

# MMCX Microminiature Connectors



Molex MMCX connectors are a microminiature series designed for applications where densely populated electronic applications demand size and weight limitations while maintaining excellent RF characteristics. MMCX connectors are also designed to function in applications operating to 6 GHz and offer similar electrical performance to much larger coaxial connector types. Mechanical stability is maintained via a snap-fit interface that uses no slotting in the outer conductor. Typical applications include wireless/PCS devices, Telecommunications, GPS receivers and consumer electronics.



## Features and Advantages

Microminiature

DC to 6 GHz

Snap-On coupling

## Materials

Contacts – BeCu gold plated (PCB jacks and adapters); brass gold plated (Edge-mount jack, cable plugs and jacks)

Insulator – Teflon

Body – Stainless steel passivated (adapters); brass gold plated (PCB and cable mount connectors)

## Technical Product Information

PCB Plugs – Edge mount / vertical SMT, straight or R/A through-board mount

Cable Plugs/ Jacks, crimp / solder - straight or right-angle versions available

– Semi-Rigid Cables .086 and .047

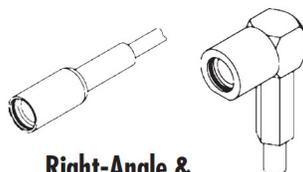
– Flexible Cables – RG174/188/196/316/RD316 and 1.13mm

Non-magnetic versions available for medical applications

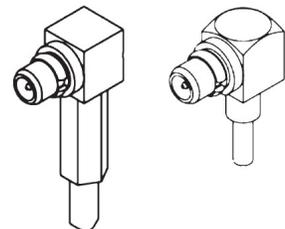
Between-series adapters also available.



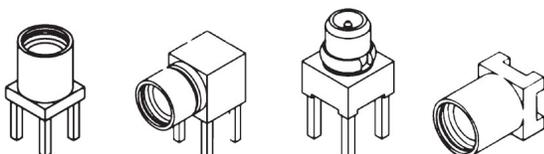
**Straight Crimp & Solder Plugs**



**Right-Angle & Straight Crimp Jacks**



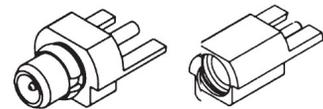
**Right-Angle Crimp & Solder Plugs**



**Various Styles PCB SMT & Through-Board Plugs & Jacks**



**Bulkhead Crimp Jack**



**Edge-Mount Plug**

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## Specifications

### ELECTRICAL

Nominal Impedance (Ohms): 50  
 Frequency Range (GHz): DC-6  
 Voltage, Working (Vrms): 170  
 Insulation Resistance (MOhms): 1000  
 Center Contact Resistance (MOhms): 5  
 Outer Contact Resistance (MOhms): 2.5  
 RF Leakage (-dB): 60  
 RF Insertion Loss (dB): 0.1 Straight Connector  
 VSWR at Max. Freq: 1.25 at 6 GHz  
 1.12 at 2.5 GHz  
 1.07 at 1 GHz  
 Straight Cabled

### MECHANICAL

Coupling Method: Snap-On  
 Force to Engage (max): 4.05lbs (18N)  
 Force to Disengage: 1.34lbs (6N) min.  
 Durability (Cycles): 500

### ENVIRONMENTAL

Temperature (Degrees C): -55 to +165  
 Vibration: MIL-STD-202, Method 204: Test Condition C  
 Thermal Shock: MIL-STD-202, Method 107:  
 Test Condition F  
 Corrosion (Salt Spray): MIL-STD-202, Method 101:  
 Test Condition B  
 Mechanical Shock: MIL-STD-202, Method 213:  
 Test Condition B  
 Moisture Resistance: MIL-STD-202, Method 106:  
 Five minutes after removal  
 200 MOhms

## Ordering Information

Part Number	Description	Body	Plating	Cable Type
73415-0971	Straight Crimp Plug	Brass	Gold	RG178/196
73415-1251	Straight Crimp Plug	Brass	Gold	RG174/188/316
73415-2131	Straight Crimp Plug	Brass	Gold	RD316
73415-2251	Straight Crimp Plug	Brass	Gold	1.13mm
73415-2101	Straight Solder Plug	Brass	Gold	.086 S/R
73415-2111	Straight Solder Plug	Brass	Gold	.047 S/R
73415-0951	Right-Angle Crimp Plug	Brass	Gold	RG178/196
73415-1121	Right-Angle Crimp Plug	Brass	Gold	RG174/188/316
73415-2141	Right-Angle Crimp Plug	Brass	Gold	RD316
73415-2261	Right-Angle Crimp Plug	Brass	Gold	1.13mm
73415-2151	Right-Angle Solder Plug	Brass	Gold	.047 S/R
73415-2161	Right-Angle Solder Plug	Brass	Gold	.086 S/R
73415-3410	Straight Crimp Jack	Brass	Gold	1.13mm
73415-3210	Straight Crimp Jack	Brass	Gold	RG178/196
73415-2361	Right-Angle Crimp Jack	Brass	Gold	RG178/196
73415-0991	Edge-Mount Plug	Brass	Gold	N/A
73415-0961	Edge-Mount Jack	Brass	Gold	N/A
73415-2121	Vertical PCB Through-Board Plug	Brass	Gold	N/A
73415-1471	Vertical PCB Through-Board Jack	Brass	Gold	N/A
73415-1001	Right-Angle PCB Through-Board Jack	Brass	Gold	N/A
73415-2061	Vertical PCB SMT Jack	Brass	Gold	N/A
73415-4700	Bulkhead Crimp Jack	Brass	Gold	1.13mm

[www.molex.com/link/rfmicrowavecoax.html](http://www.molex.com/link/rfmicrowavecoax.html)

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