

# 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		
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

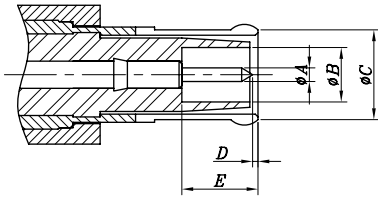
## Material Used / Finishing Material

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

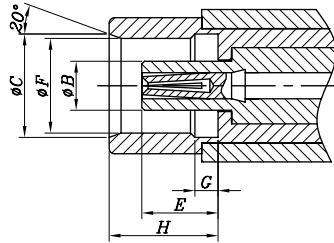
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

# MCX Series – Miniature

## MCX Interface Dimensions



Plug



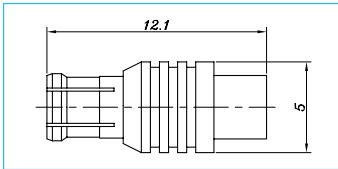
Jack

### 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

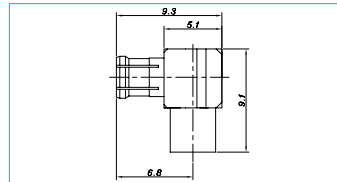
### Semi-rigid - Direct Solder



#### Part Number

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

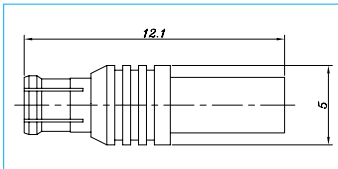
### Right-angle - Semi-rigid - Direct Solder



#### Part Number

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

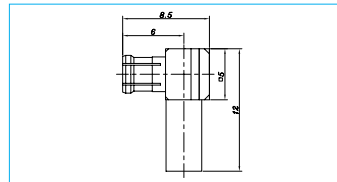
### Flexible Cable - Crimp



#### Part Number

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

### Right-angle - Flexible Cable - Crimp

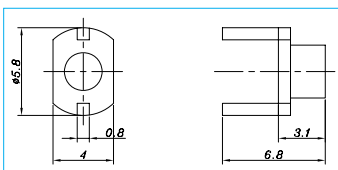


#### Part Number

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

## MCX Terminator

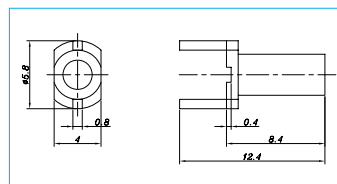
### PCB Terminator - Semi-rigid - Direct Solder



#### 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

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