

# 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

SMA	Impedance	50Ω		Contact resistance	Center Contacts	3.0mΩ
	Frequency range	Semi-rigid	DC 18GHz		Outer Contacts	2.5mΩ
		Flexible	DC 12.4GHz	Insulation resistance		500MΩ 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	

SMB	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				

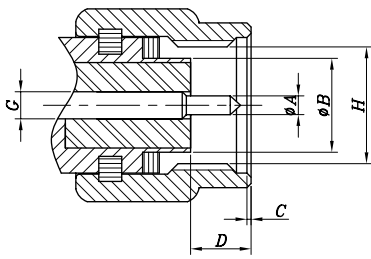
MCX	Impedance	50Ω		Contact resistance	Center Contacts	5.0mΩ
	Frequency range	up to 2 GHz			Outer Contacts	1.0mΩ
	Contact current	DC 1.5A		Insulation resistance		1000MΩ min
	Voltage rating	250V R.M.S		V.S.W.R	Straight	1.3 max
					Right-angle	1.35 max

## Material Used / Finish

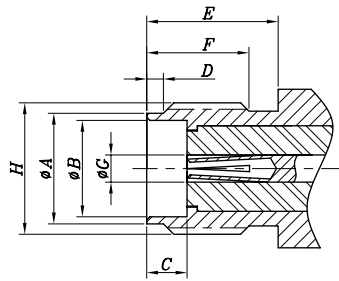
General		Material	Finish
Body		Brass	Gold
Insulator		PTFE	Natural(White)
Contacts	Pin	Brass	Brass
	Socket	Brass	Brass

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

## SMA Interface Dimensions



Plug



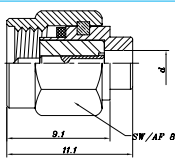
Jack

### Interface Dimension

SMA	Plug		Jack	
	mm		mm	
	min.	max.	min.	max.
ØA	0.9	0.94	5.28	5.49
ØB		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	
ØG	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

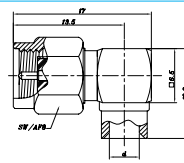


#### Part Number

SMA-P-402/u

SMA-P-405/u

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

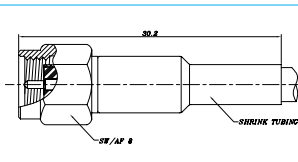


#### Part Number

SMA-LP-402/u

SMA-LP-405/u

### Flexible Cable - Crimp



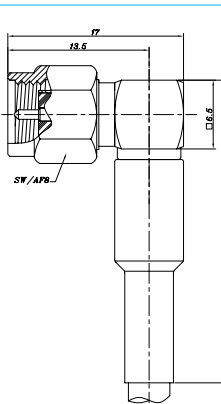
#### Part Number

SMA-PC-58/u

SMA-PC-178/u

SMA-PC-316/u

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



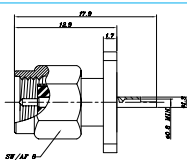
#### Part Number

SMA-LP-58/u

SMA-LP-178/u

SMA-LP-316/u

### Fixed Plug - Flange - Solder Pot Terminated

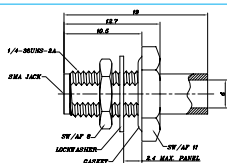


#### Part Number

SMA-PR

## SMA Jacks

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

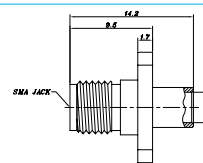


#### Part Number

SMA-BJR-402/u

SMA-BJR-405/u

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

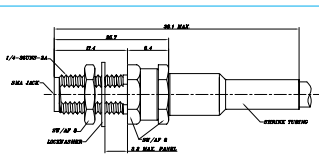


#### Part Number

SMA-JR-402/u

SMA-JR-405/u

### Bulkhead - Flexible Cable - Crimp



#### Part Number

SMA-BJC-58/u

SMA-BJC-178/u

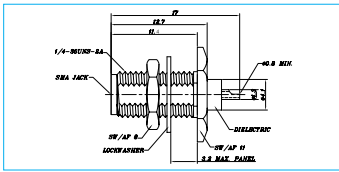
SMA-BJC-316/u

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# SMA Series – Miniature

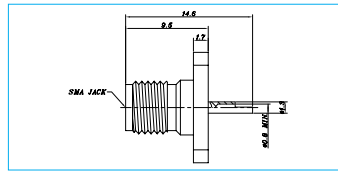
## SMA Receptacles

### Bulkhead - Front Screw - Solder Pot Terminated



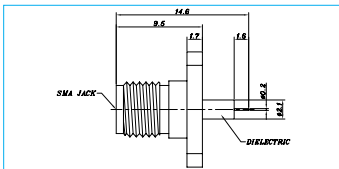
Part Number  
SMA-JBR

### Flange - Flush Dielectric - Solder Pot Terminated



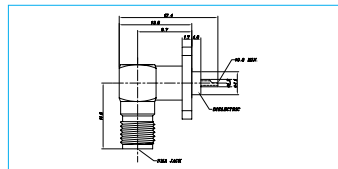
Part Number  
SMA-JR

### Flange - Extended Dielectric - Stub Terminated



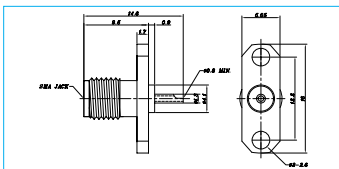
Part Number  
SMA-JR-PCB

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



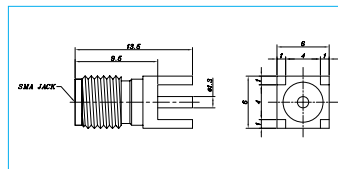
Part Number  
SMA-LJR

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



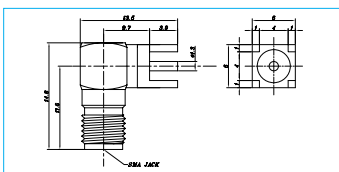
Part Number  
SMA-J2R

### PCB Receptacle - 4 leg - Stub Terminated



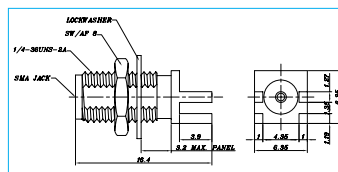
Part Number  
SMA-J4R-PCB

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



Part Number  
SMA-LJ4R-PCB

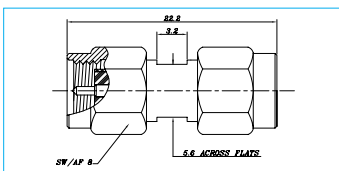
### PCB Side-Mount Receptacle



Part Number  
SMA-BJ-4RPCB

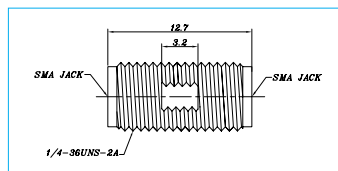
## SMA Adapters

### Plug-Plug



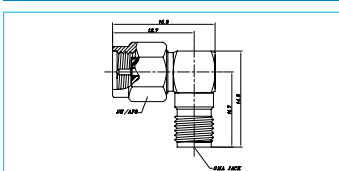
Part Number  
SMA-A-PP

### Jack-Jack



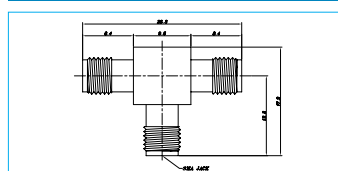
Part Number  
SMA-A-JJ

### Right-angle - Plug-Jack



Part Number  
SMA-LA-PJ

### 3 Way T-Adapters



Part Number  
SMA-TA-JJJ  
SMA-TA-JPJ  
SMA-TA-PJP

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