



Molex MMCX connectors are a microminiature series designed for applications where densely populated electronic applications demand size and weight limitations while maintaining good R.F 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 Benefits**

- Microminiature
- DC to 6 GHz
- Snap-On coupling

**Materials**

- Contacts – BeCu (PCB jacks & adapters), brass gold plated (Edge-mount jack, cable plugs & jacks)
- Insulator – Teflon<sup>®</sup>\*
- Body – Stainless steel passivated (adaptors), brass gold plated (PCB & cable mount connectors)

**PCB**  
**Cable Mount**



SPECIFICATIONS

**Electrical**

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

**Mechanical**

Coupling Method	Force to Engage (max)	Force to Disengage	Durability (Cycles)
Snap-On	3.4 lbs (15.12N)	1.4 - 3.4 lbs (6.23 - 15.12N)	500

**Environmental**

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

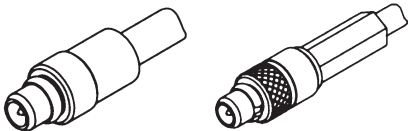
\*Teflon is a registered trademark of E.I. du Pont de Nemours and Company



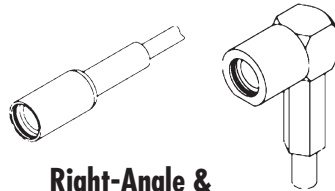
# MMCX Microminiature Connectors

## Technical Product Information

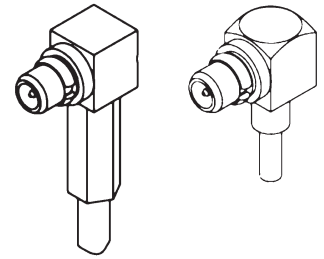
- PCB Plugs – Edge mount / vertical SMT, straight or R/A through-board mount
- Cable Plugs – Plugs/ jacks, crimp/ solder - straight or right-angle versions available
  - Semi-Rigid Cables .086 & .047
  - Flexible Cables – RG174/188/196/316/RD316 & 1.13mm
- Non-magnetic versions available for medical applications
- Between-series adapters also available.



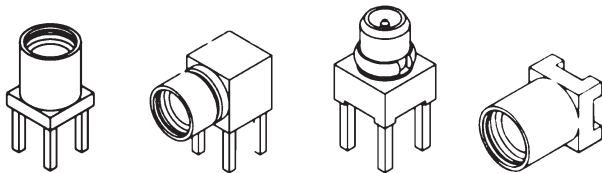
**Straight Crimp & Solder Plugs**



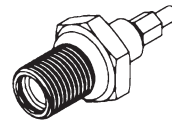
**Right-Angle & Straight Crimp Jacks**



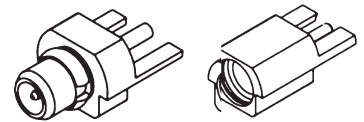
**Right-Angle Crimp & Solder Plugs**



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



**Bulkhead Crimp Jack**



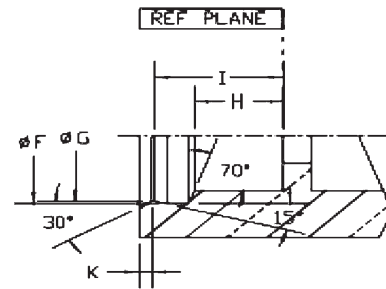
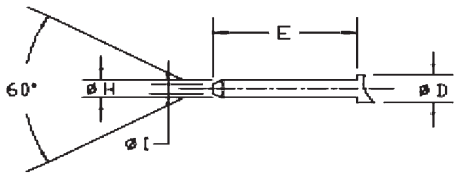
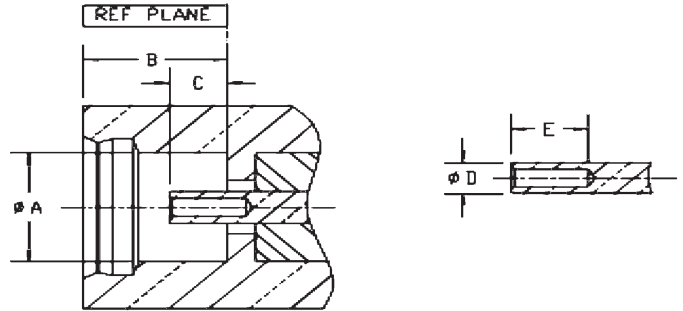
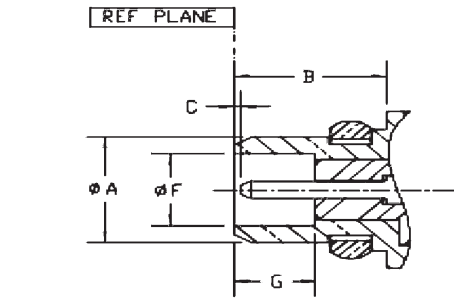
**Edge-Mount Plug**

## 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
73413-0040	Vertical SMT PCB Jack	Brass	Gold	N/A
73413-0050	Vertical Through-Board PCB Jack	Brass	Gold	N/A



# MMCX Microminiature Connectors



**Plug**

**Jack**

## INTERFACE MATING DIMENSIONS

	Dimensions			
	Plug		Jack	
	min. in/(mm)	max. in/(mm)	min. in/(mm)	max. in/(mm)
A (dia)		.094/2.40	.095/2.41	
B	.106/2.70		.102/2.60	
C	0.00/0.00	.010/0.25	.035/0.09	.047/1.20
D (dia)	.028/0.7 nom.	.028/0.70 nom.	.028/0.7 nom.	.028/0.7 nom.
E		.124/3.15	.055/1.40	
F (dia)	.062/1.58	.064/1.62	.118/3.00	.120/3.04
G	.057/1.45		.113/2.88	.114/2.90
H (dia)	.015/0.38	.017/0.42	.062/1.57	.064/1.63
I (dia)		.008/0.20	.091/2.30	.092/2.34
K				.009/.023



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