

MCX SERIES

COAXICOM MCX SERIES CONNECTORS feature reliable Snap-On mating. They are 30% smaller than the SMB series, and offer an excellent combination of performance, size, and weight. They operate to a higher frequency than the SMB (6 GHz compared to 4 GHz). These features make the MCX series ideal for applications where performance is critical, and space is limited. The standard MCX series has a 50 Ω impedance. For 75 Ω connectors, add "-75" suffix to the catalog part number.

MCX CONNECTORS have widespread applications in GPS, data systems, and automotive and wireless communications, as well as for laboratory test and measurement use. They are readily available for flexible and semirigid cables as shown below.

MCX CABLE GROUP CODES

22	22A**	RG55, 142, 223, 400	29	RG174DS, 188DS, 316DS
	23	RG178, 196		
24	24A	RG174, 188A, 316, B7805A, LMR100, LMR100A	30	.141 SR, RG402, MIL17/130, ULTRA-FLEX
	24B	RG161, 179, 187	31	.085 SR, RG405, MIL17/133, ULTRA-FLEX
	24D	RG179DS	42A	.047 SR, MIL17/151, ULTRA-FLEX
27	27A**	RG58A, B, C, B7806A		
	27B**	RG303	42C	.034 SR, MIL17/154

** Currently available for part number 1426-XX-* only.

MCX ELECTRICAL

PARAMETER	SPECIFICATIONS
Impedance	50 Ω, 75 Ω
Frequency Range	DC - 6 GHz
Working Voltage @ sea level	335 VRMS
Dielectric Withstanding Voltage @ sea level	1,000 VRMS
VSWR (Max.)	Straight: 1.3:1 Right angles: 1.5:1
Contact Resistance (Max.)	Center: 5.0 milliohms Outer: 1.0 milliohm max.
Insulation Resistance	5,000 megohms min.

MMCX SERIES

COAXICOM MMCX SERIES CONNECTORS are intended for applications that require the smallest possible coaxial interface to be used with standard miniature single and double shielded flexible, and semi-rigid cables. The MMCX series is a scaled-down version of the MCX series. It features the same reliable Snap-On mating and performance to 6 GHz, but is smaller. Its low profile (0.138 total height above the board, compared to typically 0.236 for the MCX) PWB connectors makes the series the best choice for cellular phones, GPS, and other size-critical applications.

COAXICOM offers both the MCX and the MMCX in versatile edge mount jack receptacles that accommodate board thicknesses from .031" to .063". The MMCX IM246EM-1 is unique in that it mounts with the connector mating end flush with the board edge for enhanced space savings and design flexibility.

MMCX CABLE GROUP CODES

23		RG178, 196	31	.085 SR, RG405, MIL17/133, ULTRA-FLEX
24	24A	RG174, 188A, 316, B7805A, LMR100, LMR100A	42A	.047 SR, MIL17/151, ULTRA-FLEX
			42C	.034 SR, MIL17/154
29		RG174DS, 188DS, 316DS		

MMCX ELECTRICAL

PARAMETER	SPECIFICATIONS
Impedance	50 Ω
Frequency Range	DC - 6 GHz
Working Voltage @ sea level	170 VRMS
Dielectric Withstanding Voltage @ sea level	500 VRMS
VSWR (Max.)	Straight: 1.3:1 Right angles: 1.5:1
Contact Resistance (Max.)	Center: 5.0 milliohms. Outer: 2.5 milliohm max.
Insulation Resistance	1,000 megohms min.

ADDITIONAL MCX, MMCX SPECIFICATIONS

ENVIRONMENTAL

	MCX	MMCX
Temperature Range	-65° to +165° C	-55° to +155° C
Thermal Shock MIL-STD-202, Method 107	Condition C	Condition F
Moisture Resistance	MIL-STD-202, Method 106	
Corrosion	MIL-STD-202, Method 101, Condition B	
Mechanical Shock	MIL-STD-202, Method 213, Condition B	
Vibration MIL-STD-202, Method 204	Condition D	Condition C

FINISH

Center Contacts	Gold plated per MIL-PRF-39012, IAW MIL-G-45204
Metal Parts/ Crimp Ferrule	MCX - Nickel or gold per requirement MMCX - Gold *
Insulators	Natural

MCX, MMCX MATERIAL

Center Contact	Male: Brass per QQ-B-626
	Female: Beryllium Copper per QQ-C-530
Metal Parts	Brass per QQ-B-626
Insulators	PTFE
Crimp Ferrule	Copper

MECHANICAL

	MCX	MMCX
Engagement Force	5.6 lbs max.	3.4 lbs max.
Disengagement Force	1.8 - 4.5 lbs.	1.4 - 3.4 lbs.
Contact Retention	2.3 lbs min.	
Durability (Mating)	500 cycles min.	

* Due to the small size and tight tolerances, plating other than gold is not recommended. Consult factory for information.