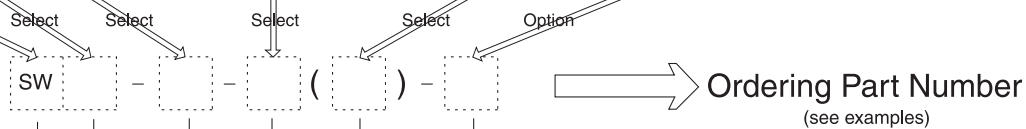
- Excellent performance at low cost
- Screw mounting assures solid connection
- Rubber gasket assures water resistance
- Manufactured with precision

## Applications

- Professional audio and video
- CCTV system
- Vision related testing equipment
- Portable wireless radio
- Measuring equipment
- Computers and peripherals
- Medical, and much more.

## Part Numbering

Part Number		Size	Number of Contact	Suffix	Optional Suffix	Notes	Page
Series	Prefix				S		
SW		8 or 10	8 size : 4,5,6 10 size : 2,3,4,9,10,12	P	●	Main SW Series	66
				R / RPCB	●		
	H			P	●	SWH Series (SW with reverse contacts)	67
				R / RPCB	●		
A	P	●	SWA Series (Adapter for SW series)	66			
HA				●	SWhA Series (Adapter for SWH series)	67	



- Connector Series**  
 SW  
 SWH - reverse contact  
 SWA - adapter for SN series  
 SWHA - adapter for SNH series
- Size**  
 8,10
- No. of Contact**  
 8 Size : 4,5,6  
 10 Size : 2,3,4,9,10,12
- Body Type**  
 P : Plug  
 R : Receptacle (solder termination)  
 RPCB : Receptacle (PCB termination)  
 blank : Adapter
- Optional**  
 S : Silver contacts

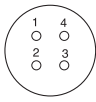
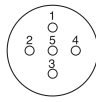
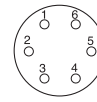
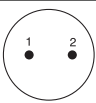
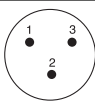
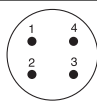
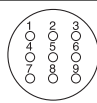
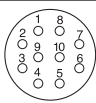
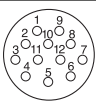
### Examples

- SW - 8 - 4 ( P )  
 SW series - Size 8 - 4 contacts ( Plug shell )
- SW - 10 - 12 ( R ) - S  
 SW series - Size 10 - 12 contacts ( Receptacle / Solder contact termination ) - Silver contacts
- SWA - 10 - 2  
 Adapter for SW series - Size 10 - 2 contacts
- SWHA - 8 - 6 - 2  
 Adapter for SWH series - Size 8 - 6 contacts - Silver contacts

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



## Major Performances / Contact Arrangements

Performance	Size / No of Contacts		Size 8			
	4	5	6	6	6	6
Withstanding Voltage (per min) <sup>1</sup>	AC 300V	AC 300V	AC 300V	AC 300V	AC 300V	AC 300V
Current	2A	2A	2A	2A	2A	2A
Insulation Resistance (Minimum) <sup>2</sup>	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>	10mΩ	10mΩ	10mΩ	10mΩ	10mΩ	10mΩ
Solder Pot Inside Diameter	Ø0.7	Ø0.7	Ø0.7	Ø0.7	Ø0.7	Ø0.7
Contact Arrangement						
Performance	Size / No of Contacts		Size 10			
	2	3	4	9	10	12
Withstanding Voltage (per min) <sup>1</sup>	AC 500V	AC 500V	AC 500V	AC 300V	AC 300V	AC 300V
Current	3A	3A	3A	2A	2A	2A
Insulation Resistance (Minimum) <sup>2</sup>	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ	1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>	10mΩ	10mΩ	10mΩ	10mΩ	10mΩ	10mΩ
Solder Pot Inside Diameter	Ø1.0	Ø1.0	Ø1.0	Ø0.7	Ø0.7	Ø0.7
Contact Arrangement						

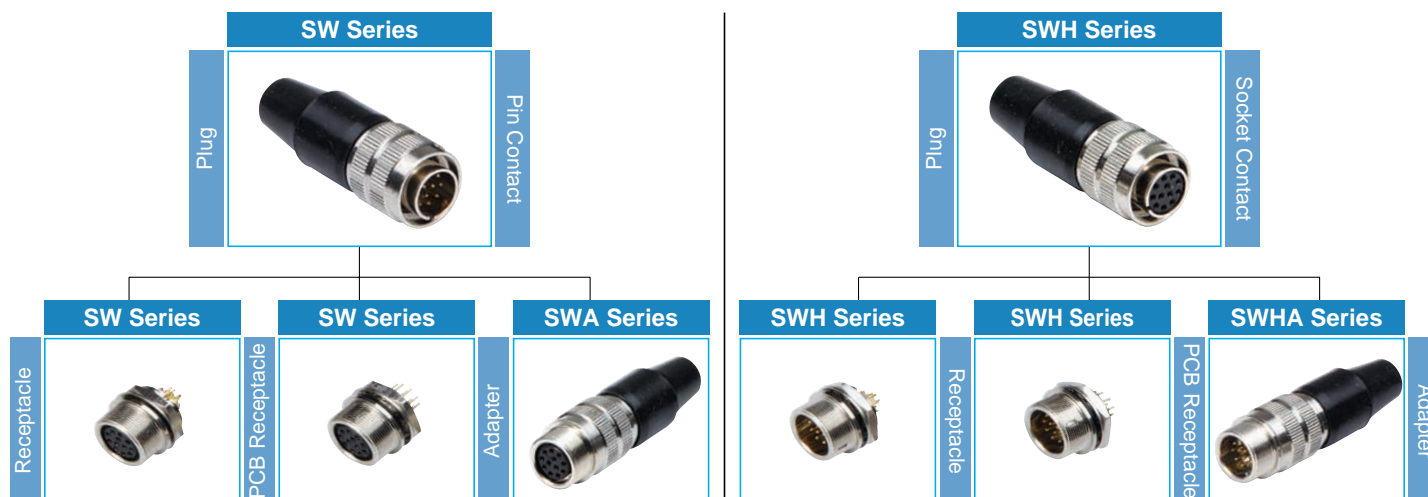
- <sup>1</sup> Withstanding voltage is the tested voltage value in this table.
- <sup>2</sup> Insulation resistance is measured at DC 100V.
- <sup>3</sup> Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics for the latest specifications.

**Contact Diameter**  
 ○ 0.55mm ● 1.0mm

## Material Used / Finishing Material

	Material	Finish
Body	Brass	Sn, Ni plate
Insulator	PA	Black
Contacts	Pin	Brass
	Socket	Phosphor bronze

## SW Series Mini-map

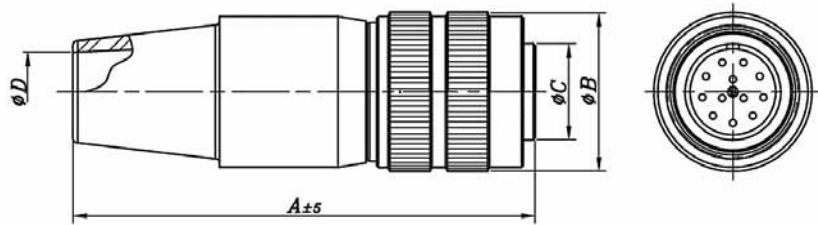


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SW Series – SW Plug, Receptacle, Adapter



## SW Plug



SW-10-12(P)

Part Number	A	ØB	ØC	ØD
SW-8-4 (P)	35	11	6.7	5.1
SW-8-5 (P)				
SW-8-6 (P)				

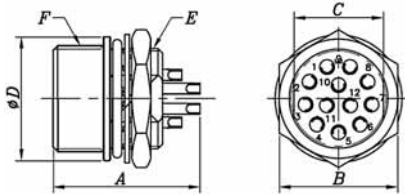
Part Number	A	ØB	ØC	ØD
SW-10-2 (P)	42	14	8.5	7
SW-10-3 (P)				
SW-10-4 (P)				
SW-10-9 (P)				
SW-10-10 (P)				
SW-10-12 (P)				

→ SW Series  
→ Size  
→ No. of Contacts

### Silver contacts

Include '-S' at end of part number.  
EX) SW-8-4 (P)-S  
SW-10-12 (P)-S

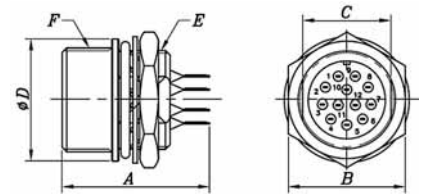
## SW Solder Type Receptacle



SW-10-12 (R)

Part Number	A	B	C	ØD	E	F
SW-8-4 (R)	14.5	10	7.5	10	M8×0.5	M9×0.5
SW-8-5 (R)						
SW-8-6 (R)						
SW-10-2 (R)	15	13	9.8	13.5	M11×0.75	M11.5×0.5
SW-10-3 (R)						
SW-10-4 (R)	16.5	13	9.8	13.5	M11×0.75	M11.5×0.5
SW-10-9 (R)						
SW-10-10 (R)						
SW-10-12 (R)						

## SW PCB Type Receptacle



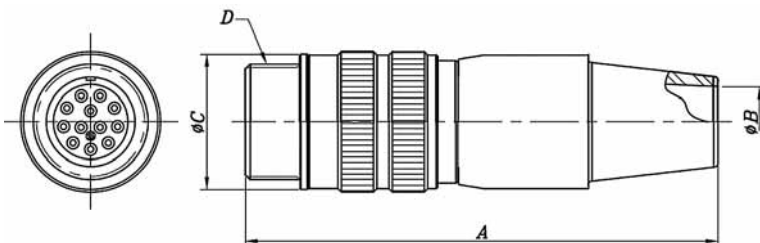
SW-10-12 (RPCB)

Part Number	A	B	C	ØD	E	F
SW-8-4 (RPCB)	15.7	10	7.5	10	M8×0.5	M9×0.5
SW-8-5 (RPCB)						
SW-8-6 (RPCB)						
SW-10-9 (RPCB)	15.7	13	9.8	13.5	M11×0.75	M11.5×0.5
SW-10-10 (RPCB)						
SW-10-12 (RPCB)						

### Silver contacts

Include '-S' at end of part number.  
EX) SW-8-4 (RPCB)-S  
SW-10-12 (R)-S

## SW Adapter



Part Number	A	ØB	ØC	D
SWA-8-4	39.3	5.1	10	M9×0.5
SWA-8-5				
SWA-8-6				

Part Number	A	ØB	ØC	D
SWA-10-2	47	7	13.5	M11.5×0.5
SWA-10-3				
SWA-10-4				
SWA-10-9				
SWA-10-10				
SWA-10-12				

→ SWA Series  
→ Size  
→ No. of Contacts



SWA-10-12

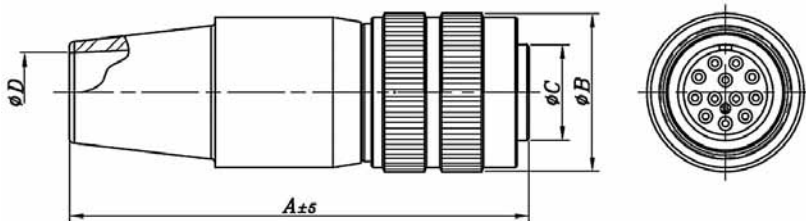
### Silver contacts

Include '-S' at end of part number.  
EX) SWA-8-4-S  
SWA-10-12-S

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SWH Plug, Receptacle, Adapter – SW Series

## SWH Plug



SW-10-12(P)

Part Number	A	ØB	ØC	ØD
SWH-8-4 (P)	35	11	6.7	5.1
SWH-8-5 (P)				
SWH-8-6 (P)				

Part Number	A	ØB	ØC	ØD
SWH-10- 2 (P)	42	14	8.5	7
SWH-10- 3 (P)				
SWH-10- 4 (P)				
SWH-10- 9 (P)				
SWH-10-10 (P)				
SWH-10-12 (P)				

### Silver contacts

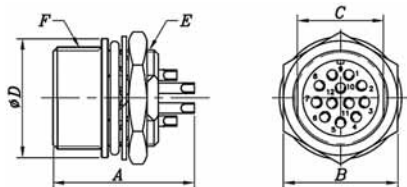
Include '-S' at end of part number.  
EX) SWH-8-4 (P)-S  
SWH-10-12 (P)-S

→ SWH Series  
→ Size  
→ No. of Contacts

## SWH Solder Type Receptacle



SWH-10-12 (R)

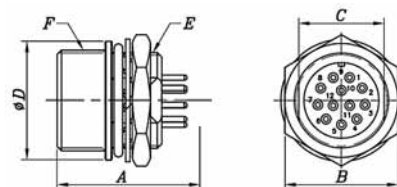


Part Number	A	B	C	ØD	E	F
SWH- 8- 4 (R)	14.2	10	7.5	10	M8×0.5	M9×0.5
SWH- 8- 5 (R)						
SWH- 8- 6 (R)						
SWH-10- 2 (R)	16.2	13	9.8	13.5	M11×0.75	M11.5×0.5
SWH-10- 3 (R)						
SWH-10- 4 (R)						
SWH-10- 9 (R)						
SWH-10-10 (R)						
SWH-10-12 (R)						

## SWH PCB Type Receptacle



SWH-10-12 (RPCB)



Part Number	A	B	C	ØD	E	F
SWH- 8- 4 (RPCB)	15	10	7.5	10	M8×0.5	M9×0.5
SWH- 8- 5 (RPCB)						
SWH- 8- 6 (RPCB)						
SWH-10- 9(RPCB)	15	13	9.8	13.5	M11×0.75	M11.5×0.5
SWH-10-10(RPCB)						
SWH-10-12(RPCB)						

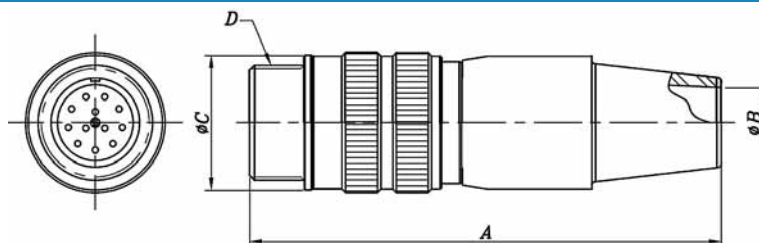
### Silver contacts

Include '-S' at end of part number.  
EX) SWH-8-4 (RPCB)-S  
SWH-10-12 (R)-S



SWHA-10-12

## SWHA Adapter



Part Number	A	ØB	ØC	D
SWHA-8-4	39.3	5.1	10	M9×0.5
SWHA-8-5				
SWHA-8-6				

Part Number	A	ØB	ØC	D
SWHA-10- 2	47	7	13.5	M11.5×0.5
SWHA-10- 3				
SWHA-10- 4				
SWHA-10- 9				
SWHA-10-10				
SWHA-10-12				

**Silver contacts**  
Include '-S' at end of part number.  
EX) SWHA-8-4-S  
SWHA-10-12-S

→ SWHA Series  
→ Size  
→ No. of Contacts

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SW Series – Cable Assembly Instruction

## General Instruction / Information

- Diagram 1 show a sample wiring for SW series.
- Soldering must be done as quickly and carefully as possible to prevent damage to insulator.
- Receptacles do not require additional instructions.

## Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0.129mm<sup>2</sup>(AWG#26).
- ② Insert RUBBER BUSHING to cable.
- ③ Insert PLUG HOUSING to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure PLUG BODY to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten CRIMP using hand crimp tool (SA-HCT<sup>①</sup>)
- ⑧ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑨ Tighten WRENCH BOLT using 0.3N force onto one of two embossed parts of crimp.
- ⑩ Cover RUBBER BUSHING onto PLUG HOUSING.

<sup>①</sup> See below for information on SA-HCT.

Diagram 1

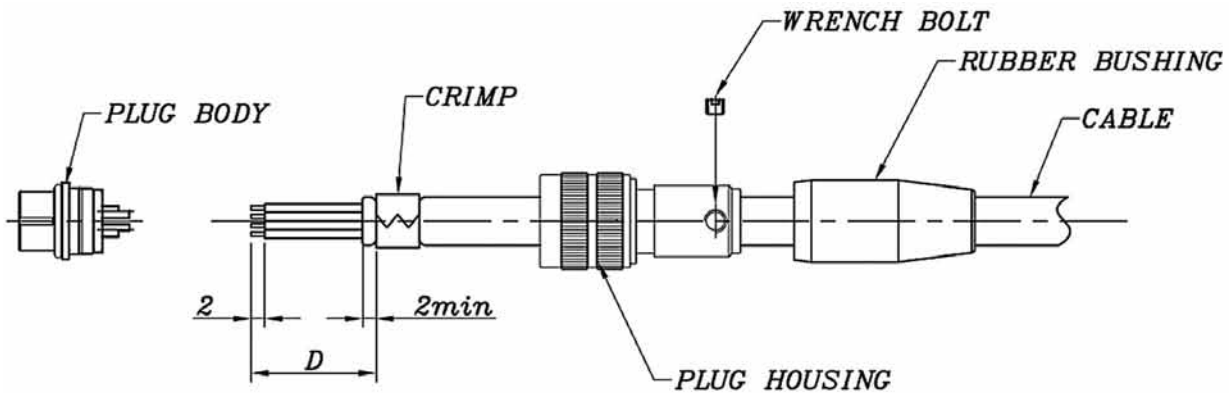


Table 1

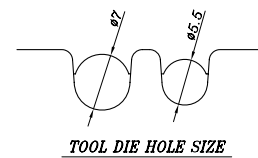
unit : mm

Size	Spanner Jaw	D (Dimension)	Tightening Force	Notes
SW - 8	8	10	1.5N · m (15kg · cm)	SA-HCT size Ø5.5
SW - 10	10	16	2.0N · m (20kg · cm)	SA-HCT size Ø7.0

## SA-HCT (Hand Crimp Tool)

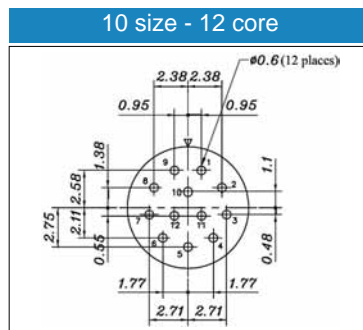
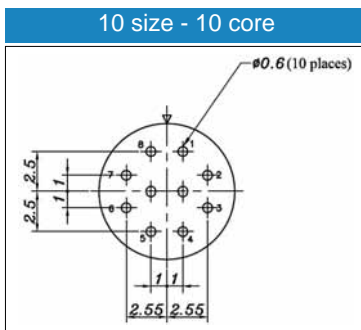
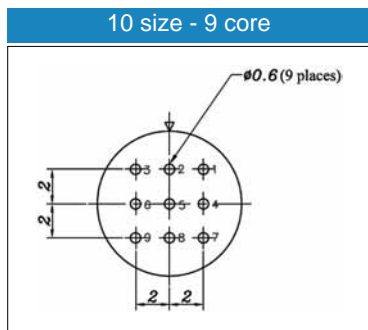
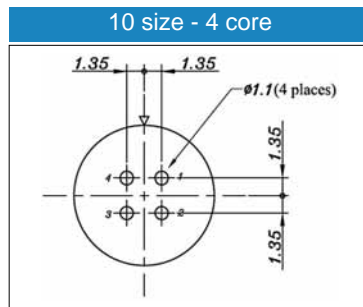
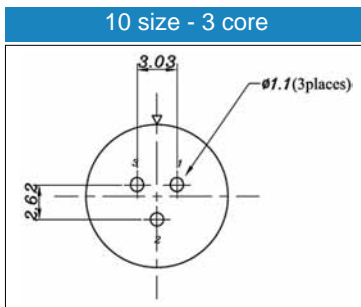
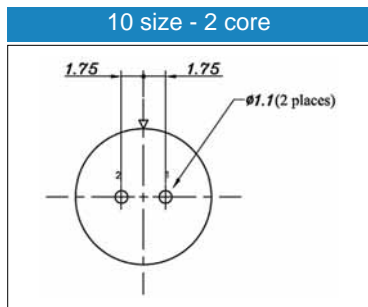
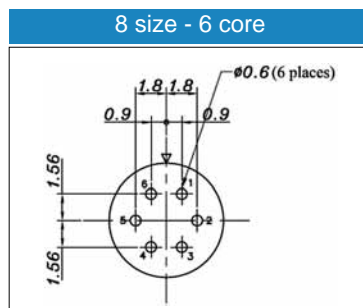
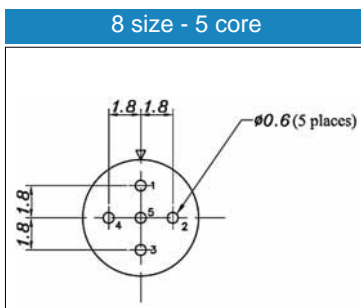
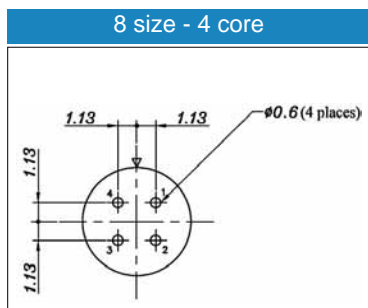


Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.

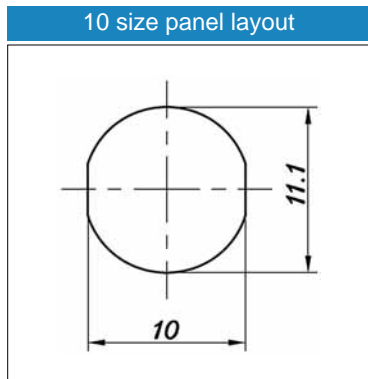
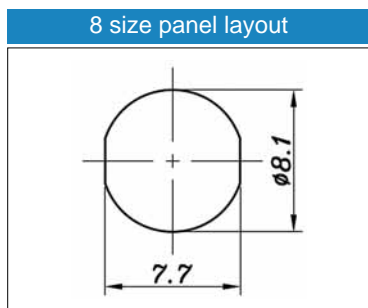


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SW Receptacle PCB Hole Layout



## SW Receptacle Panel Layout



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SXR Series – Part Numbering



## Features

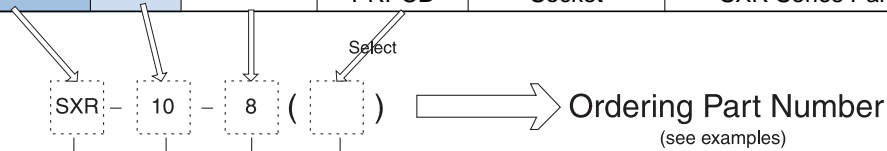
- Miniature
- Ultra Light Weight
- Ground Function

## Applications

- Professional Audio
- Professional Video
- Camera

## Part Numbering

Part Number	Size	Number of Contact	Suffix	Contact Type	Notes	Page
Series						
SXR	10	8	P	Pin	SXR Series Plug	72
			R	Socket	SXR Series Receptacle	72
			PRPCB	Socket	SXR Series Panel PCB Receptacle	72



### Connector Series

SXR Series

### Size

10

### No. of Contact

8

### Body Type

P : Plug

R : Receptacle (solder termination)

PRPCB : Panel Receptacle (PCB termination)

### Examples

**SXR - 10 - 8 ( P )**

SXR series - Size 10 - 8 contacts ( Plug )

**SXR - 10 - 8 ( R )**

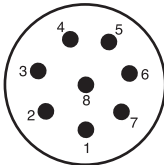
SXR series - Size 10 - 8 contacts ( Receptacle )

**SXR - 10 - 8 ( PRPCB )**

SXR series - Size 10 - 8 contacts ( Panel Receptacle PCB type )

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## Major Performances / Contact Arrangements

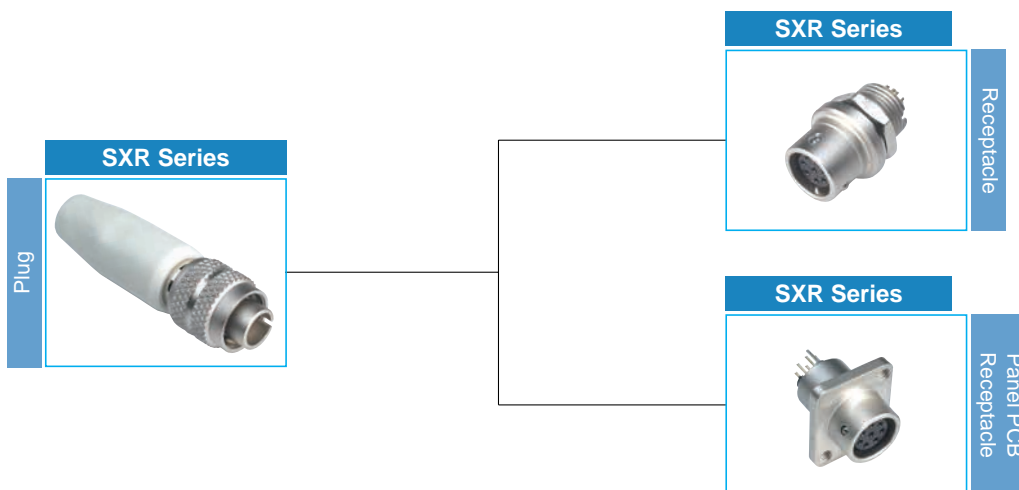
Performance	Size / No of Pin	Size 10
		8
Withstanding Voltage (per min) <sup>1</sup>		AC 300V
Rated Current		2A
Insulation Resistance (Minimum) <sup>2</sup>		1,000MΩ
Contact Resistance (Maximum) <sup>3</sup>		20mΩ
Solder Pot Inside Diameter		∅0.9
Contact Arrangement		

- <sup>1</sup> Withstanding voltage is the tested voltage value in this table.
- <sup>2</sup> Insulation resistance is measured at DC 100V.
- <sup>3</sup> Contact resistance is measured at DC 1A.
- Values are from tested items and may not apply to all connectors.
- Specifications subject to change without notice.
- Consult Sam Woo Electronics for the latest specifications.

## Material Used / Finishing Material

	Material	Finish
Body	Alluminum alloy	Nickel plate
Insulator	PBT resin	Black
Contacts	Pin	Brass
	Socket	Phosphor bronze
		Silver plate

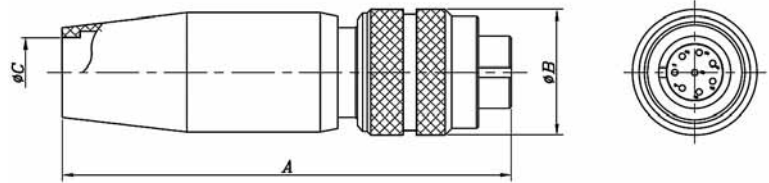
## SXR Series Mini-map



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

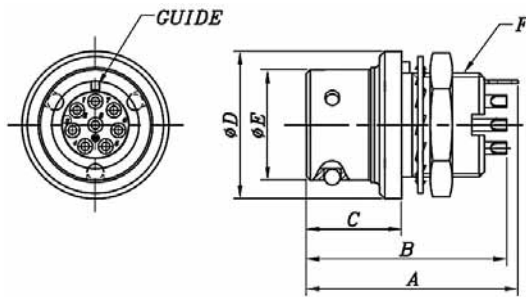
# SXR Series – Plug, Receptacle

## SXR Plug



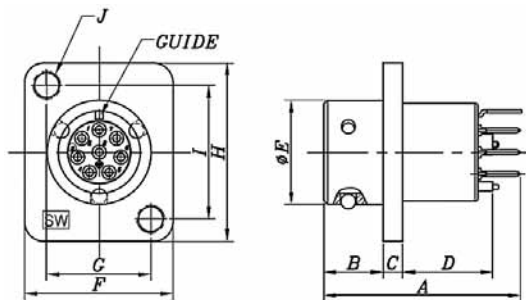
Part Number	A	ØB	ØC
SXR-10-8 (P)	50.0	14.0	8.0

## SXR Receptacle



Part Number	A	B	C	ØD	ØE	F
SXR-10-8 (R)	20.2	19.1	9.1	14	10.5	M10×0.75P

## SXR Panel PCB Receptacle

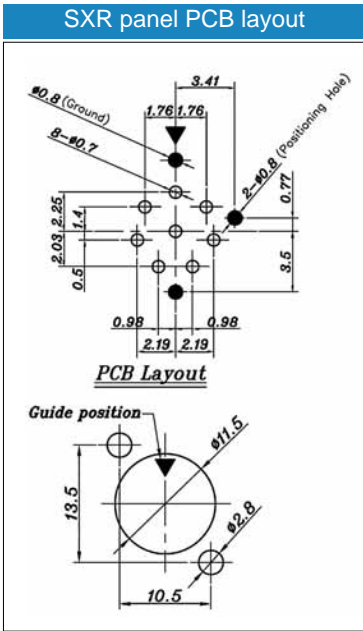
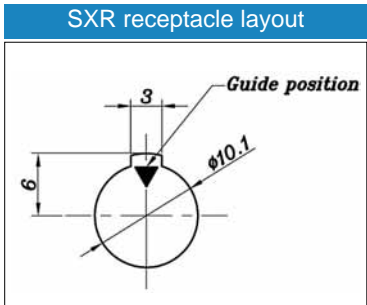


Part Number	A	B	C	D	ØE	F	G	H	I	J
SXR-10-8 (PRPCB)	20	6	2	9.1	10.5	15	10.5	18	13.5	M2.5×0.45P

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



## SXR Receptacle Layout



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.





## RF/Microwave Connectors

<b>RF / Microwave Overview</b>	.....	76
<b>Triaxial 75Ω</b>	SB.....	78
<b>Miniature</b>	Performance and Features.....	84
	SMA.....	85
	SMB.....	87
	MCX.....	88
<b>High Frequency</b>	BNC 75Ω .....	90
	Performance and Features.....	96
	BNC 50Ω .....	97
	N.....	99
	M.....	101
	TNC .....	102
	F / RCA.....	103
<b>Others</b>	Between-Series Adapter.....	104

## SB Series

P.78



### Applications

Professional TV Camera  
Broadcasting Industry

### Main Features

Triaxial 75Ω  
High-performance  
Rigorous design

### Material / Finish

Body - Brass (Nickel & Chrome III)  
Insulator - PTFE  
Contacts - Brass (Gold Plate)  
Latch Sleeve - Brass (Nickel) or  
Beryllium copper (Nickel)

## SMA

P.85



### Main Features

Ideal for 18GHz or higher  
Maximum reliability  
Superb robustness  
MIL-C-39012 specification

### Material / Finish

Body - Brass  
Insulator - PTFE  
Contacts - Brass

## SMB

P.87



### Main Features

Snap-on quick connection  
Frequency of 4GHz  
MIL-C-39012 specification

### Material / Finish

Body - Brass  
Insulator - PTFE  
Contacts - Brass

## MCX

P.88



### Main Features

MIL-C-39012 specification  
Frequency up to 2GHz

### Material / Finish

Body - Brass  
Insulator - PTFE  
Contacts - Brass

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## BNC 75Ω

P.90



### Applications

TV broadcasting, CCTV,  
CATV Transmitters, LAN,  
Telecommunications,  
Satellite receivers, medical, etc

### Main Features

Top quality 75Ω  
Frequency from 0 to 3GHz

### Material / Finish

Body - Zinc alloy or Brass / Nickel  
Insulator - PTFE / White  
Contacts - Brass / Gold  
Beryllium copper / Gold

## BNC 50Ω, N,M,TNC,F/RCA P.96



### Main Features

High frequency coaxial  
75Ω available upon request

### Material / Finish

Body - Brass  
Insulator - PTFE  
Contacts - Brass

## Between-Series Adapter P.104



### Main Features

- BNC-N
- BNC-RCA
- BNC-TNC
- M-RCA
- N-SMA
- BNC-M
- BNC-SMA
- F-RCA
- N-M
- N-TNC

### Material / Finish

Body - Brass  
Insulator - PTFE  
Contacts - Brass

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SB Series – Triaxial



## Features

- High performance
- Rigorous design

## Applications

- Professional TV Camera
- Broadcasting Industry

## SB Part Numbering



### Connector Series

**SB Series**

### Model Number

101 : European Standard (Self-locking System)  
 102 : American Standard (Self-locking System)  
 770 : American Standard (Quad-locking System)

### Body Type

P : Plug  
 PFC : Plug Fixed with Clamping Device  
 PFC1 : Plug Fixed with Short Clamping Device  
 J : Jack  
 RC : Receptacle with Clamping Device  
 RC1 : Receptacle with Short Clamping Device  
 APJF : Adapter (Plug - Jack) Flange

### Accessory Code

101 Model  
 1.0 / 4.5 / 8.7  
 1.0 / 4.5 / 9.4  
 1.4 / 4.5 / 9.4  
 1.4 / 6.6 / 11.3  
 1.4 / 6.6 (for short clamping device)  
 102 Model  
 0.81 / 3.7 / 9.5  
 770 Model  
 0.81 / 3.7 / 9.2  
 1.63 / 7.9 / 13.2

### Examples

**SB - 101 P - 1.0/4.5/8.7**

SB series - 101 Model Plug 1.0/4.5/8.7

**SB - 101 P - 1.4/6/6/11.3A**

SB series - 101 Model Plug - 1.4/6.6/11.3 Accessory only

**SB - 101 PFC - 1.0/4.5/9.4**

SB series - 101 Model Plug Fixed with Clamping device 1.0/4.5/9.4

**SB - 101 APJF**

SB series - 101 Model Adapter (Plug - Jack) Square Flange

**SB - 102 J - 0.81/3.7/9.5**

SB series - 102 Model Jack 0.81/3.7/9.5

**SB - 102 P - 0.81/3.7/9.5 A**

SB series - 102 Model Plug 0.81/3.7/9.5

**SB - 770 P - 1.63/7.9/13.2**

SB series - 770 Model Plug 1.63/7.9/13.2

**SB - 770 J - 1.63/7.9/13.2 A**

SB series - 770 Model Jack 1.63/7.9/13.2 Accessory only

### Accessory Only (applies only to 102 and 770 models)

A : To order accessory only include 'A' at the end

SB Part Numbering

Accessories

Option

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

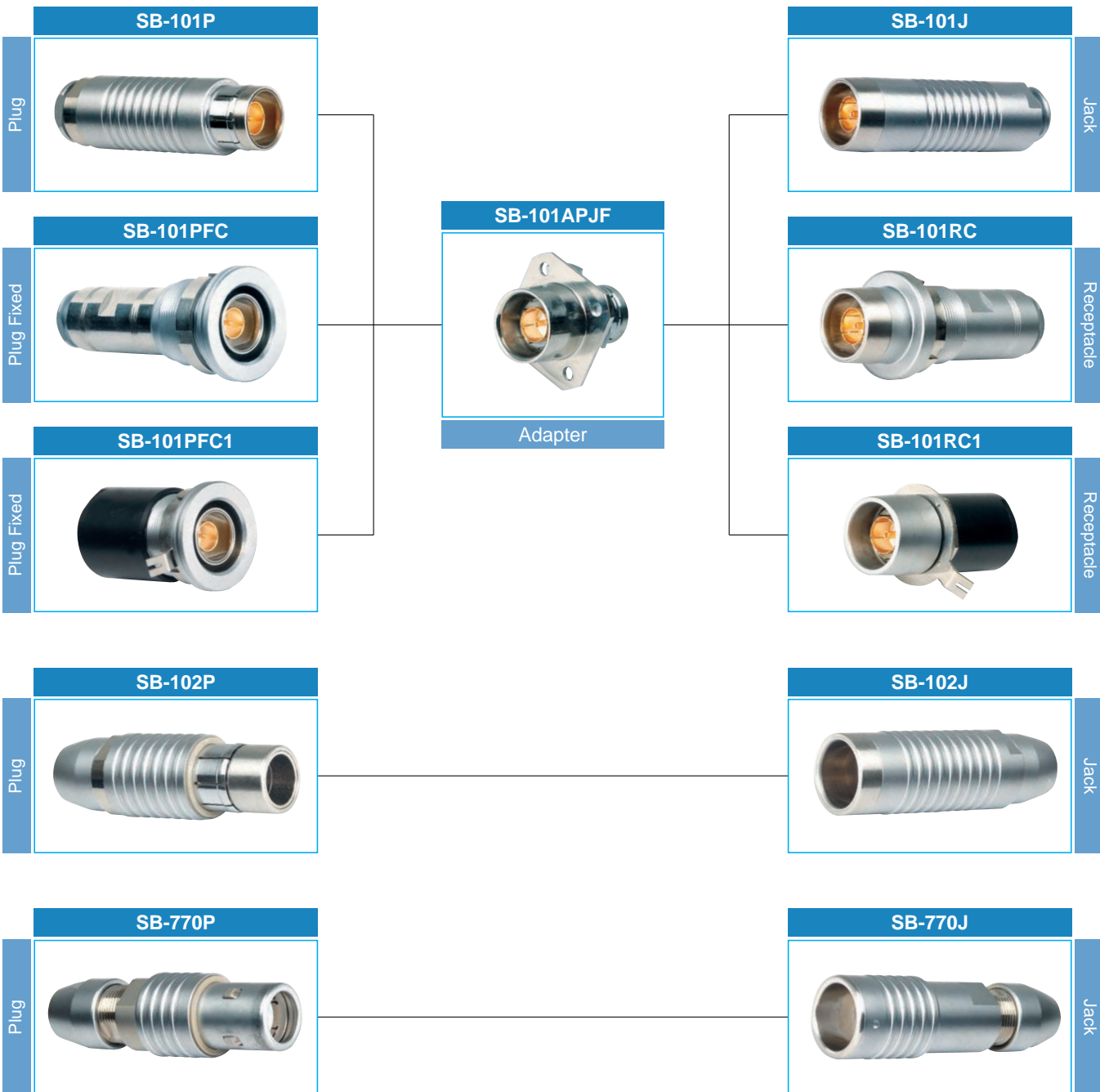
## Major Performances

Specification	101 Model	102 Model	770Model
Impedance	75Ω	75Ω	75Ω
VSWR	<1.2 upto 1.5GHz	<1.2 upto 1GHz	<1.2 upto 1GHz
Contact Resistance	<3mΩ	<3mΩ	<1mΩ
Operating Temperature	-20℃~+70℃	-20℃~+70℃	-20℃~+70℃

## Material Used / Finish

Material	101 Model	102 Model	770Model
Body	Brass (Nickel & Chrome III)	Brass (Nickel & Chrome III)	Brass (Nickel & Chrome III)
Contacts	Brass (Gold Plate)	Brass (Gold Plate)	Brass (Gold Plate)
Insulator	Ptfe	Ptfe	Ptfe
Latching Sleeve	Brass (Nickel Plate)	Brass (Nickel Plate)	Beryllium copper (Nickel Plate)
Seal	Silicon Rubber	Silicon Rubber	Silicon Rubber

## SB Series Mini-map



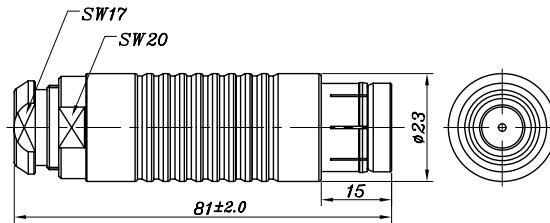
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# SB Series – Triaxial

## SB-101 Model

SB-101P

Plug

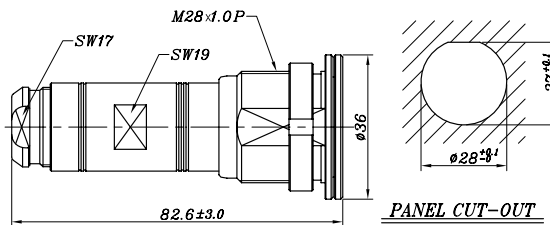


### Available Accessories

- 1.0/4.5/8.7
- 1.0/4.5/9.4
- 1.4/4.5/9.4
- 1.4/6.6/11.3

SB-101PFC

Plug Fixed

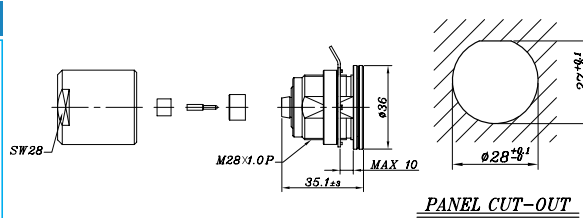


### Available Accessories

- 1.0/4.5/8.7
- 1.0/4.5/9.4
- 1.4/4.5/9.4
- 1.4/6.6/11.3

SB-101PFC1

Plug Fixed

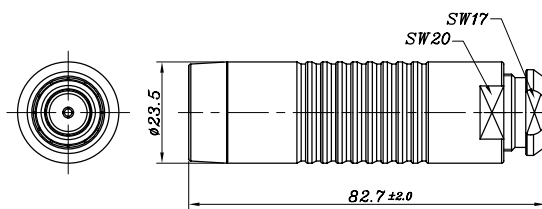


### Available Accessories

- 1.4/6.6

### Available Accessories

- 1.0/4.5/8.7
- 1.0/4.5/9.4
- 1.4/4.5/9.4
- 1.4/6.6/11.3



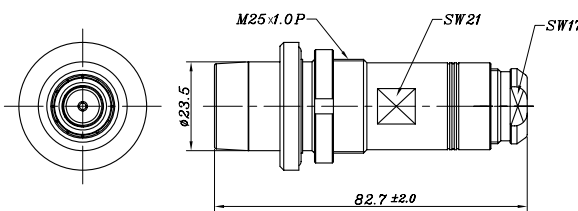
SB-101J



Jack

### Available Accessories

- 1.0/4.5/8.7
- 1.0/4.5/9.4
- 1.4/4.5/9.4
- 1.4/6.6/11.3



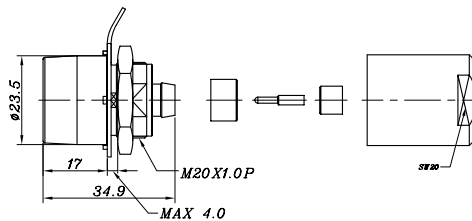
SB-101RC



Receptacle

### Available Accessories

- 1.4/6.6



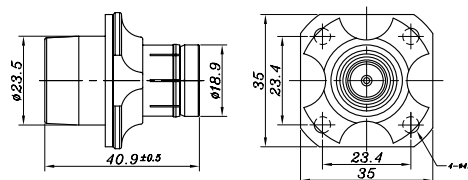
SB-101RC1



Receptacle

SB-101APJF

Adapter



Plug - Jack Adapter

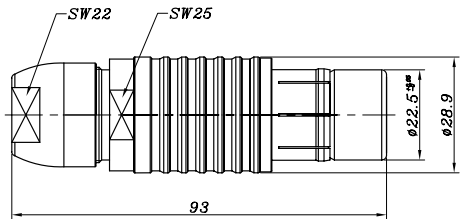
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



## SB-102 Model

SB-102P

Plug



### Available Accessories

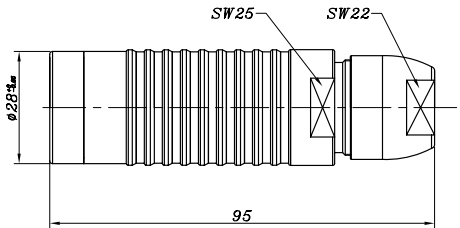
- 0.81/3.7/9.5

more coming soon

### Available Accessories

- 0.81/3.7/9.5

more coming soon



SB-102J

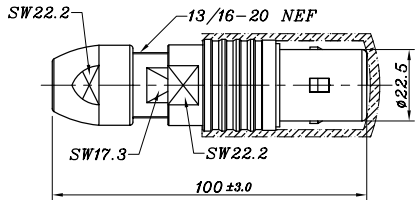
Jack



## SB-770 Model

SB-770P

Plug



### Available Accessories

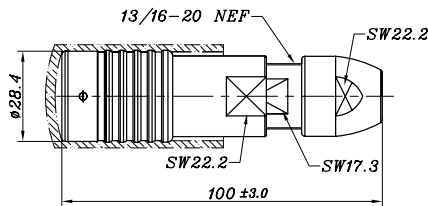
- 0.81/3.7/9.2
- 1.63/7.9/13.2

more coming soon

### Available Accessories

- 0.81/3.7/9.2
- 1.63/7.9/13.2

more coming soon



SB-770J

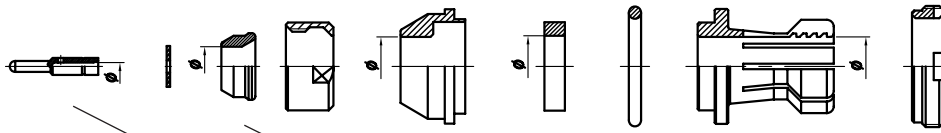
Jack



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

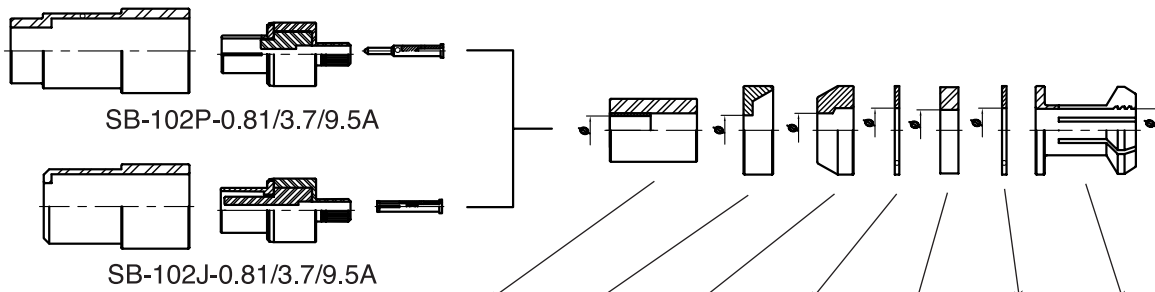
# SB Series(accessories) – Triaxial

## SB-101 Accessory



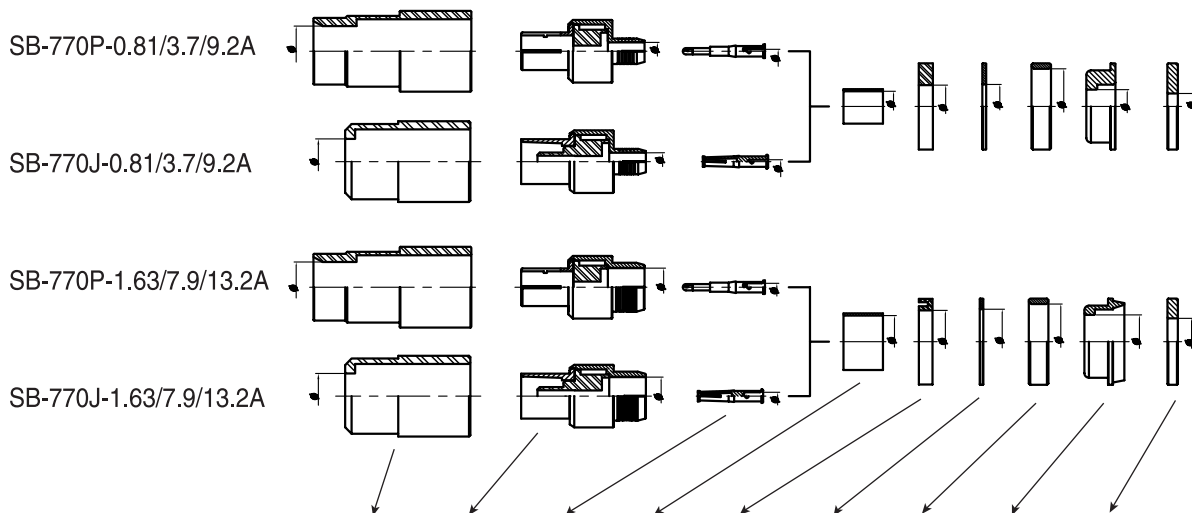
Part Number	Diameter Ø				
	1	2	3	4	5
SB-101P-1.0/4.5/8.7A	1.15	5.8	8.7	8.8	8.7
SB-101P-1.0 / 4.5 / 9.4A	1.15	5.8	9.4	9.4	9.4
SB-101P-1.4 / 4.5 / 9.4A	1.5	5.8	9.4	9.4	9.4
SB-101P-1.4 / 6.6 / 11.3A	1.5	7.5	11.3	10.3	11.3

## SB-102 Accessory



Part Number	1	2	3	4	5	6	7
	SB-102P-0.81/3.7/9.5A SB-102J-0.81/3.7/9.5A	Ø6.3	Ø6.6	Ø7.5	Ø9.8	Ø9.0	Ø9.8

## SB-770 Accessory



Part Number	1	2	3	4	5	6	7	8	9
	SB-770P-0.81/3.7/9.2A SB-770J-0.81/3.7/9.2A	Ø11.1	Ø3.9	Ø0.85	Ø6.7	Ø9.4	Ø9.7	Ø16.65	Ø7.4
SB-770P-1.63/7.9/13.2A SB-770J-1.63/7.9/13.2A	Ø11.1	Ø8.4	Ø1.7	Ø11.5					

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



# SMA, SMB, MCX Series – Miniature



## SMA Features

- 18 GHz MIL-C-39012 SMA specifications
- High quality finish and optimum electrical properties
- Special version offers housing elements made of copper beryllium or stainless steel for higher mechanical strength
- Copper beryllium of the special version is gold plated, while stainless steel connectors are passivated
- SSMA also available.

## SMB Features

- DC to 4GHz MIL-C-39012 SMB specifications
- Snap-on for rapid connection and disconnection

## MCX Features

- Up to 2GHz MIL-C-39012 MCX specifications
- 30% less space than SMB
- Offers equal contact reliability as SMB

## Major Performance

<b>SMA</b>	Impedance	50Ω		Contact resistance	Center Contacts	3.0mΩ
	Frequency range	Semi-rigid	DC 18GHz		Outer Contacts	2.5mΩ
		Flexible	DC 12.4GHz	Insulation resistance		
	Contact current	DC 2.0A max		Insertion loss		0.05 f(GHz)db
	Working voltage	Semi-rigid	1000V	V.S.W.R		<1.15+0.02f(GHz)
Flexible		750V	RF leakage		-60dB min@2~3GHz	

<b>SMB</b>	Impedance	50Ω		Insulation resistance	1000MΩ min	
	Frequency range	DC to 4GHz		Insertion loss		0.6dB max
	Contact current	DC 1.5A max		V.S.W.R	Straight	1.3+0.04f
	Voltage rating	250V R.M.S			Right-angle	1.4+0.06f
	Contact resistance	Center Contacts	0.3mΩ	RF leakage	-55dBm min. between 2 to 3 GHz	
Outer Contacts		0.5mΩ				

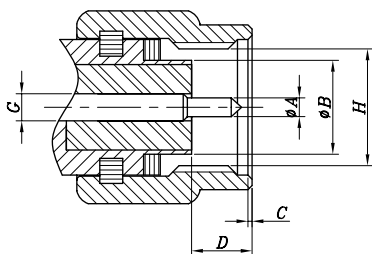
<b>MCX</b>	Impedance	50Ω		Contact resistance	Center Contacts	5.0mΩ	
	Frequency range	up to 2 GHz			Outer Contacts	1.0mΩ	
	Contact current	DC 1.5A		Insulation resistance		1000MΩ min	
	Voltage rating	250V R.M.S		V.S.W.R		Straight	1.3 max
						Right-angle	1.35 max

## Material Used / Finishing Material

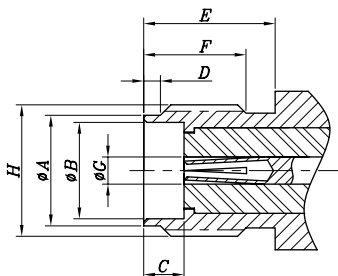
General		Material	Finish
Body		Brass	Gold
Insulator		Ptfe	Natural(White)
Contacts	Pin	Brass	Brass
	Socket	Brass	Brass

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SMA Interface Dimensions



Plug



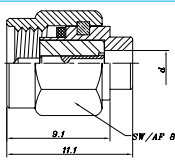
Jack

Interface Dimension

SMA	Plug		Jack	
	mm		mm	
	min.	max.	min.	max.
A	0.9	0.94	5.28	5.49
B		4.59	4.59	
C	0.38	1.14	1.88	1.98
D		3.43	0.38	1.14
E			5.54	
F			4.32	
G	1.24	1.29	1.24	1.29
H	1/4-36 UNS-2B		1/4-36 UNS-2A	

## SMA Plugs

### Straight - Semi-rigid Cable - Direct Solder

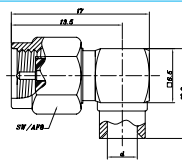


**Part Number**

SMA-P-402/u

SMA-P-405/u

### Right-angle - Semi-rigid Cable - Direct Solder

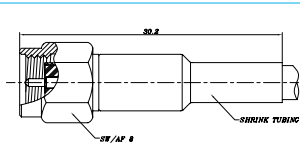


**Part Number**

SMA-LP-402/u

SMA-LP-405/u

### Flexible Cable - Crimp



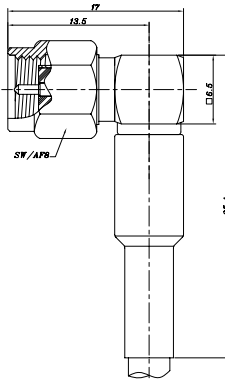
**Part Number**

SMA-PC-58/u

SMA-PC-178/u

SMA-PC-316/u

### Right-angle - Semi-rigid Cable - Crimp



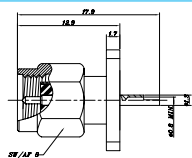
**Part Number**

SMA-LP-58/u

SMA-LP-178/u

SMA-LP-316/u

### Fixed Plug - Flange - Solder Pot Terminated

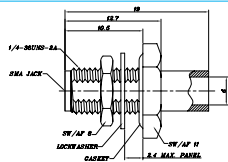


**Part Number**

SMA-PR

## SMA Jacks

### Bulkhead - Semi-rigid Cable - Direct Solder

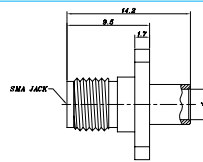


**Part Number**

SMA-BJR-402/u

SMA-BJR-405/u

### Fixed Jack - Flange - Semi-rigid Cable - Direct Solder

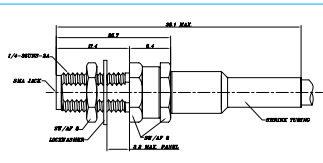


**Part Number**

SMA-JR-402/u

SMA-JR-405/u

### Bulkhead - Flexible Cable - Crimp



**Part Number**

SMA-BJC-58/u

SMA-BJC-178/u

SMA-BJC-316/u

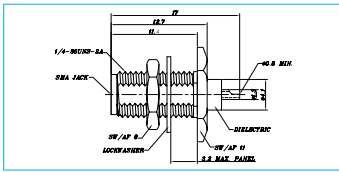
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



# SMA Series – Miniature

## SMA Receptacles

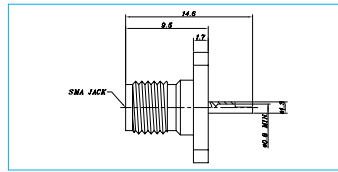
### Bulkhead - Front Screw - Solder Pot Terminated



**Part Number**

SMA-JBR

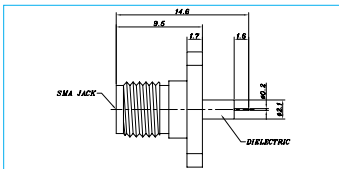
### Flange - Flush Dielectric - Solder Pot Terminated



**Part Number**

SMA-JR

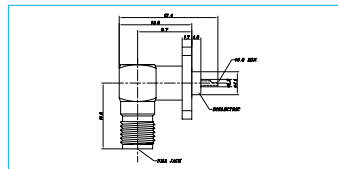
### Flange - Extended Dielectric - Stub Terminated



**Part Number**

SMA-JR-PCB

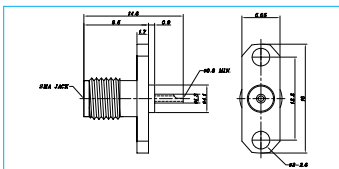
### Right-angle - Flange - Extended Dielectric - Solder Pot Terminated



**Part Number**

SMA-LJR

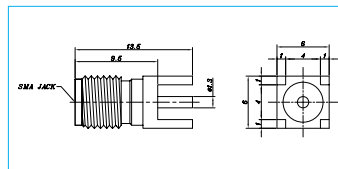
### Narrow Flange - Extended Dielectric - Solder Pot Terminated



**Part Number**

SMA-J2R

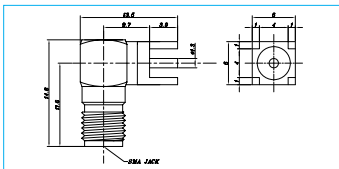
### PCB Receptacle - 4 leg - Stub Terminated



**Part Number**

SMA-J4R-PCB

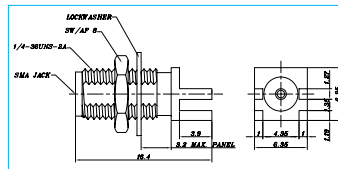
### Right-angle - PCB Receptacle - 4 leg - Stub Terminated



**Part Number**

LJ4R-PCB

### PCB Side-Mount Receptacle

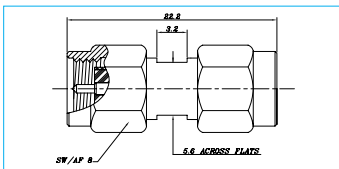


**Part Number**

SMA-BJ-4RPCB

## SMA Adapters

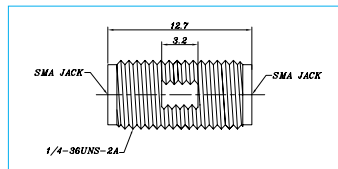
### Plug-Plug



**Part Number**

SMA-A-PP

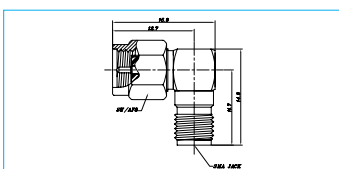
### Jack-Jack



**Part Number**

SMA-A-JJ

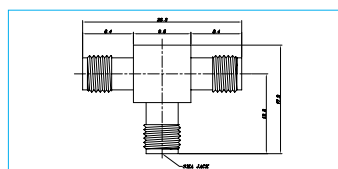
### Right-angle - Plug-Jack



**Part Number**

SMA-LA-PJ

### 3 Way T-Adapters



**Part Number**

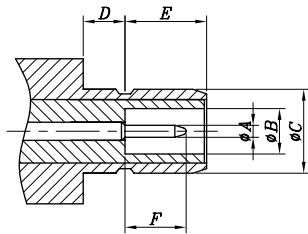
SMA-TA-JJJ

SMA-TA-JPJ

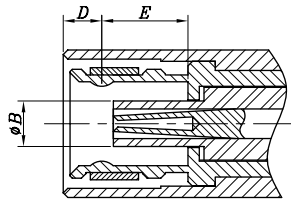
SMA-TA-PJP

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SMB Interface Dimensions



Plug



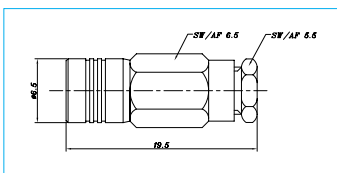
Jack

### Interface Dimension

SMB	Plug mm		Jack mm	
	min.	max.	min.	max.
A	0.48	0.53		
B	2.08			2.06
C	3.66	3.71		
D	1.65			1.63
E	3.33	3.58	3.58	
F		2.97	2.97	

## SMB Plugs

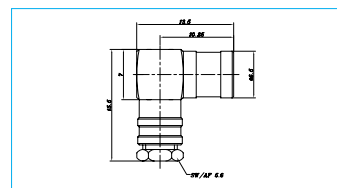
### Flexible Cable - Clamp



#### Part Number

SMB-P-58/u  
SMB-P-178/u  
SMB-P-316/u

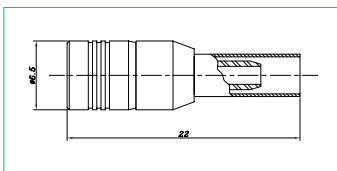
### Right-angle - Flexible - Clamp



#### Part Number

SMB-LP-58/u  
SMB-LP-178/u  
SMB-LP-316/u

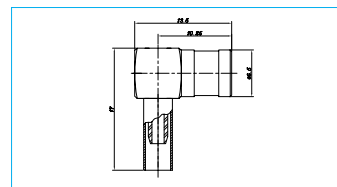
### Flexible Cable - Crimp



#### Part Number

SMB-PC-58/u  
SMB-PC-178/u  
SMB-PC-316/u

### Right-angle - Flexible Cable - Crimp

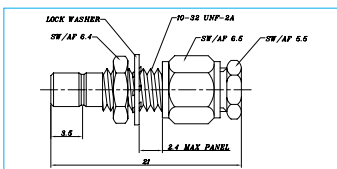


#### Part Number

SMB-LPC-58/u  
SMB-LPC-178/u  
SMB-LPC-316/u

## SMB Jacks

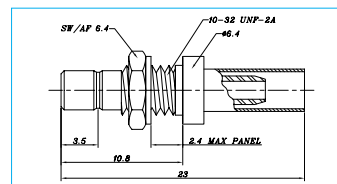
### Bulkhead - Flexible - Clamp



#### Part Number

SMB-BJ-58/u  
SMB-BJ-178/u  
SMB-BJ-316/u

### Bulkhead - Flexible Cable - Crimp

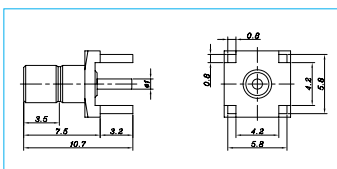


#### Part Number

SMB-BJC-58/u  
SMB-BJC-178/u  
SMB-BJC-316/u

## SMB Receptacles

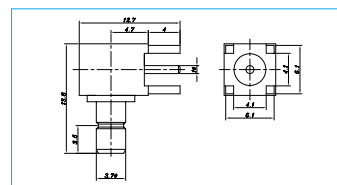
### PCB Receptacle - 4 leg - Stub Terminated



#### Part Number

SMB-J4R-PCB

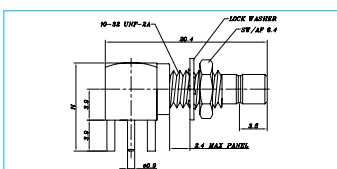
### Right-angle - PCB Receptacle - 4 leg - Stub Terminated



#### Part Number

SMB-LJ4R-PCB

### Right-angle - Bulkhead - PCB Receptacle - 4 leg - Stub



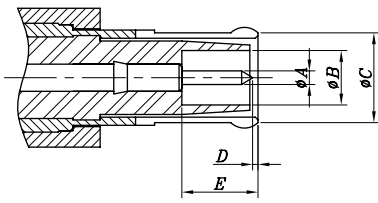
#### Part Number

SMB-LB4R-PCB

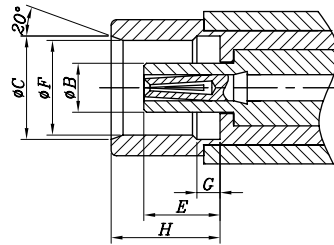
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# MCX Series – Miniature

## MCX Interface Dimensions



Plug



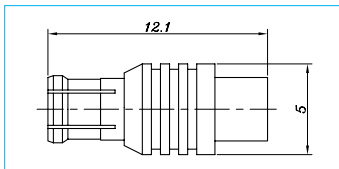
Jack

### Interface Dimension

MCX	Plug mm		Jack mm	
	min.	max.	min.	max.
A	0.48	0.53		
B	2			1.98
C		3.6	3.8	
D	0.15			
E	2.8		2.6	2.8
F			3.42	3.48
G			0.75	0.85
H			4	4.12

## MCX Plugs

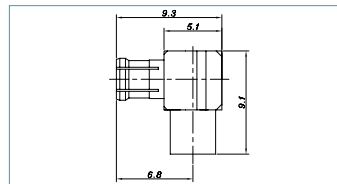
### Semi-rigid - Direct Solder



#### Part Number

MCX-P-402/u  
MCX-P-405/u

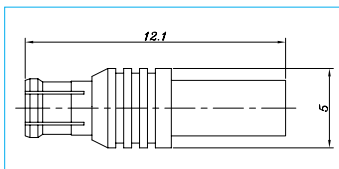
### Right-angle - Semi-rigid - Direct Solder



#### Part Number

MCX-LP-402/u  
MCX-LP-405/u

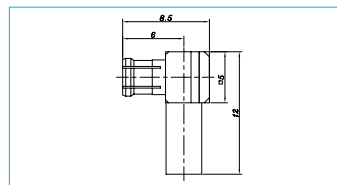
### Flexible Cable - Crimp



#### Part Number

MCX-PC-58/u  
MCX-PC-178/u  
MCX-PC-316/u

### Right-angle - Flexible Cable - Crimp

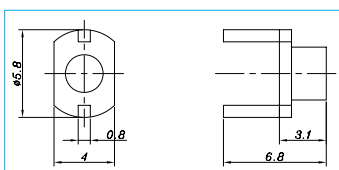


#### Part Number

MCX-LPC-58/u  
MCX-LPC-178/u  
MCX-LPC-316/u

## MCX Terminator

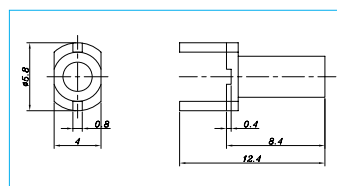
### PCB Terminator - Semi-rigid - Direct Solder



#### Part Number

PCB-T-402/u  
PCB-T-405/u

### PCB Terminator - Flexible - Crimp



#### Part Number

PCB-T-58/u  
PCB-T-178/u  
PCB-T-316/u

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.





# BNC 75Ω – High Frequency



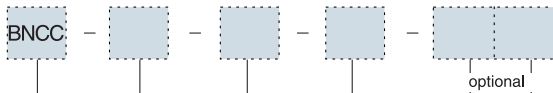
## Features

- Top-quality performing 75Ω BNC
- Quick reliable connection
- Intermateable with 50Ω series

## Applications

- TV broadcasting
- CCTV
- Satellite receivers
- Medical imaging equipment, etc
- CATV transmitters
- Telecommunications
- Computer networking

## BNC Part Numbering (plug & adapter)



### Connector Series

BNCC-BNC 75Ω series

### Body Type

PC : Plug (crimp type)    AJJ : Adapter (jack-jack)  
 APJ : Adapter (plug-jack)    APP : Adapter (plug-plug)

### Cable code

Code	Cable in use
1.5C	1.5C 2V
2.5C	2.5C 2V
3C	3C 2V
5C	5C 2V
6CHF	6CHFB
7C	7C 2V
7CHF	7CHF
6	RG6/U
59U	RG59/U, Belden 1505A
179U	RG179/U
1855A	Belden 1855A
VK2	Percon VK2
VK5/6.0	Percon VK5/0.6
VK6/0.8	Percon VK6/0.8
VK7/1.0	Percon VK7/1.0
VK95	Percon VK95

### Frequency

1 : 1GHz    3 : 3GHz

### Boot Color Code

BK - Black	BU - Blue	BR - Brown
GY - Gray	GN - Green	OR - Orange
PR - Purple	RD - Red	WH - White
YE - Yellow		

### Boot Code

01 : RG - 179, 1.5C 2V  
 02 : 2.5C 2V, 3C 2V  
 03 : 1505A, RG - 59/U

BNC Part Numbering

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

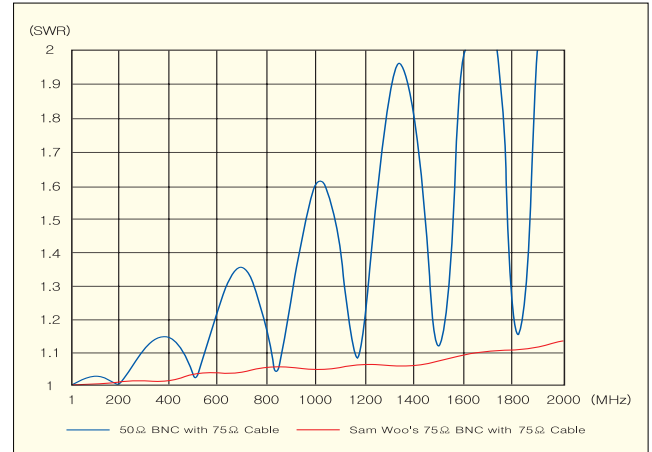
## Major Performance

Impedance	75Ω	Insulation resistance	5,000Ω	
Frequency range	0~3 GHz	Contact resistance	Center Contact	3.5mΩ max
Voltage rating	500V R.M.S		Outer Contact	2.5mΩ max
Dielectric withstanding voltage	1,500V@sea level	V.S.W.R	<1.2	

## BNC 75Ω Advantage

### Why use BNC 75Ω Connectors?

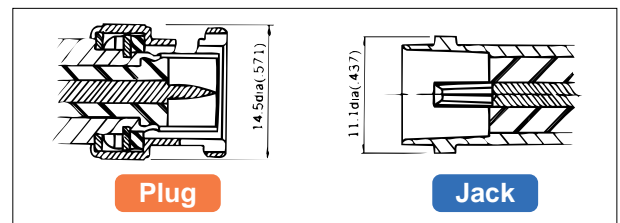
The 50Ω BNC connector that terminates to the 75Ω video coax is not sufficient in producing maximum performance for today's high analog and digital transmission, causing a mismatch that results in signal degradation and reduced picture quality. The data on the right shows that the 75Ω connectors outperform the 50Ω in terms of VSWR. Thirty-centimeter long cables with both BNC ends are used to generate the data.



## Material Used / Finishing Material

General		Material	Finish
Body		Zinc alloy or Brass	Nickel plate
Insulator		Ptfe	White
Contacts	Pin	Brass	Gold plate
	Socket	Beryllium copper	Gold plate

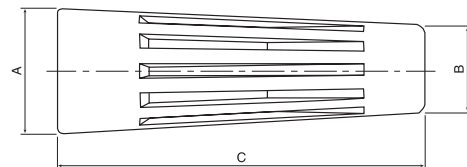
## Interface Dimension



## 1GHz and 3GHz comparison



## Boot Dimension / Part Numbering (for boot only)



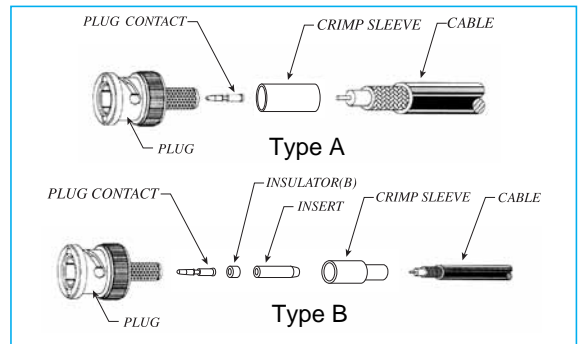
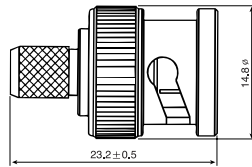
Model	Cable	∅A	∅B	C
BNC-color 01	RG-179/U, 1.5C 2V	12.5	5.5	28
BNC-color 02	2.5C 2V, 3C 2V	12.5	6	32
BNC-color 03	1505A, RG-59/U	12.5	8.5	36

↓  
**Color Code**  
 BK - Black      BU - Blue      BR - Brown  
 GY - Gray      GN - Green      OR - Orange  
 PR - Purple      RD - Red      WH - White  
 YE - Yellow

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# BNC 75Ω – High Frequency

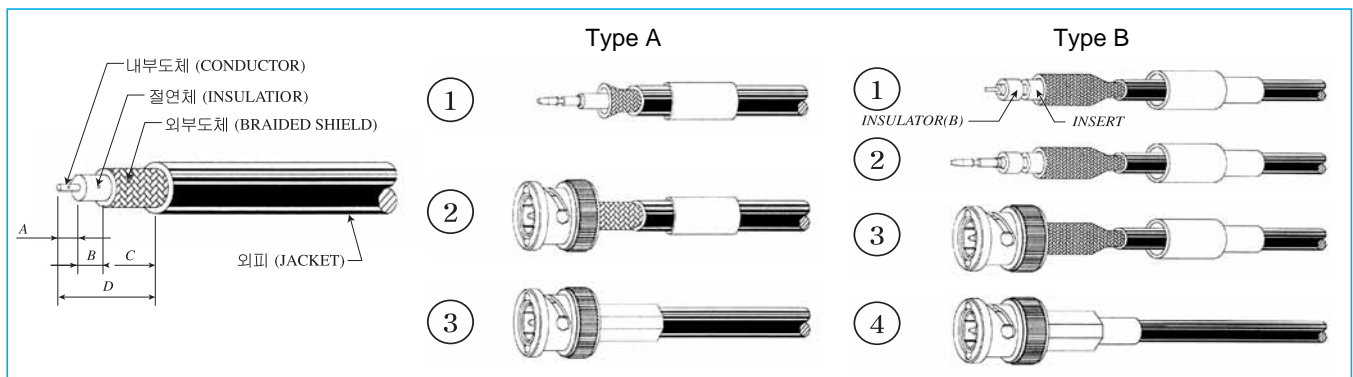
## BNC Plugs



No	Part Number	Cable Type	Frequency	Cable Stripping(mm)				Assembly Type
				A	B	C	D	
1	BNCC-PC-1.5C-1	1.5C 2V	1	3.5	5.5	8	17	B
2	BNCC-PC-2.5C-1	2.5C 2V	1	3.5	5.5	7	16	A
3	BNCC-PC-3C-1	3C 2V	1	3.5	5.5	7	16	A
4	BNCC-PC-5C-1	5C 2V	1	3	4	8	15	A
5	BNCC-PC-6CHF-1	6CHFB	1	3.5	3.5	9	16	A
6	BNCC-PC-7C-1	7C 2V	1					
7	BNCC-PC-7CHF-1	7CHF	1	3.5	3.5	9	16	A
8	BNCC-PC-6-1	RG6/U	1					
9	BNCC-PC-59U-1	RG59/U, Belden 1505A	1	3.5	5.5	7	16	A
10	BNCC-PC-179U-1	RG179/U	1	3.5	5.5	8	17	B
11	BNCC-PC-1.5C-3	1.5C 2V	3	3	4	8	15	B
12	BNCC-PC-2.5C-3	2.5C 2V	3	3	4	7	14	A
13	BNCC-PC-3C-3	3C 2V	3	3	4	7	14	A
14	BNCC-PC-5C-3	5C 2V	3					
15	BNCC-PC-6CHF-3	6CHFB	3	3	3	9	15	A
16	BNCC-PC-7CHF-3	7CHF	3	3	3	9	15	A
17	BNCC-PC-59U-3	RG59/U, Belden 1505A	3	3	3	9	15	B
18	BNCC-PC-179U-3	RG179/U	3	3	4	8	15	B
19	BNCC-PC-1885A-3	Belden 1885A	3	3	3	9	15	A
20	BNCC-PC-VK2-4	Percon VK2	3	3	4	7	14	B
21	BNCC-PC-VK5/0.6-3	Percon VK5/0.6	3	3	4	7	14	A
22	BNCC-PC-VK6/0.8-3	Percon VK6/0.8	3	3	4	7	14	A
23	BNCC-PC-VK7/1.0-3	Percon VK7/1.0	3	3	4	7	14	A
24	BNCC-PC-VK9-3	Percon VK9	3	3	4	7	14	A

## Cable Assembly Instruction

- Use above cable stripping dimensions



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## Crimp Tools



Sam Woo Tool (SW-HT)



Tool Die



Canare Tool (TC-1)

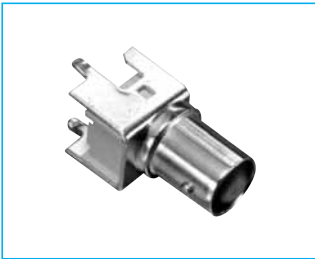
Tool	Color of Handles	Tool Die	Hexagon		Square		Hexagon		Square		Hexagon	
			A	E	B	D	C	D	E	E		
SW-HT	Red	HTD-02		5.87		1.36		6.48		1.59		5.41
TC-1	Blue	TCD-5CFB	A		B		C	8.05	D	1.2	E	
		TCD-7CA						10.23		1.93		

No	Part Number	Cable Type	Die Spec(mm)					Tool	Tool Die	Tool Maker
			Sleeve			Pin				
			A	C	E	B	D			
1	BNCC-PC-1.5C-1	1.5C 2V			●	●	SW-HT	HTD-02	Sam Woo	
2	BNCC-PC-2.5C-1	2.5C 2V	●			●	SW-HT	HTD-02	Sam Woo	
3	BNCC-PC-3C-1	3C 2V	●			●	SW-HT	HTD-02	Sam Woo	
4	BNCC-PC-5C-1	5C 2V		●		●				
5	BNCC-PC-6CHF-1	6CHFB		●		●	TC-1	TCD-7CA	Canare	
6	BNCC-PC-7C-1	7C 2V								
7	BNCC-PC-7CHF-1	7CHF		●		●	TC-1	TCD-7CA	Canare	
8	BNCC-PC-6-1	RG6/U								
9	BNCC-PC-59U-1	RG59/U, Belden 1505A		●		●	SW-HT	HTD-02	Sam Woo	
10	BNCC-PC-179U-1	RG179/U			●	●	SW-HT	HTD-02	Sam Woo	
11	BNCC-PC-1.5C-3	1.5C 2V			●	●	SW-HT	HTD-02	Sam Woo	
12	BNCC-PC-2.5C-3	2.5C 2V	●			●	SW-HT	HTD-02	Sam Woo	
13	BNCC-PC-3C-3	3C 2V	●			●	SW-HT	HTD-02	Sam Woo	
14	BNCC-PC-5C-3	5C 2V								
15	BNCC-PC-6CHF-3	6CHFB		●		●	TC-1	TCD-7CA	Canare	
16	BNCC-PC-7CHF-3	7CHF		●		●	TC-1	TCD-7CA	Canare	
17	BNCC-PC-59U-3	RG59/U, Belden 1505A		●		●	SW-HT	HTD-02	Sam Woo	
18	BNCC-PC-179U-3	RG179/U			●	●	SW-HT	HTD-02	Sam Woo	
19	BNCC-PC-1885A-3	Belden 1885A		●		●	SW-HT	HTD-02	Sam Woo	
20	BNCC-PC-VK2-4	Percon VK2			●	●	SW-HT	HTD-02	Sam Woo	
21	BNCC-PC-VK5/0.6-3	Percon VK5/0.6			●	●	SW-HT	HTD-02	Sam Woo	
22	BNCC-PC-VK6/0.8-3	Percon VK6/0.8			●	●	SW-HT	HTD-02	Sam Woo	
23	BNCC-PC-VK7/1.0-3	Percon VK7/1.0		●		●	TC-1	TCD-5CFB	Canare	
24	BNCC-PC-VK9-3	Percon VK9		●		●	TC-1	TCD-5CFB	Canare	

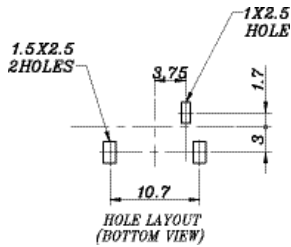
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## BNC Receptacles

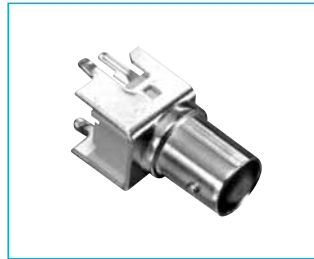
SW-2497B-PCB



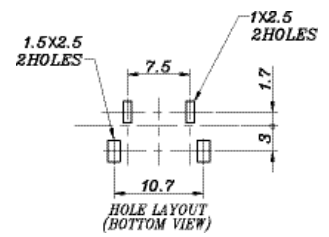
Vertical w/o Switch



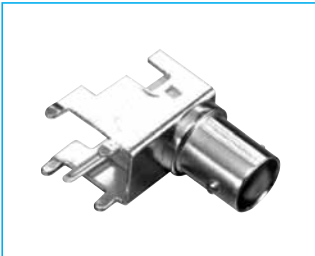
SW-2520B-PCB



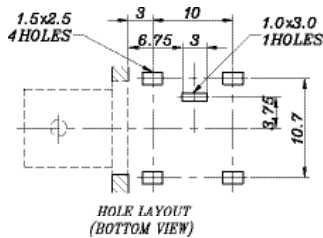
Vertical with Switch



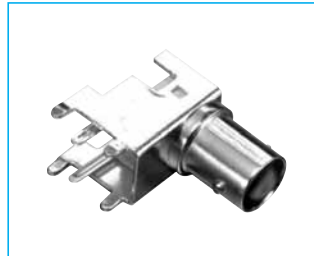
SW-2639B-LPCB



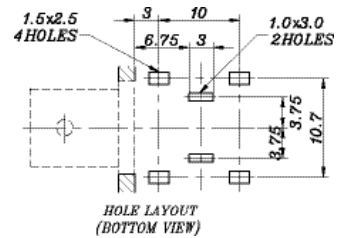
Horizontal w/o Switch



SW-2521B-LPCB



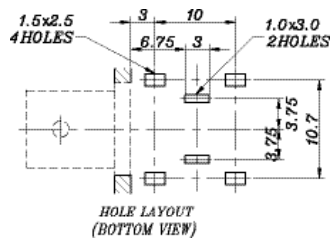
Horizontal with Switch



SW-2635B-LPCB



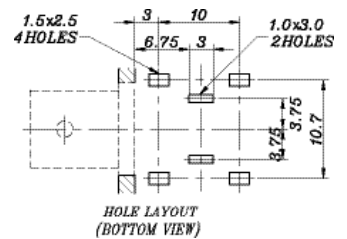
Horizontal w/o Switch (Short)



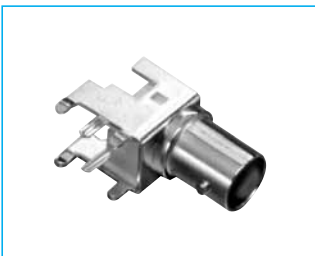
SW-2645B-LPCB



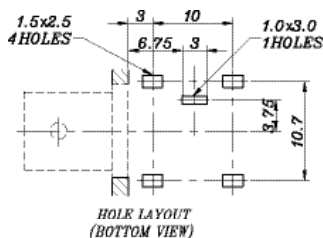
Horizontal w/o Switch (Short, Brass)



SW-2584B-LPCB



Horizontal with Switch (Short)



BNC-RB-2P



Bulkhead with Switch

BNC-PCL

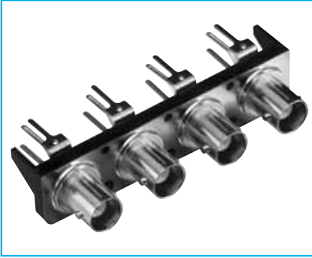


Horizontal w/o Switch

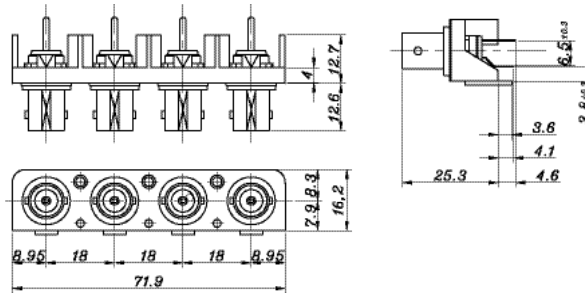
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## BNC Receptacles

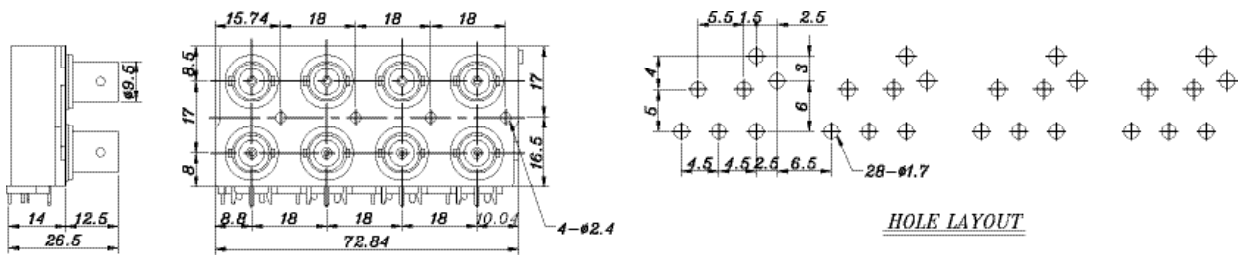
### BNC4-P/B



Vertical with 4 Switches



### BNC8-P/B



Vertical with 8 Switches

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# BNC 50Ω, N, M, TNC, F/RCA Series – High Frequency



## BNC 50Ω, N, M, TNC, F/RCA Features

- High quality Sam Woo medium size coaxial connectors provide best performance for various applications.
- 75Ω products available upon request.

## Adapter Basic Features

- Various between series adapter.
  - BNC-N
  - BNC-SMA
  - M-RCA
  - N-TNC
  - BNC-M
  - BNC-TNC
  - N-M
  - BNC-RCA
  - F-RCA
  - N-SMA
- Other types available upon request.

## Major Performance

<b>BNC 50Ω</b>	Impedance	50Ω		Contact resistance	Center Contacts	3.0mΩ	
	Frequency range	Semi-rigid	DC 18GHz		Insulation resistance	Outer Contacts	2.5mΩ
		Flexible	DC 12.4GHz	5000MΩ min			
	Contact current	DC 2.0A max		Insertion loss	0.05 f(GHz)db		
	Working voltage	Semi-rigid	1000V		V.S.W.R	<1.15+0.02f(GHz)	
Flexible		750V		RF leakage	-60dB min@2~3GHz		
<b>N</b>	Impedance	50Ω		Insulation resistance	1000MΩ min		
	Frequency range	DC to 4GHz		Insertion loss	0.6dB max		
	Contact current	DC 1.5A max		V.S.W.R	Straight	1.3+0.04f	
	Voltage rating	250V R.M.S			Right-angle	1.4+0.06f	
	Contact resistance	Center Contacts	0.3mΩ		RF leakage	-55dB min. between 2 to 3 GHz	
Outer Contacts		0.5mΩ					
<b>M</b>	Impedance	50Ω		Contact resistance	Center Contacts	5mΩ	
	Frequency range	up to 2 GHz			Outer Contacts	1mΩ	
	Contact current	DC 1.5A		Insulation resistance	1000MΩ min		
	Voltage rating	250V R.M.S		V.S.W.R	Straight	1.3 max	
					Right-angle	1.35 max	
<b>TNC</b>	Impedance	50Ω		Contact resistance	Center Contacts	5mΩ	
	Frequency range	up to 2 GHz			Outer Contacts	1mΩ	
	Contact current	DC 1.5A		Insulation resistance	1000MΩ min		
	Voltage rating	250V R.M.S		V.S.W.R	Straight	1.3 max	
					Right-angle	1.35 max	
<b>F/RCA</b>	Impedance	50Ω		Contact resistance	Center Contacts	5mΩ	
	Frequency range	up to 2 GHz			Outer Contacts	1mΩ	
	Contact current	DC 1.5A		Insulation resistance	1000MΩ min		
	Voltage rating	250V R.M.S		V.S.W.R	Straight	1.3 max	
					Right-angle	1.35 max	

## Material Used / Finishing Material

General		Material	Finish
Body		Zinc alloy or Brass	Nickel plate
Insulator		Ptfe	White
Contacts	Pin	Brass	Gold plate
	Socket	Brass	Gold plate

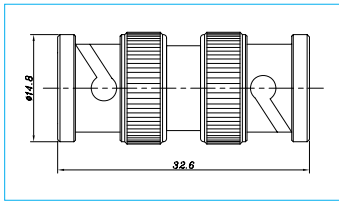
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.





## Adapters

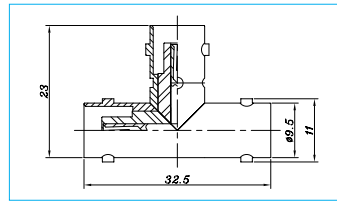
### Plug - Plug Adapter



**Part Number**

BNC-A(PP)

### Jack - Jack - Jack Adapter



**Part Number**

BNC-TA(JJJ)

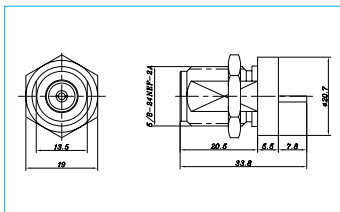
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



# N – High Frequency

## N Receptacles

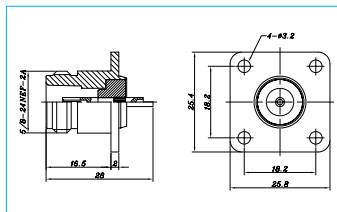
### Bulkhead



**Part Number**

N-BR

### Panel

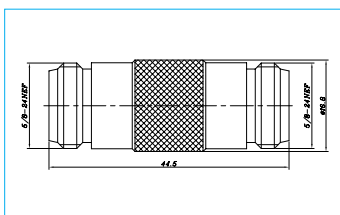


**Part Number**

N-R

## N Adapter and Others

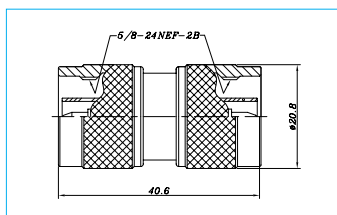
### Jack - Jack Adapter



**Part Number**

N-A(JJ)

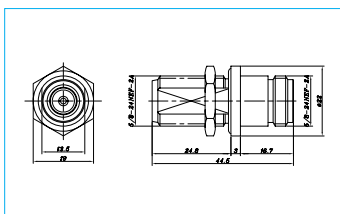
### Plug - Plug Adapter



**Part Number**

N-A(PP)

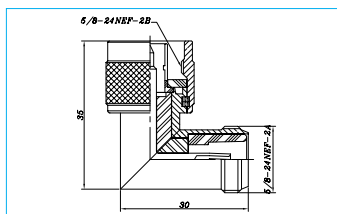
### Jack - Jack Bulkhead Adapter



**Part Number**

N-BA(JJ)

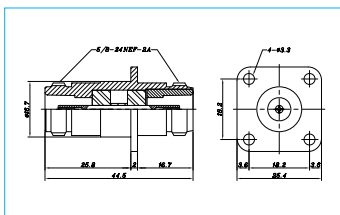
### Plug - Jack Right-angle Adapter



**Part Number**

N-LA(PJ)

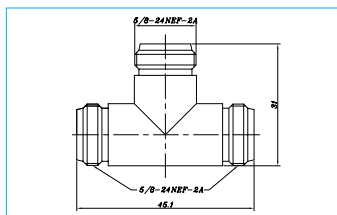
### Jack - Jack Panel Adapter



**Part Number**

N-PA(JJ)

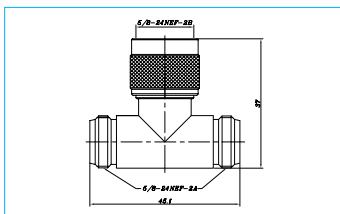
### Jack - Jack - Jack Adapter



**Part Number**

N-TA(JJJ)

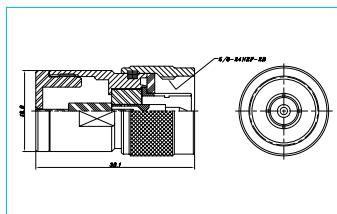
### Jack - Plug - Jack Adapter



**Part Number**

N-TA(JPJ)

### Plug Terminator



**Part Number**

N-DUMMY

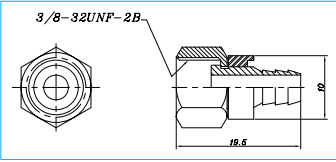
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.





## F

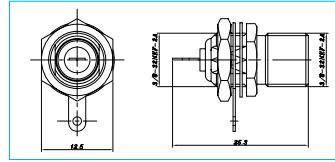
### Plug



#### Part Number

F-59

### Jack

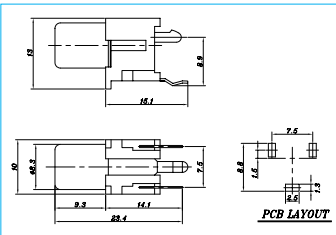


#### Part Number

F-61

## RCA

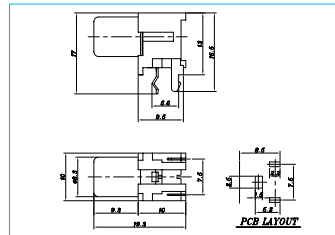
### PCB Plug



#### Part Number

RCA-JBPCB

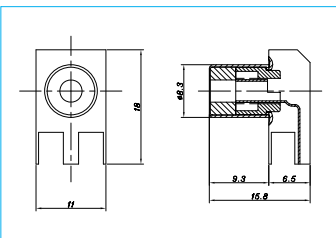
### PCB Jack



#### Part Number

RCA-LJBPCB

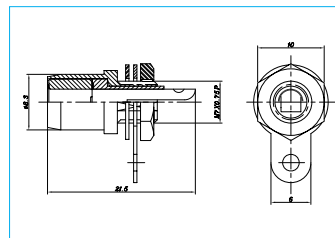
### PCB Plug



#### Part Number

RCA-B/J

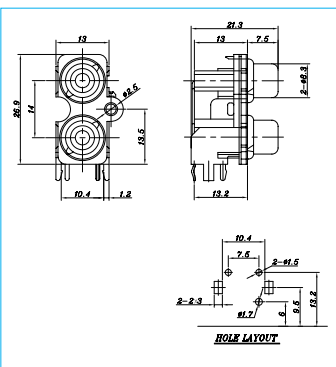
### PCB Jack



#### Part Number

RCA-P/J

### PCB Jack



#### Part Number

RCA2-PB

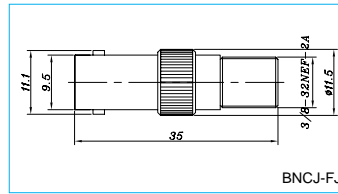
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# Between Series Adapter – High Frequency

## Between Series Adapter

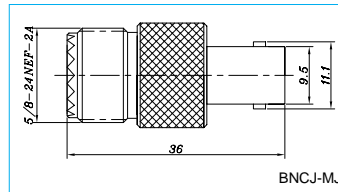


### BNC - F Adapter



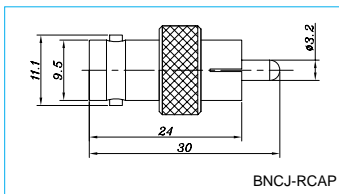
Part Number	BNC	F
BNCP-FP	Plug	Plug
BNCP-FJ	Plug	Jack
BNCJ-FP	Jack	Plug
BNCJ-FJ	Jack	Jack

### BNC - M Adapter



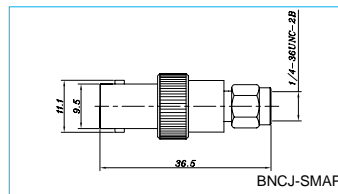
Part Number	BNC	M
BNCP-MP	Plug	Plug
BNCP-MJ	Plug	Jack
BNCJ-MP	Jack	Plug
BNCJ-MJ	Jack	Jack

### BNC - RCA Adapter



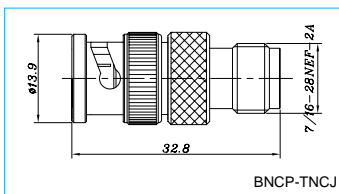
Part Number	BNC	RCA
BNCP-RCAP	Plug	Plug
BNCP-RCAJ	Plug	Jack
BNCJ-RCAP	Jack	Plug
BNCJ-RCAJ	Jack	Jack

### BNC - SMA Adapter



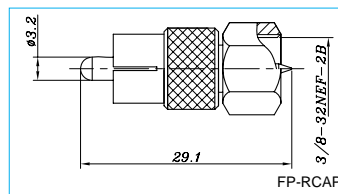
Part Number	BNC	SMA
BNCP-SMAP	Plug	Plug
BNCP-SMAJ	Plug	Jack
BNCJ-SMAP	Jack	Plug
BNCJ-SMAJ	Jack	Jack

### BNC - TNC Adapter



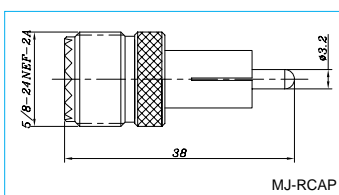
Part Number	BNC	TNC
BNCP-TNCP	Plug	Plug
BNCP-TNCJ	Plug	Jack
BNCJ-TNCP	Jack	Plug
BNCJ-TNCJ	Jack	Jack

### F - RCA Adapter



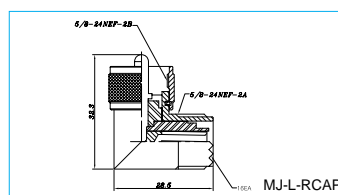
Part Number	F	RCA
FP-RCAP	Plug	Plug
FP-RCAJ	Plug	Jack
FJ-RCAP	Jack	Plug
FJ-RCAJ	Jack	Jack

### M - RCA Adapter



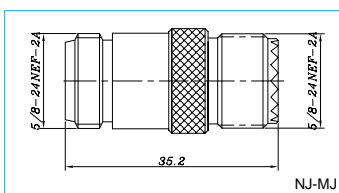
Part Number	M	RCA
MP-RCAP	Plug	Plug
MP-RCAJ	Plug	Jack
MJ-RCAP	Jack	Plug
MJ-RCAJ	Jack	Jack

### M - RCA Adapter



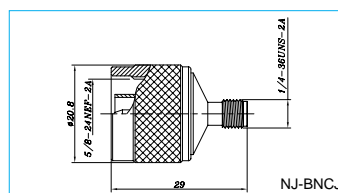
Part Number	M	RCA
MJ-L-RCAP	Jack	Plug

### N - M Adapter



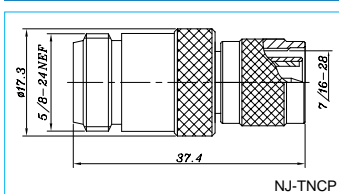
Part Number	N	M
NP-MP	Plug	Plug
NP-MJ	Plug	Jack
NJ-MP	Jack	Plug
NJ-MJ	Jack	Jack

### N - SMA Adapter



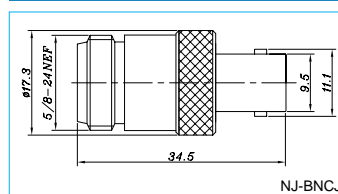
Part Number	N	SMA
NP-SMAP	Plug	Plug
NP-SMAJ	Plug	Jack
NJ-SMAP	Jack	Plug
NJ-SMAJ	Jack	Jack

### N - TNC Adapter



Part Number	N	TNC
NP-TNCP	Plug	Plug
NP-TNCJ	Plug	Jack
NJ-TNCP	Jack	Plug
NJ-TNCJ	Jack	Jack

### N - BNC Adapter



Part Number	N	BNC
NP-BNCP	Plug	Plug
NP-BNCJ	Plug	Jack
NJ-BNCP	Jack	Plug
NJ-BNCJ	Jack	Jack

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.





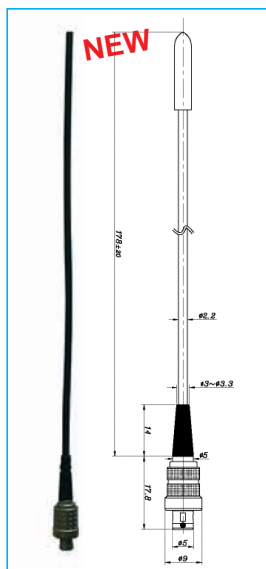
## Antenna

### Antenna

<b>Custom Band</b>	SPB-450 .....	SP	400~900MHz .....	106
	SMAP-450 .....	SMA	400~900MHz .....	106
	SMALP-450 .....	SMA	400~900MHz .....	106
	SSMAP-450 .....	SSMA	400~900MHz .....	106
	SPU-450 .....	SP	400~900MHz .....	106
<b>SMA/SMC</b>	SMAP-434 .....	SMA	135~900MHz .....	107
	SMALP-434 .....	SMA	200~900MHz .....	107
	SMAP-447 .....	SMA	450MHz .....	107
	SMAP-ANT-925S .....	SMA	900MHz .....	107
	SMAP-900-1 .....	SMA	900MHz .....	107
	SMAP-1800-1 .....	SMA	1800MHz .....	107
	SMAP-2400-1 .....	SMA	2400MHz .....	108
	SMALP-1800 .....	SMA	1800MHz .....	108
	SMALP-2400 .....	SMA	2400MHz .....	108
	SMALP-1800 .....	SMA	1800MHz .....	108
	SMALP-2400 .....	SMA	2400MHz .....	108
	SMAP-2400T .....	SMA	2400MHz .....	108
	SMCP-900 .....	SMC	900MHz .....	109
	SMCP-1800 .....	SMA	1800MHz .....	109
	RSMAP-900 .....	SMA	900MHz .....	109
	RSMAP-1800 .....	SMA	1800MHz .....	109
<b>FME Antenna</b>	FMEJ-900 .....	FME	900MHz .....	109
	FMEJ-1800 .....	FME	1800MHz .....	109
<b>MCX Antenna</b>	MCX-850 .....	MCX	850MHz .....	110
	MCX-1800 .....	MCX	1800MHz .....	110
	MCX-2400 .....	MCX	2400MHz .....	110
<b>TNC Antenna</b>	TNCP-800 .....	TNC	800MHz .....	110
<b>BNC Antenna</b>	BNCP-1800 .....	BNC	1800MHz .....	110
	RBNCP-2400 .....	BNC	2400MHz .....	110

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# Antenna – Customizable Band Antenna



## SPB-450-Super miniature antenna

The SPB-450 is one of the versatile antenna series customizable from a bandwidth of 400MHz to 900MHz. This new 1/4 wavelength whip antenna brings wireless applications to a new paradigm.

- 1/4 Wavelength Whip antenna
- Customizable band using cutting chart
- 400MHz ~ 900MHz
- Sam Woo's High-quality SPB connector

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ +70°C



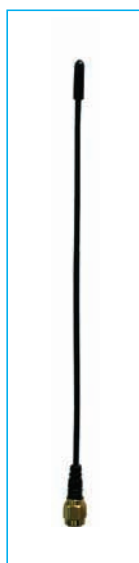
Included with all customizable band antenna

Bare SPB plug and receptacle also available.  
More information on Sam Woo's Circular Connector catalogue p. 39.



SPB-00PT1

SPB-00RT1

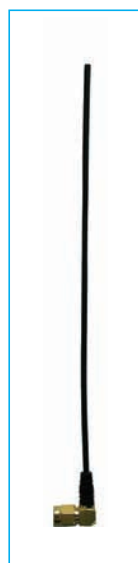


## SMAP-450

- 1/4 Wavelength whip antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SMA connector

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ +70°C

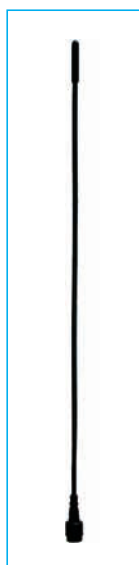


## SMAPL-450

- 1/4 Wavelength whip antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- Right-angle SMA connector

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ +70°C

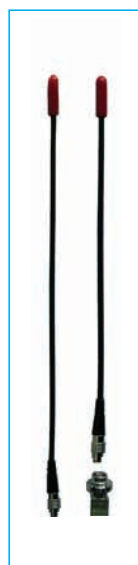


## SSMAP-450

- 1/4 Wavelength whip antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SSMA connector

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ +70°C



## SPU-450

- 1/4 Wavelength whip antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SPU connector(also available with SPU recetpacle)

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ +70°C

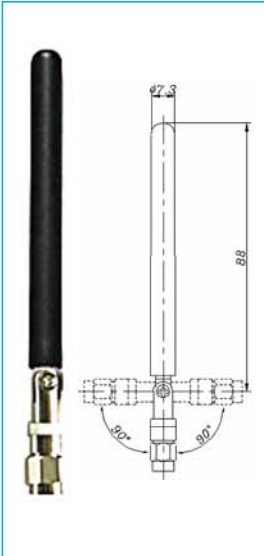
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SMAP-434

- 1/4 Wavelength Monopole Antenna
- 180° Tilting Helical or Whip Type
- Available with other connectors

Electrical Performance	Specifications
Frequency Range	200MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	Urethane
Connector	SMA (Male)
Antenna Length	~88mm
Operating Temperature	-30°C ~ +70°C
Others	

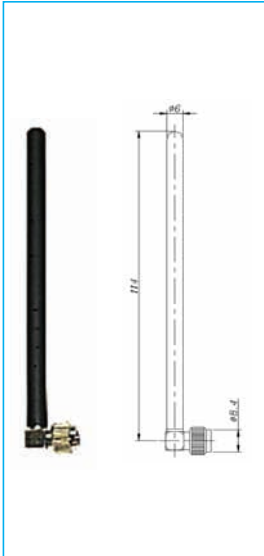


## SMALP-434

- 1/4 Wavelength Monopole Antenna
- 90° Fixed Helical or Whip Type
- Available with other connectors

Electrical Performance	Specifications
Frequency Range	135MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SWC
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~114mm
Operating Temperature	-30°C ~ +70°C
Others	

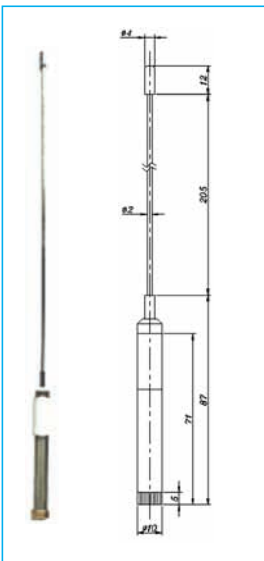


## SMAP-447

- 1/2 Wavelength Spike Antenna
- Designed for Outdoor Use

Electrical Performance	Specifications
Frequency Range	400MHz~500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	SUS
Base Material	BS / Acetal
Connector	SMA (Male)
Antenna Length	~330mm
Operating Temperature	-30°C ~ +70°C
Others	

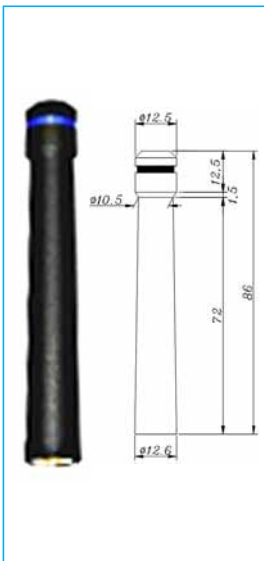


## SMAP-ANT-925S

- 1/2 Wavelength Helical Antenna
- High Gain
- 900MHz Band

Electrical Performance	Specifications
Frequency Range	900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~86mm
Operating Temperature	-30°C ~ +70°C
Others	



## SMAP-900-1

- 1/4 Wavelength Helical Antenna
- 900MHz Band

Electrical Performance	Specifications
Frequency Range	824~960MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PVC
Connector	SMA (Male)
Antenna Length	~28.5mm
Operating Temperature	-30°C ~ +70°C
Others	



## SMAP-1800-1

- 1/4 Wavelength Helical Antenna
- 1800MHz Band

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PVC
Connector	SMA (Male)
Antenna Length	~28.5mm
Operating Temperature	-30°C ~ +70°C
Others	



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# Antenna

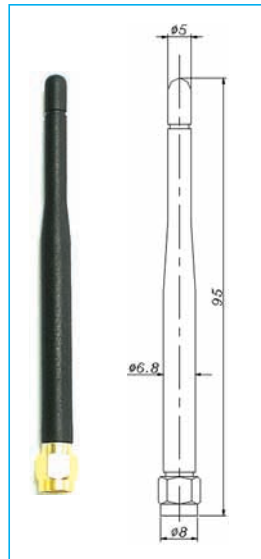


## SMAP-2400-1

- 1/4 Wavelength Helical Antenna
- 2400MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PVC
Connector	SMA (Male)
Antenna Length	~28.5mm
Operating Temperature	-30°C ~ +70°C
Others	

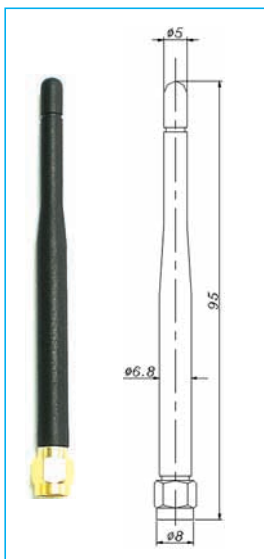


## SMAP-1800

- 1/2 Wavelength Dipole Antenna
- 1800 MHz Band

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~95mm
Operating Temperature	-30°C ~ +70°C
Others	

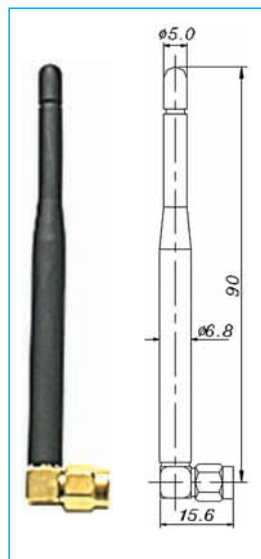


## SMAP-2400

- 1/2 Wavelength Dipole Antenna
- 2400 MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~95mm
Operating Temperature	-30°C ~ +70°C
Others	

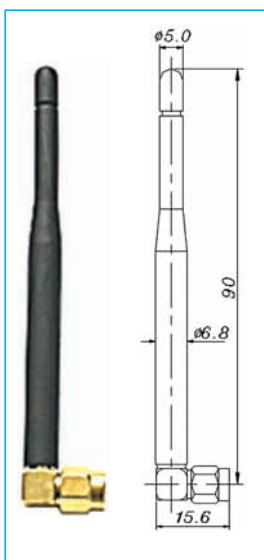


## SMALP-1800

- 1/2 Wavelength Dipole Antenna
- 90° Fixed 1800 MHz Band

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~90mm
Operating Temperature	-30°C ~ +70°C
Others	

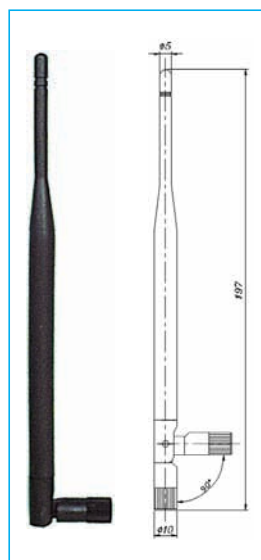


## SMALP-2400

- 1/2 Wavelength Dipole Antenna
- 90° Fixed 2400 MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~90mm
Operating Temperature	-30°C ~ +70°C
Others	



## SMAP-2400T

- 90° Tilting 2400MHz Band
- High Gain

Electrical Performance	Specifications
Frequency Range	2350~2480MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	4dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PA
Connector	SMA (Male)
Antenna Length	~197mm
Operating Temperature	-30°C ~ +70°C
Others	

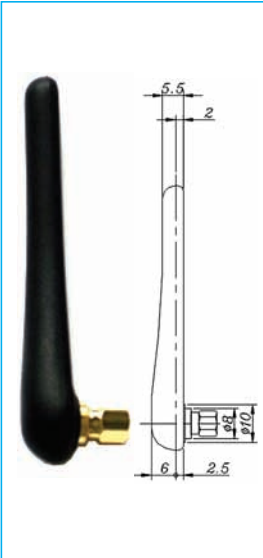
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

## SMCP-900

- 1/4 Wavelength Whip Antenna
- Insert - Molding Type
- 900MHz Band
- Also available with SMA

Electrical Performance	Specifications
Frequency Range	900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	SMC (Female)
Antenna Length	~70mm
Operating Temperature	-30°C ~ +70°C
Others	Also available with SMA

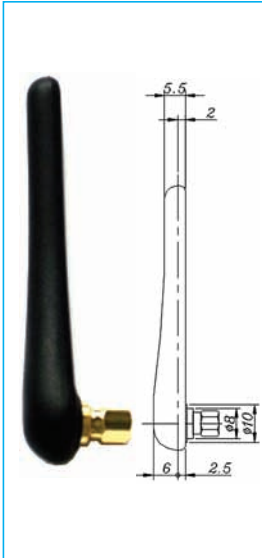


## SMCP-1800

- 1/4 Wavelength Whip Antenna
- Insert - Molding Type
- 1800MHz Band
- Also available with SMA

Electrical Performance	Specifications
Frequency Range	1800MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	SMC (Female)
Antenna Length	~70mm
Operating Temperature	-30°C ~ +70°C
Others	Also available with SMA

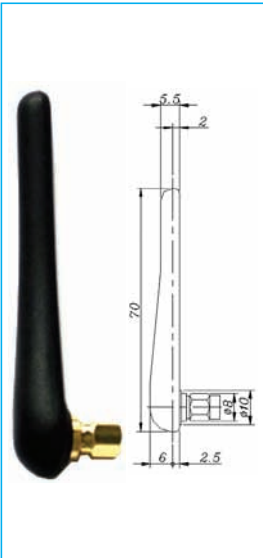


## RSMAP-900

- 1/4 Wavelength Whip Antenna
- Insert - Molding Type
- 900MHz Band
- Also available with SMC

Electrical Performance	Specifications
Frequency Range	900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	SMA (Female)
Antenna Length	~70mm
Operating Temperature	-30°C ~ +70°C
Others	Also available with SMC

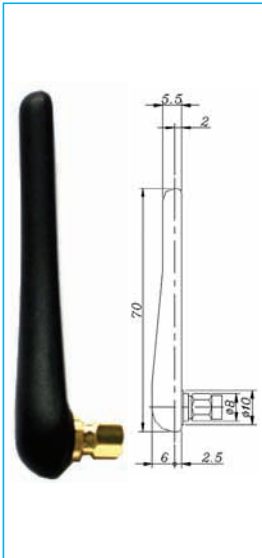


## RSMAP-1800

- 1/4 Wavelength Whip Antenna
- Insert - Molding Type
- 1800MHz Band
- Also available with SMC

Electrical Performance	Specifications
Frequency Range	1800MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	SMA (Female)
Antenna Length	~70mm
Operating Temperature	-30°C ~ +70°C
Others	Also available with SMC



## FMEJ-900

- 1/4 Wavelength Monopole Antenna
- Single Band or Dual Band
- 900MHz Band
- Also available with SMA, MCX

Electrical Performance	Specifications
Frequency Range	824-960MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	FME (Female)
Antenna Length	~76mm
Operating Temperature	-30°C ~ +70°C
Others	Also available with SMA, MCX



## FMEJ-1800

- 1/4 Wavelength Monopole Antenna
- Single Band or Dual Band
- 1800MHz Band
- Also available with SMA, MCX

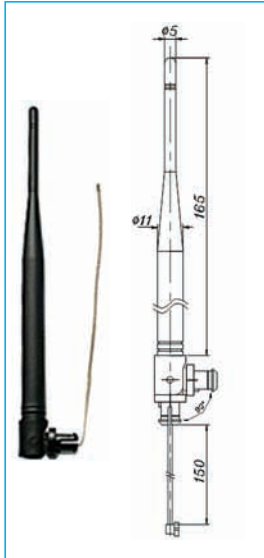
Electrical Performance	Specifications
Frequency Range	1800MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	FME (Female)
Antenna Length	~76mm
Operating Temperature	-30°C ~ +70°C
Others	Also available with SMA, MCX



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# Antenna

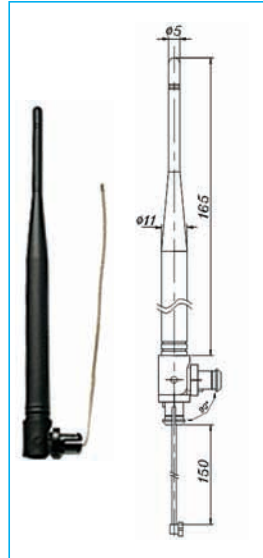


## MCX-850

- 1/2 Wavelength Dipole Antenna
- Direct Connection with RF Module
- 90° Tilting MCX Series

Electrical Performance	Specifications
Frequency Range	824~960MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCuAg
Base Material	PA
Cable Type	RG-316 or RG-178
Connector	MCX,MMCX,etc
Antenna Length	140~200mm
Operating Temperature	-30°C ~ + 70°C
Others	Snap-in Type

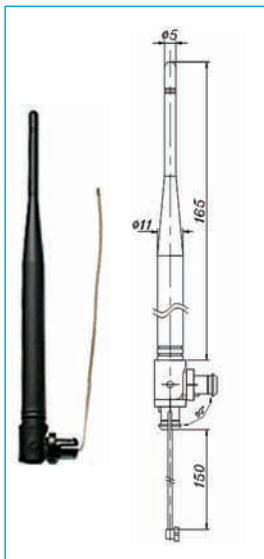


## MCX-1800

- 1/2 Wavelength Dipole Antenna
- Direct Connection with RF Module
- 90° Tilting MCX Series

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCuAg
Base Material	PA
Cable Type	RG-316 or RG-178
Connector	MCX,MMCX,etc
Antenna Length	140~200mm
Operating Temperature	-30°C ~ + 70°C
Others	Snap-in Type

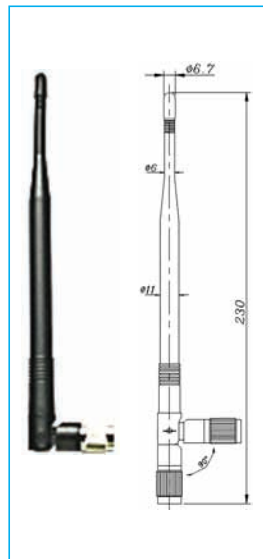


## MCX-2400

- 1/2 Wavelength Dipole Antenna
- Direct Connection with RF Module
- 90° Tilting MCX Series

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCuAg
Base Material	PA
Cable Type	RG-316 or RG-178
Connector	MCX,MMCX,etc
Antenna Length	140~200mm
Operating Temperature	-30°C ~ + 70°C
Others	Snap-in Type

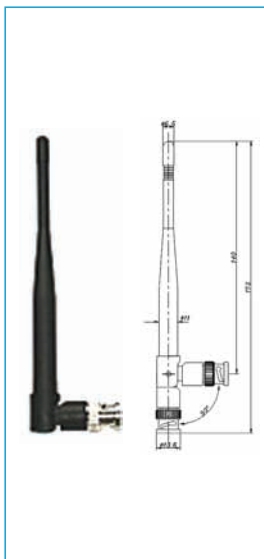


## TNCP-800

- 1/2 Wavelength Dipole Antenna
- 90° Tilting 800MHz Band

Electrical Performance	Specifications
Frequency Range	800MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	PA
Connector	TNC (Male)
Antenna Length	~230mm
Operating Temperature	-30°C ~ + 70°C
Others	

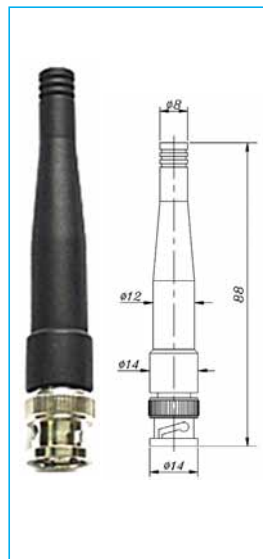


## BNCP-1800

- 1/2 Wavelength Dipole Antenna
- 90° Tilting 1800MHz Band

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PA
Connector	BNC (Male)
Antenna Length	~172mm
Operating Temperature	-30°C ~ + 70°C
Others	



## RBNCP-2400

- 1/2 Wavelength Dipole Antenna
- 2400MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2480MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	BNC (Female)
Antenna Length	~88mm
Operating Temperature	-30°C ~ + 70°C
Others	

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

[www.isamwoo.com](http://www.isamwoo.com)

# Connecting

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