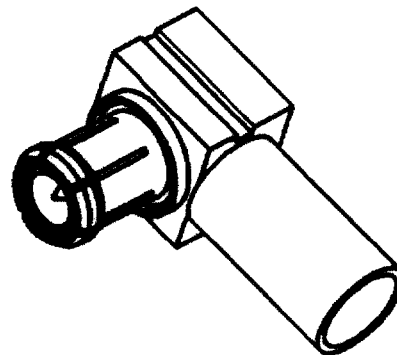


MCX Series

50 Ohms

Sub Miniature Snap-On Coupling



Features

- 30 percent smaller than SMB Connectors
- For applications to 6 GHz
- Resistance to RF leakage
- For areas that are inaccessible to the normal mating action.
- Made to CECC 22220
- Brass bodies with beryllium copper female contacts with gold plating

Options

- Small Sized Cables - 0.047 SR, 0.086 SR, RG316, RG188, RG187, RG174, RG179, RG196, RD316.
- Straight, Right-Angle, Long Crimp, Short Crimp, Printed Circuit Board, Solder and Compliant Pin types available
- Adapters available
- Nickel or Gold Finish available

Specifications

- QQ-B-626
- CECC 22220
- QQ-C-530
- MIL-G-45204
- ZZ-R-765

Mating Data

- RG-/U Cables (See page 30-9)

Technical Data

Materials

- Body Parts Brass, QQ-B-626 1/2 HD.
- Contacts
 - ▶ Male Brass
 - ▶ Female Beryllium copper QQ-C-530
- Insulators PTFE Fluorocarbon

Plating

All parts plated to meet finish and corrosion requirements of MIL-C-39012

- Finish
 - ▶ Gold MIL-G-45204
 - ▶ Nickel IP23

Electrical Performance

- Impedance 50Ω nominal
- Frequency D.C. to 6 GHz
- Insulation Resistance 5,000 MΩ Minimum
- Voltage Rating 335 VRMS
- Dielectric Withstanding 1000 VRMS at sea level

- Voltage Standing Wave ratio (VSWR) 1.3 max to 4 GHz
- Insertion Loss 0.1 times square root fGHz(in dB)
- Contact Resistance 5.0 mΩ Maximum

Mechanical Performance

- Connector Durability 500 cycles Minimum
- Force to Engage and Disengage
 - ▶ Engagement 14 lbs Maximum
 - ▶ Separation 1.75 lbs Minimum 4.5 lbs Maximum

Environmental Qualification

- Temperature range -55°C to +155°C
- Vibration 10 to 500 Hz at 10 G's
- Temperature Cycling 65°C to +125°C
- High Temperature Test +125°C for 96 hours

Packaging

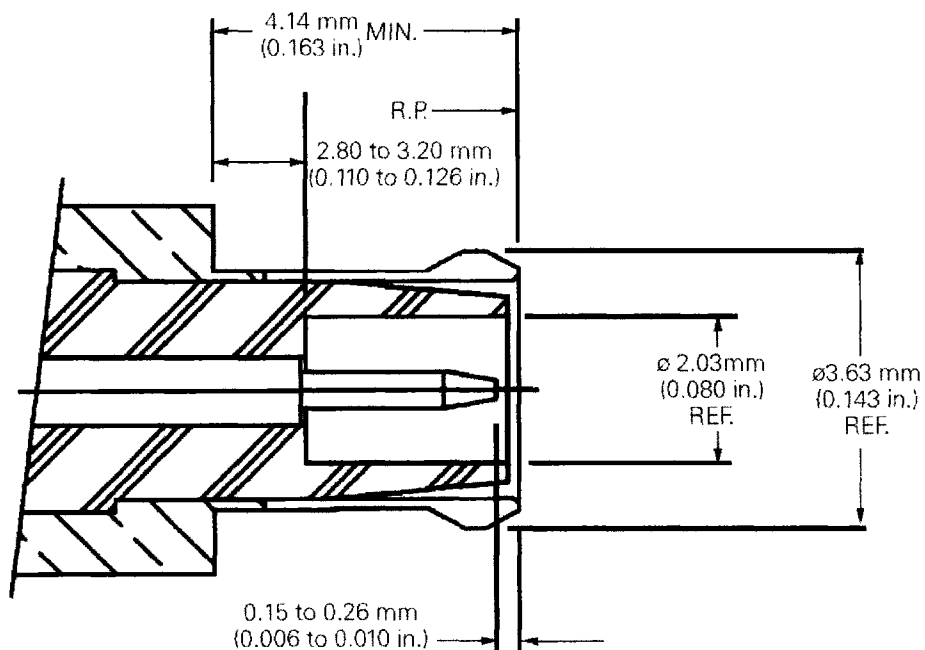
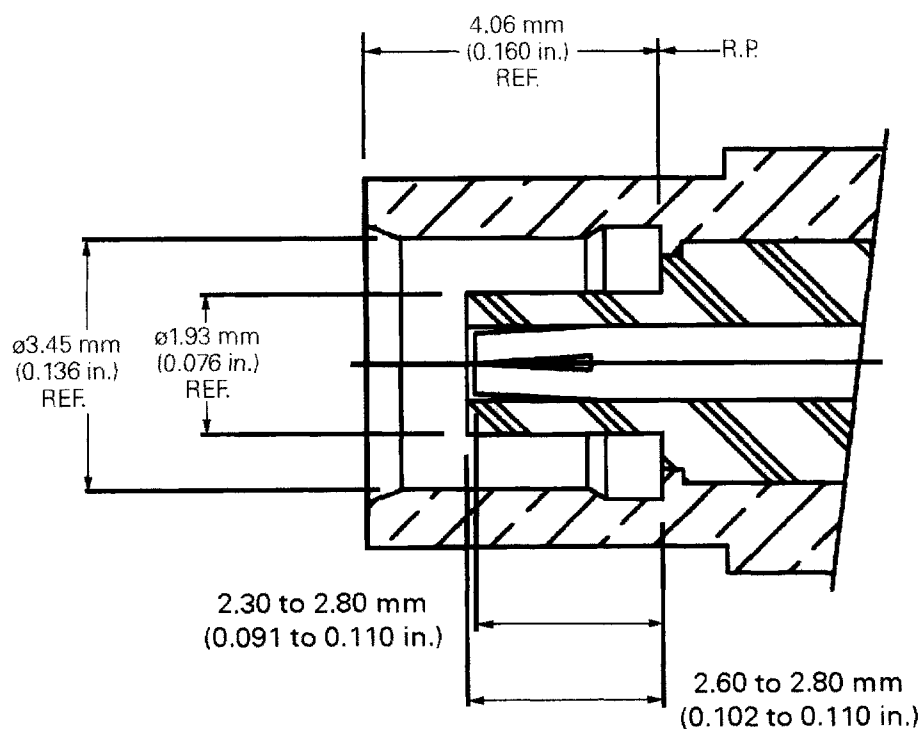
- Single Bags
- Custom packaging available upon request.

Customer Support Materials

Description	Order No.
Customer Product Drawings.....	By Part Number
Product Substitutions	Contact Technical Support

Description	Order No.
Product Samples.....	Upon Request
Test Data	Upon Request

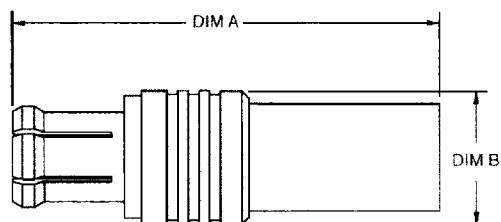
Interface Dimensions per CECC 22220

PLUGJACK

MCX 50 Ohm Cable Plugs

Description

MCX 50 Ohm Cable Plug - Short Crimp Straight



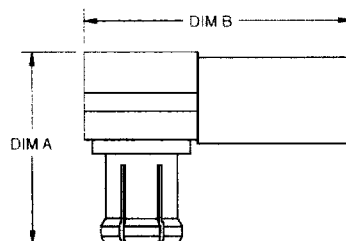
Ordering Data

MCX 50 Ohm Cable Plug - Short Crimp Straight

Part Number	Cable	Crimp Tool Hex		Dimension				Finish	Assembly Instructions
				A		B			
		mm	in.	mm	in.	mm	in.		
59P110-1	RG316	3.25	0.128	15.34	0.604	6.86	0.270	Nickel	AI-307
59P110-2	RD316	3.84	0.151	15.34	0.604	6.86	0.270	Nickel	AI-307
59P110-3	RG316	3.25	0.128	15.34	0.604	6.86	0.270	Gold	AI-307
59P110-4	RD316	3.84	0.151	15.34	0.604	6.86	0.270	Gold	AI-307
59P110-5	RG178	2.67	0.105	15.34	0.604	6.86	0.270	Nickel	AI-307
59P110-6	RG178	2.67	0.105	15.34	0.604	6.86	0.270	Gold	AI-307

Description

MCX 50 Ohm Cable Plug - Short Crimp Right-Angle

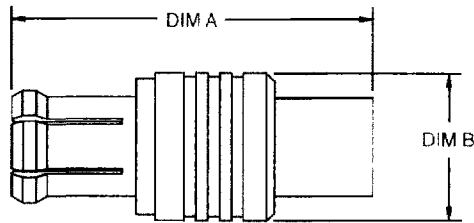


Ordering Data

MCX 50 Ohm Cable Plug - Short Crimp Right-Angle

Part Number	Cable	Crimp Tool Hex		Dimension				Finish	Assembly Instructions
				A		B			
		mm	in.	mm	in.	mm	in.		
59P105-1	RG316	3.25	0.128	8.59	0.338	11.94	0.470	Nickel	AI-305
59P105-2	RD316	3.84	0.151	8.59	0.338	11.94	0.470	Nickel	AI-305
59P105-3	RG316	3.25	0.128	8.59	0.338	11.94	0.470	Gold	AI-305
59P105-4	RD316	3.84	0.151	8.59	0.338	11.94	0.470	Gold	AI-305
59P108-1	0.086 SR	Solder On		8.59	0.338	8.26	0.325	Nickel	AI-306
59P108-2	0.086 SR	Solder On		8.59	0.338	8.26	0.325	Gold	AI-306
59P108-3	0.047 SR	Solder On		8.59	0.338	8.26	0.325	Nickel	AI-306
59P108-4	0.047 SR	Solder On		8.59	0.338	8.26	0.325	Gold	AI-306

To obtain Assembly Instructions contact Berg Electronics at 1-800-237-2374 Ext.-2800



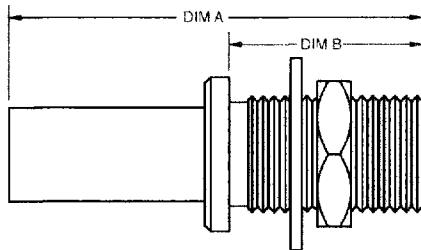
Description

MCX 50 Ohm Cable Plug - Solder Straight

Ordering Data

MCX 50 Ohm Cable Plug - Solder Straight

Part Number	Cable	Dimension				Finish	Assembly Instructions
		A		B			
		mm	in.	mm	in.		
59P107-1	0.086 SR	11.07	0.436	8.59	0.338	Nickel	AI-302
59P107-2	0.086 SR	11.07	0.436	8.59	0.338	Gold	AI-302



Description

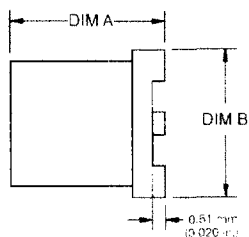
MCX 50 Ohm Cable Jack - Single Hole Mount Crimp Straight

Ordering Data

MCX 50 Ohm Cable Jack - Single Hole Mount Crimp Straight

Part Number	Cable RG-/U	Crimp Tool Hex		Dimension				Finish	Mtg. Hole	Assembly Instructions
				A		B				
		mm	in.	mm	in.	mm	in.			
59JS100-1	316	3.25	0.128	17.75	0.699	7.98	0.314	Nickel	D12	AI-304

MCX Receptacles



Description

MCX Receptacle Jack - Printed Circuit Board Surface Mount Straight

Ordering Data

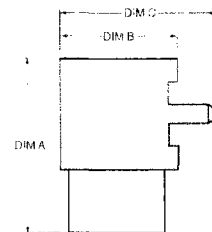
MCX Receptacle Jack - Printed Circuit Board Surface Mount Straight

Part Number	Dimension				Finish	Mtg. PCB
	A		B			
	mm	in.	mm	in.		
59JR107-1	6.25	0.246	5.99	0.236	Nickel	D1
59JR107-2	6.25	0.246	5.99	0.236	Gold	D1

To obtain Assembly Instructions contact Berg Electronics at 1-800-237-2374 Ext.-2800

Description

MCX 50 Ohm Receptacle Jack - Printed Circuit Board
Surface Mount Right-Angle



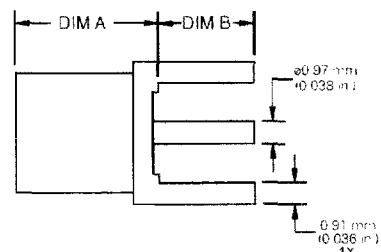
Ordering Data

MCX 50 Ohm Receptacle Jack - Printed Circuit Board Surface Mount Right-Angle

Part Number	Dimension						Finish	Mtg. PCB
	A		B		C			
	mm	in.	mm	in.	mm	in.		
59JR108-1	9.35	0.368	6.25	0.246	8.28	0.326	Nickel	F1
59JR108-2	9.35	0.368	6.25	0.246	8.28	0.326	Gold	F1

Description

MCX 50 Ohm Receptacle Jack - Printed Circuit Board
Mount Straight



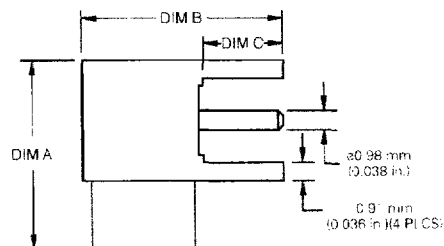
Ordering Data

MCX 50 Ohm Receptacle Jack - Printed Circuit Board Mount Straight

Part Number	Dimension				Finish	Mtg. PCB
	A		B			
	mm	in.	mm	in.		
59JR101-1	5.99	0.236	3.94	0.155	Nickel	A1
59JR101-2	5.99	0.236	3.18	0.125	Nickel	A1
59JR101-3	5.99	0.236	2.36	0.093	Nickel	A1
59JR101-4	5.99	0.236	3.94	0.155	Gold	A1
59JR101-5	5.99	0.236	3.18	0.125	Gold	A1
59JR101-6	5.99	0.236	2.36	0.093	Gold	A1

Description

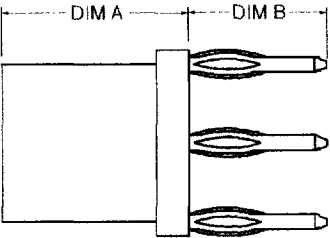
MCX 50 Ohm Receptacle Jack - Printed Circuit
Board Mount Right-Angle



Ordering Data

MCX 50 Ohm Receptacle Jack - Printed Circuit Board Mount Right-Angle

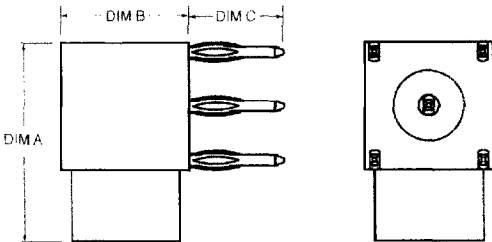
Part Number	Dimension						Finish	Mtg. PCB
	A		B		C			
	mm	in.	mm	in.	mm	in.		
59JR102-1	9.40	0.370	9.93	0.391	3.94	0.155	Nickel	A1
59JR102-2	9.40	0.370	9.93	0.391	3.94	0.155	Gold	A1



Description

**MCX 50 Ohm Receptacle Jack -
Compliant Pin Mount Straight**

MCX 50 Ohm Receptacle Jack - Compliant Pin Mount Straight						Ordering Data	
Part Number	Dimension				Finish	Mtg. PCB	
	A		B				
	mm	in.	mm	in.			
59JR110-1	5.99	0.236	4.45	0.175	Nickel	G1	
59JR110-2	5.99	0.236	4.45	0.175	Gold	G1	

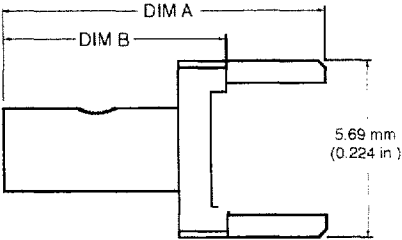


Description

**MCX 50 Ohm Receptacle Jack -
Compliant Pin Mount Right-Angle**

MCX 50 Ohm Receptacle Jack - Compliant Pin Mount Right-Angle							Ordering Data	
Part Number	Dimension						Finish	Mtg. PCB
	A		B		C			
	mm	in.	mm	in.	mm	in.		
59JR109-1	9.35	0.368	5.99	0.236	4.45	0.175	Nickel	G1
59JR109-2	9.35	0.368	5.99	0.236	4.45	0.175	Gold	G1

MCX 50 Ohm Termination



Description

**MCX Termination Jack -
Printed Circuit Board Mount Straight**

MCX Termination Jack - Printed Circuit Board Mount Straight							Ordering Data	
Part Number	Cable RG-/U	Dimension				Finish	Mtg. PCB	
		A		B				
		mm	in.	mm	in.			
59TS100-1	178, 196	10.49	0.413	7.29	0.287	Gold	H1	
59TS100-2	178, 196	10.49	0.413	7.29	0.287	Nickel	H1	

To obtain Assembly Instructions contact Berg Electronics at 1-800-237-2374 Ext.-2800