

MCX RF Connectors and Assemblies

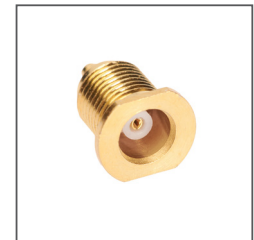
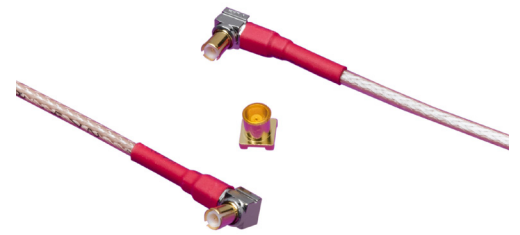
molex®

MCX connectors and assemblies are designed for use in any wire to board application where quick and easy snap-on mating is needed; available in 50 and 75 Ohm and frequencies up to 6 GHz

MCX subminiature snap-on connectors offer a stable and durable connection. The subminiature design allows other electronic assemblies to be densely packaged on the PCB. MCX connectors are approximately 30% smaller than SMB connectors are, are available in both 50 and 75 Ohm versions and provide good electrical performance to 6 GHz. These connectors are used in telecommunications systems as well as wireless and GPS applications. For medical MRI applications, non-magnetic versions are available. Molex also provides multi-port MCX connectors for coplanar board-to-board and cable-to-board applications.

Features and Benefits

Snap-on coupling reduces installation time	Ganged configurations available
MCX connectors are approximately 30% smaller than SMB connectors	Custom cable assemblies available upon request
Non-Magnetic versions are available	Good electrical performance up to 6 GHz
Available in 50 or 75 Ohm versions	Provides a variety of options for design flexibility
Reverse polarity styles available	Numerous cable options available



Specifications

REFERENCE INFORMATION

Packaging: Tray or Bag
UL File No.: None
CSA File No.: None
Designed In: Millimeters
RoHS: Yes
Halogen Free: N/A
Glow Wire Compliant: N/A

MECHANICAL

Force to Engage/Disengage:
Engagement Force (Typical)
Engage – 14 lbs max.
Disengage – 1.8 lbs min. 4.5 lbs max.
Durability (Cycles): 500

ELECTRICAL

Nominal Impedance: 50 and 75 Ohms
Frequency Rating:
50 Ohm: DC to 6 GHz
75 Ohm: DC to 6 GHz
Insertion Loss (max.): 6 GHz – 0.5 dB VSWR (max.):
1.3 @ 2 GHz
1.35 @ 2 to 6 GHz
Voltage (max.): 335Vrms – 50 and 75 Ohm
Center Contact Resistance: 5.0 Milliohms Outer
Contact Resistance: 2.5 Milliohms Dielectric
Withstanding Voltage: 1,000 Vrms
Insulation Resistance: 5,000 Megohms min.

PHYSICAL

50 and 75 Ohms
Body: Brass or Zinc Alloy
Body Plating: Nickel, Gold and Tin
Center Contact: Brass, Phosphor Bronze
Contact Plating: Gold
Insulator: PTFE
Operating Temperature: -55 to +155°C

MCX RF Connectors and Assemblies



Ordering Information

MCX RF PCB Connectors 50 Ohm

Series No.	Description	Termination Style	PCB Thickness	Body	Plating
73415-2450	Vertical PCB Plug Receptacle	Through Hole	3.81mm	Brass	Tin
73366-0000	Vertical PCB Jack Receptacle	Through Hole	3.20mm	Brass/Zinc Alloy	Nickel/Tin
73366-0060	Vertical PCB Jack Receptacle	Through Hole	1.20mm	Brass	Nickel
73366-0061	Vertical PCB Jack Receptacle	Through Hole	1.20mm	Brass	Gold
73415-4220	Vertical PCB Jack Receptacle	Through Hole	2.40mm	Brass	Gold
73415-4222	Vertical PCB Jack Receptacle	Through Hole	2.40mm	Brass	Nickel
73415-1040	Vertical PCB Bulkhead Jack Receptacle	Through Hole	2.40mm	Brass	Gold
73415-1690	Vertical PCB Jack Receptacle	Surface Mount	N/A	Brass	Nickel
73415-1691	Vertical PCB Jack Receptacle	Surface Mount	N/A	Brass	Gold
73366-0030	Right Angle PCB Jack Receptacle	Through Hole	3.2mm	Brass	Nickel
73415-1101	Right Angle PCB Jack Receptacle	Surface Mount	N/A	Brass/Zinc Alloy	Nickel/Tin
73415-1102	Right Angle PCB Jack Receptacle	Surface Mount	N/A	Brass/Zinc Alloy	Gold
73415-1060	Edge Mount PCB Jack Receptacle	Edge Mount	N/A	Brass	Gold

MCX RF PCB Connectors 75 Ohm

Series No.	Description	Termination Style	PCB Thickness	Body	Plating
73415-1630	Vertical PCB Jack Receptacle	Surface Mount	N/A	Brass	Tri Alloy
73415-1631	Vertical PCB Jack Receptacle	Surface Mount	N/A	Brass	Gold
73415-0780	Right Angle PCB Jack Receptacle	Through Hole	3.20mm	Brass/Zinc Alloy	Nickel/Tin

MCX RF Cable Connectors 50 Ohm

Series No.	Description	Cable Type	Body	Plating
73366-0020	Straight MCX Plug	RG174, RG188, RG316	Zinc Alloy	Nickel
73366-6150	Straight MCX Plug	RG174, RG188, RG316	Brass	Nickel
73366-0301	Straight MCX Plug	RG174, RG188, RG316	Zinc Alloy	Gold
73415-4190	Right Angle MCX Plug	RG174, RG188, RG316	Brass	Nickel
73366-0010	Right Angle MCX Plug	RG174, RG188, RG316	Zinc Alloy	Nickel
73415-5230	Straight MCX Bulkhead Jack	RG174, RG188, RG316	Brass	Nickel
73415-1050	Right Angle MCX Plug	RG178	Zinc Alloy	Nickel
73415-2240	Straight MCX Plug	RG316 Double Shielded	Zinc Alloy	Gold
73415-2230	Right Angle MCX Plug	RG316 Double Shielded	Brass	Nickel
73415-2370	Straight MCX Plug	RG405 (.086SR)	Brass	Gold
73415-2380	Right Angle MCX Plug	RG405 (.086SR)	Brass	Tin
73415-2381	Right Angle MCX Plug	RG405 (.086SR)	Brass	Gold
73366-6220	Straight MCX Plug	RG141 (.141SR)	Brass	Gold
73415-2460	Right Angle MCX Plug	RG402 (.141SR)	Brass	Gold