

Our **MCX 75Ω** connectors are derived from the MCX 50Ω series but have a characteristic impedance of 75Ω. They offer outstanding electrical properties up to 6 GHz and allow the transmission of digital signals with high bit rates.

Series **MCX-75Ω**

Microminiature Coaxial Connector

Technical Data

Material Data

Cable Connector

Solder connector

PCB Connector



Microminiature Coaxial Connector

Description

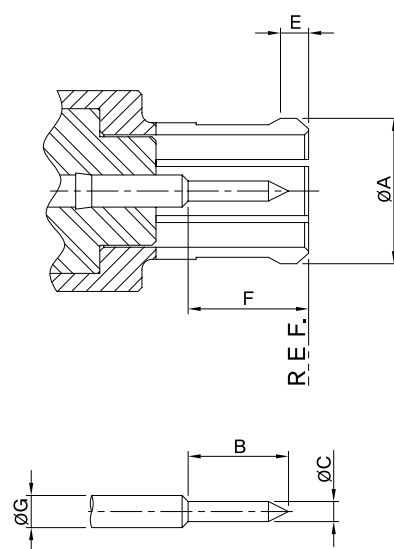
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Contents

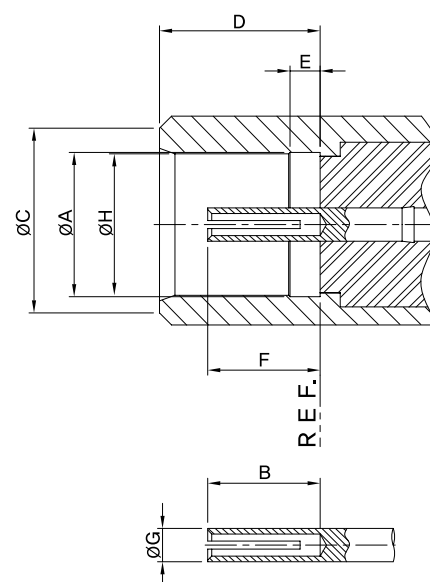
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Interface Dimensions

Plug (Male)



Jack (Female)



Interface Dimensions in mm/inch

	Plug (Male)		Jack (Female)	
	Min.	Max.	Min.	Max.
A	3.72 / 0.146	3.80 / 0.150	3.60 / 0.142	3.70 / 0.146
B	2.49 / 0.098	2.59 / 0.102	2.80 / 0.110	-
C	0.48 / 0.019	0.53 / 0.021	3.75 / 0.148	3.85 / 0.152
D	-	-	4.00 / 0.157	4.12 / 0.162
E	0.70 / 0.028	0.75 / 0.030	0.75 / 0.030	0.85 / 0.033
F	2.80 / 0.110	3.20 / 0.126	2.30 / 0.091	2.80 / 0.110
G	0.83 / 0.033	-	0.83 / 0.033	-
H	-	-	3.42 / 0.135	3.48 / 0.137

Technical Data

Requirement

ELECTRICAL DATA

Impedance	75Ω
Frequency range	DC 6GHz
Dielectric withstanding voltage (at sea level)	500 V rms, 50 Hz
Working voltage (at sea level)	≤ 170 V rms, 50 Hz
Insulation resistance	≥ 10 ⁹ MΩ
Contact resistance	
- Center contacts	≤ 5.0 mΩ
- Outer contacts	≤ 2.5 mΩ

Specification

TEST REQUIREMENTS

MECHANICAL DATA

Engagement force	≤ 25 N / 5.6 lbs
Disengagement force	8 N ~ 20 N / 1.8 lbs ~ 4.5 lbs
Contact captivation	≥ 10 N / 2.3 lbs
Durability (matings)	≥ 500

TEST REQUIREMENTS

Material Data

Connector Part	Material		Plating
	Male	Female	
PIN	Brass	Beryllium-Copper	Gold
INSULATOR	PTFE	PTFE	-
BODIES	Brass	Brass	Gold or White-Bronze
JACK	-	Beryllium-Copper	Gold or White-Bronze

Cable Connector

● Straight Cable Plugs (male)

For Flexible cable
Cable entry crimp
Centre contact soldered

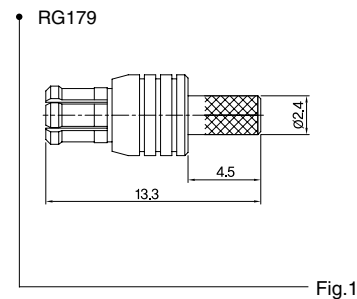


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Pipe		
1	MCX75-PC-179	K313-085-000	CN1311X04-001-1/1	X04 RG179	Gold	Gold	Gold		

● Right Angle Cable Plugs (male)

For Semirigid cable
Cable entry soldered & crimp
Centre contact soldered

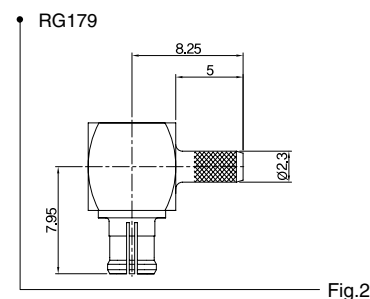
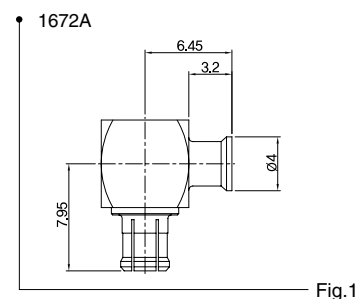


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Pipe		
1	MCX75-LPS-1672A	K313-114-002	CN1331S06-001-1/1	1672A	Gold	Gold	Gold		
2	MCX75-LPC-179	K313-114-000	CN1331X04-001-1/1	X04 RG179	Gold	Gold	Gold		

Solder Connector

● Receptacle Jack(female)

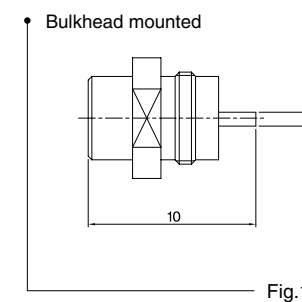


Fig	Type	Code		Plating			Mounting Hole	AS-In	Note
		Old Code	New Code	Pin	Body	Coupling			
1	MCX75-J-BR	K313-311-000	CN1326000-001-1/1	Gold	Gold	Gold	ML10		

PCB Connector

● Straight PCB Jacks (female)

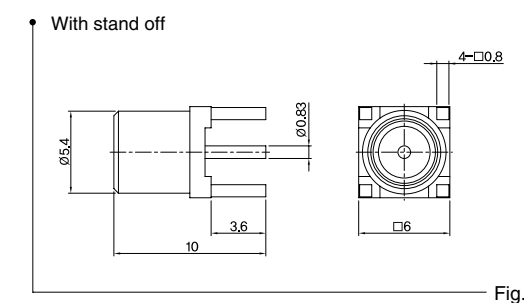
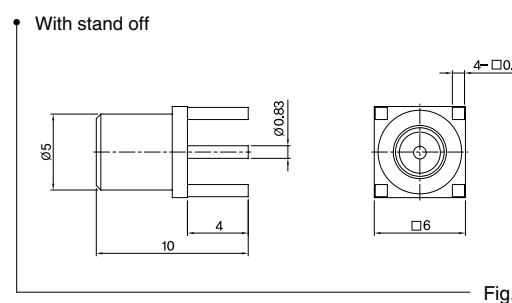


Fig	Type	Code		Plating			Mounting Hole	AS-In	Note
		Old Code	New Code	Pin	Body	Coupling			
1	MCX75-J-4R-R	K313-427-000	CN1351000-001-1/1	Gold	Gold	Gold	ML8		
2	MCX75-J-4R-R	K313-427-001	CN1351000-002-1/1	Gold	Gold	Gold			

● Right Angle PCB Jacks (female)

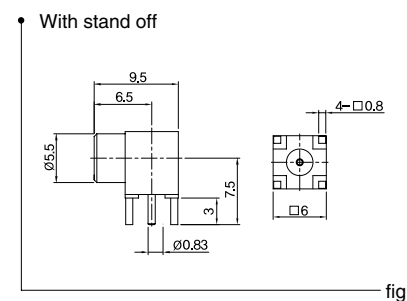
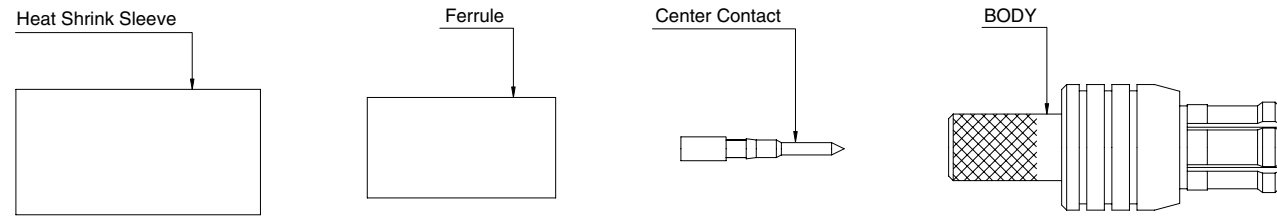


Fig	Type	Code		Plating			Mounting Hole	AS-In	Note
		Old Code	New Code	Pin	Body	Coupling			
1	MCX75-LJ-4R-R	K313-666-000	CN1353000-001-1/1	Gold	Gold	Gold	ML8		

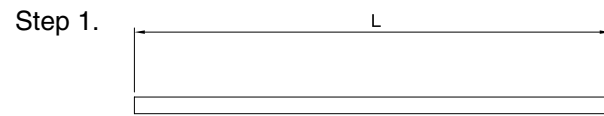
● STANDARD CRIMP



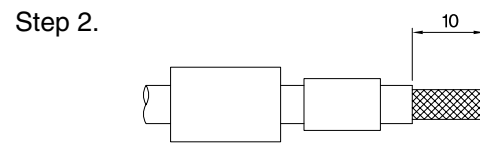
● CONNECTORS

- K313-082
- K313-083
- K313-084
- K313-085
- K313-313
- K313-214

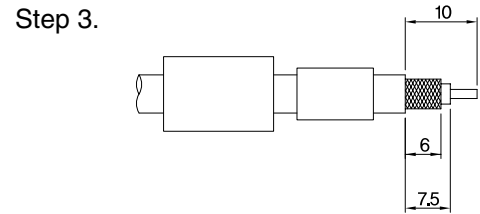
1. Cut the cable as much as required.



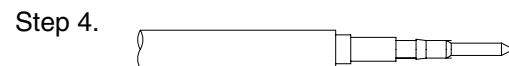
2. Insert the ferrule and the shrink sleeve into the cable and strip off the outer seath.



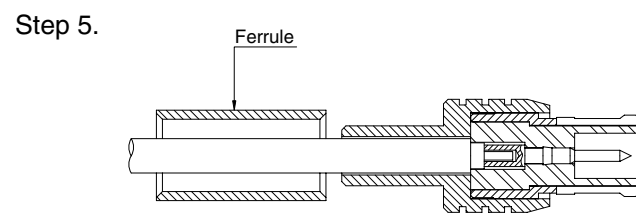
3. Strip off the out conductor and center conductor as shown in the diagram.



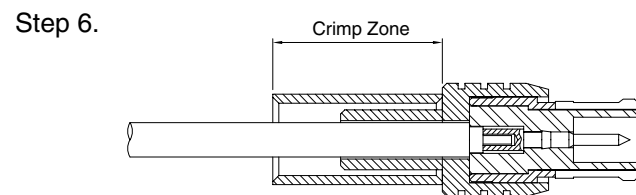
4. After Preparing the center conductor to solder, insert the center contact and solder.



5. After inserting the center contact and the dielectric core of the cable into the body to be wrapped with the above portion of the body, push the Ferrule into above the outer conductor and crimp with the crimp tool.



6. Push the meat shrink sleeve to the above of the ferrule crimped and contract by heating.



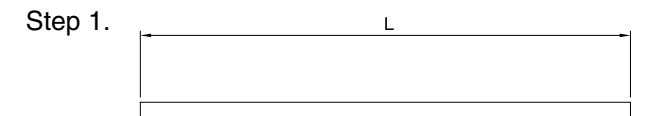
● SEMI-RIGID CABLE



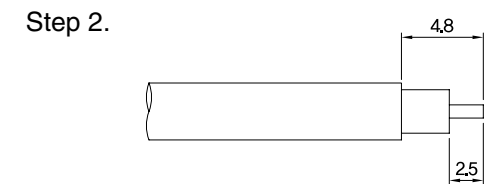
● CONNECTORS

- K313-081
- K313-215

1. Cut the semi-rigid cable as much as required.



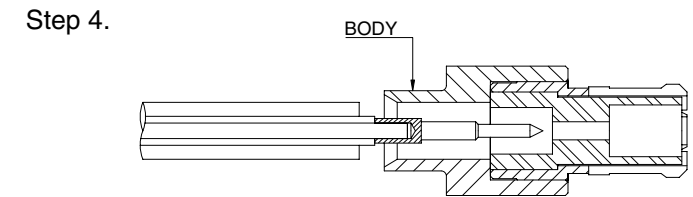
2. Strip off the cover of the table jacket and dielectric core & center conductor according to the required as shown in the diagram.



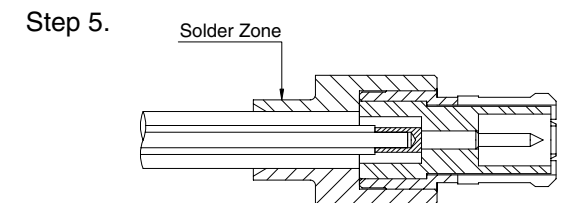
3. Put center contact in the center conductor and then solder it to the solder point.



4. Insert the cable into the body.

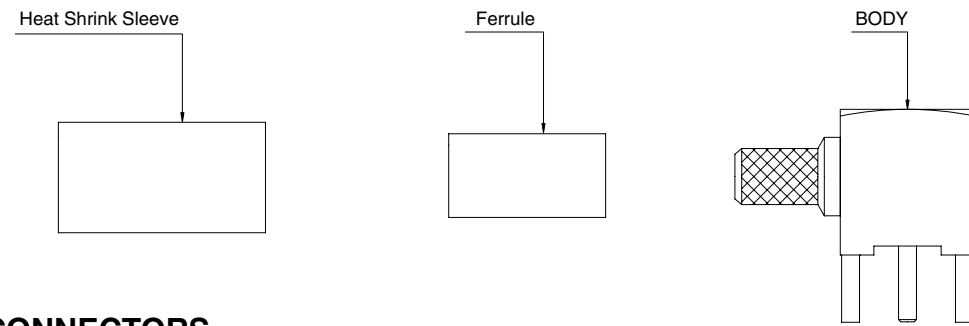


5. Wipe off flux in the solder zone section.



MCX -75Ω

● RIGHT ANGLE CRIMP



● CONNECTORS

- K313-110
- K313-111
- K313-113
- K313-114
- K313-966
- K313-988

1. Cut the cable as much as required.
2. Insert the ferrule and heat shrink sleeve into the cable and tacked off the outer sheath.
3. After stripping off the outer conductor and the inner conductor as shown in the diagram, prepare the inner conductor to solder.
4. Insert the cable into the body and solder fixing exactly the inner conductor to the solder point.
5. Insert the ferrule and crimp with the crimp tool. After doing this, contract the heat shrink sleeve.
6. Insert the insulator in the body and close the cap.

