

MMCX Series

Description

The MMCX family of products is a 6 GHz 50 ohm interconnection system.

Applications

- PCMCIA Cards
- Wireless Applications
- Antennas
- Wireless LANs
- Broadband communications
- Instrumentation
- RF Test Ports
- Cellular Telephones
- Global Positioning Systems (GPS)
- Base Stations
- Radio Boards
- Satellite Reception Terminals

Features

- Mating cycles \approx 500
- Conforms to CECC 22000 specifications.
- Interface according to CECC 22340, EN 122340

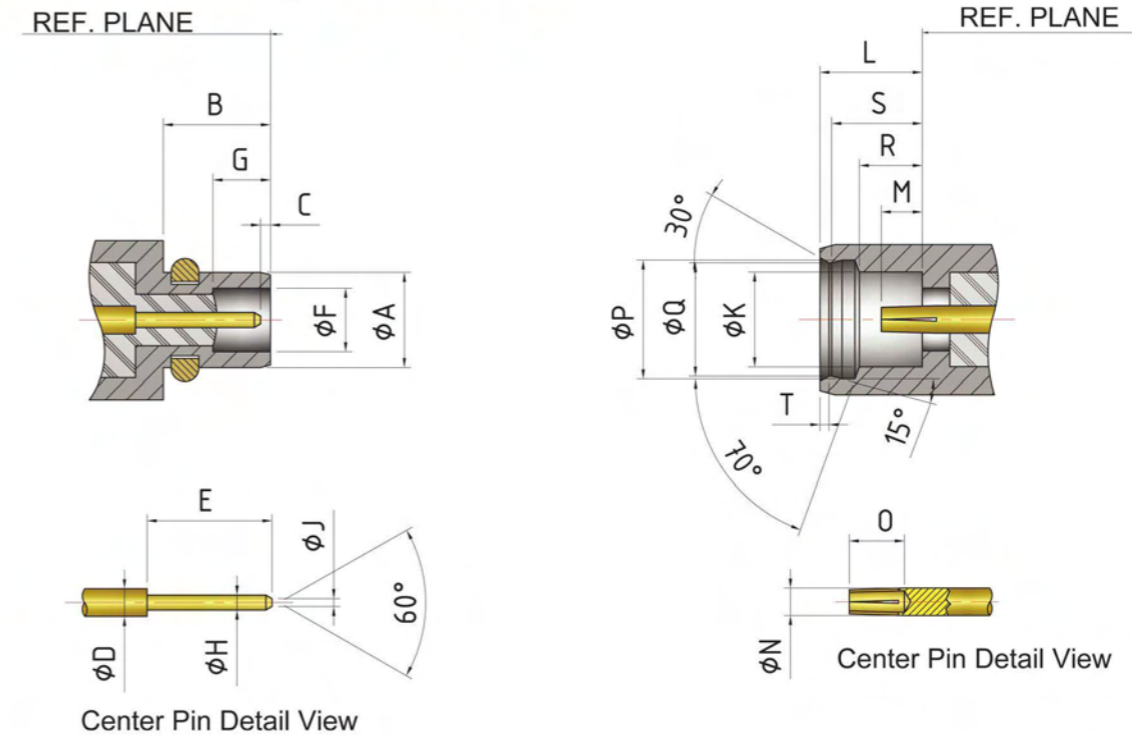


Specification

MMCX

MMCX, micro-miniature connectors are designed with a 50Ω characteristic impedance, The working frequency is up to 6 GHz. The reliable snap-on mating design offers "low RF-leakage". Also, the small dimensions allow you to use the connectors where space requirements are critical. The major application for MMCX series connectors are PCMCIA cards & other small hand-held communication devices.

Interface Mating Dimensions

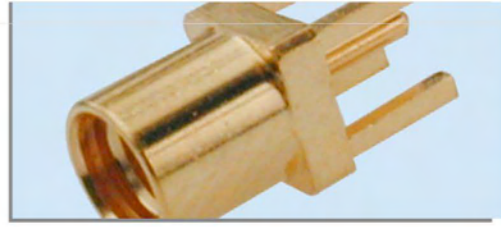
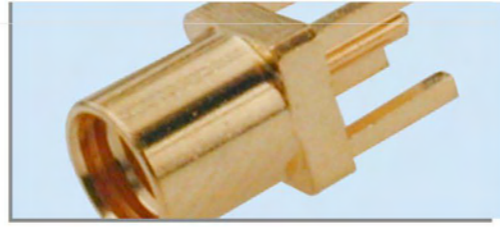


PLUG

Letter	Milimeters (inches)	
	Minimum	Maximum
A	—	2.40(.094)
B	2.70(.106)	—
C	0.00(.000)	0.25(.010)
D	0.70(.028)nom	
E	—	3.15(.124)
F	1.58(.062)	1.62(.064)
G	1.45(.057)	—
H	0.38(.015)	0.42(.017)
J	—	0.20(.008)

JACK

Letter	Milimeters (inches)	
	Minimum	Maximum
K	2.41(.095)	—
L	2.60(.102)	—
M	0.90(.035)	1.20(.047)
N	0.70(.028)nom	
O	1.40(.055)	—
P	3.00(.118)	3.04(.120)
Q	2.88(.113)	2.90(.114)
R	1.57(.062)	1.63(.064)
S	2.31(.091)	2.34(.092)
T	—	0.23(.009)



Electrical

Impedance	50Ω
Frequency Range	0 to 6 GHz
VSWR	≤1.15 @ DC to 4 GHz ≤1.40 @ 4 to 6 GHz
RF Leakage	≥60 dB (flexible cable) ≥70 dB (semi-rigid cable)
Dielectric Withstanding Voltage	500 V rms
Voltage Rating	≤170 V rms (depending on cable)
Center Contact Resistance	≤ 10 mΩ
Outer Contact Resistance	≤ 5 mΩ
Insulation Resistance	≥ 1 GΩ

Mechanical

Mating	Snap-on Coupling
Connector Durability	≥ 500 Cycles (for beryllium copper female contact only)
Engagement Force	≤ 3.4 lbs
Disengagement Force	1.4 lbs ~ 3.4 lbs
Cable Retention Force	≥ 7.3 lbs (for RG178) ≥ 12.1 lbs (for RG316)

Environmental

Temperature Range	-55° C to 155° C
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Cond. B
Vibration	MIL-STD-202, Method 204, Cond. C
Thermal Shock	MIL-STD-202, Method 107, Cond. F
Mechanical Shock	MIL-STD-202, Method 213, Cond. B

Material

Parts Name	Material	Plating
Body	Brass	Gold or Nickel
Center Contact	Male : Brass Female : Phosphor Bronze Beryllium Copper	Gold
Insulator	PTFE	
Crimp Ferrule	Annealed Copper	Same as Body

Note: Other Material/Finish is Available on Request.

Crimp Type (for Flexible Cable)

MMCX, Crimp, Plug

	Hand Tool	See Appendix B
	Cable	RG174/U, 178/U, 316/U
	Cable Assembly Instruction	See Appendix A Code E

MMCX, R/A, Crimp, Plug

	Hand Tool	See Appendix B
	Cable	Mini Coaxial Cable, RG174/U, 178/U, 316/U
	Cable Assembly Instruction	See Appendix A Code C

MMCX, R/A, Crimp, Plug

	Hand Tool	See Appendix B
	Cable	RG174/U, 178/U, 316/U
	Cable Assembly Instruction	See Appendix A Code C

MMCX, Crimp, Jack

	Hand Tool	See Appendix B
	Cable	Mini Coaxial Cable, RG174/U, 178/U, 316/U
	Cable Assembly Instruction	See Appendix A Code E

MMCX, R/A, Crimp, Jack

	Hand Tool	See Appendix B
	Cable	RG174/U, 178/U, 316/U
	Cable Assembly Instruction	See Appendix A Code C