



Non-Magnetic Connectors

SMB/MCX/MMCX



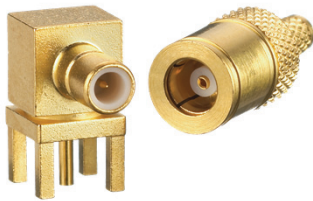
Product Description

Connectors for the Medical Market are typically required to be non-magnetic, due to the environment in which they are utilized.

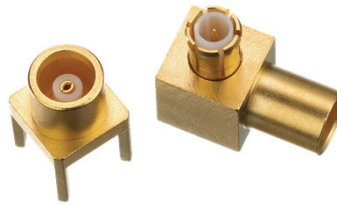
There are two levels of magnetism, depending on the application:

- **Low Permeability:** This is required if the connectors are used in the MRI, within the imaging field. This ensures there will not be any image artifacts during scans.
- **Standard:** For other applications, such as on the MRI filter panel, Tx/Rx switches and wireless patient monitoring, there is a less stringent requirement and they can be made from more standard materials and processes, but must not contain Nickel plating.

Our line of non-magnetic connectors includes several standard configurations of the typical connectors used in this market, including SMB, MCX and MMCX. We can also provide other configurations and series to fit our customer's needs.



- The SMB interface features a snap-on coupling, which reduces installation time. It conforms to the requirements of MIL-PRF-39012 and the interface is compliant with MIL-STD-348 and is available in both 50 Ohm and 75 Ohm. It features a self-cleaning outer spring to withstand moderate vibration and is rated to 4 GHz.



- The MCX interface features a snap-on coupling and is 1/3 smaller than the SMB series. It is rated to 6 GHz and both 50 Ohm and 75 Ohm versions are available. The design complies with the European CECC 22000 specification.



- The MMCX interface features a snap-on coupling which can be rotated through 360 degrees. It is 1/3 smaller than the MCX series and complies with the European CECC 22000 specification.

Specifications

Electrical

Impedance: 50/75 Ohms
 Frequency Range: DC to 4 GHz or 6 GHz

Mechanical

Durability: 500 Cycles Minimum
 Mating: Snap-On

Material

Body: Copper Alloy/Brass*
 Outer/Center Contacts: Beryllium Copper/Brass/
 Copper Alloy*
 Insulators: Teflon®
 Ferrule: Copper Alloy

Finishes

Body: Gold over Copper
 Outer/Center Contacts: Gold over Copper
 Ferrule: Gold over Copper

* = Depends on application

Part Numbers

Part Number	Description	Style	Cable Size	Crimp Die	Hex Size
453-060-0046J	MCX Right-Angle Jack, PCB Mount	Std. Non-Magnetic	N/A		
451-060-00411HN	MCX Straight Jack, PCB Mount	Low Permeability	N/A		
451-060-00410HN	MCX Straight Jack, PCB Mount, Low Profile	Low Permeability	N/A		
452-900-0362HN	MCX Right-Angle Plug, RG-178	Low Permeability	RG178	KTH-2008	0.128
452-900-0637HN	MCX Right-Angle Plug, RG-316	Low Permeability	RG316	KTH-2011	0.128
452-900-0630J	MCX Right-Angle Plug, RG-316	Std. Non-Magnetic	RG316	KTH-2011	0.128
451-060-0046J	MCX Straight Jack, PCB Mount	Std. Non-Magnetic	N/A		
450-060-0046J	MCX Straight Plug, PCB Mount	Std. Non-Magnetic	N/A		
450-900-0630J	MCX Straight Plug, RG-316	Std. Non-Magnetic	RG316	KTH-2011	0.128
471-040-0043HN	MMCX Straight Jack, PCB Mount	Low Permeability	N/A		
472-900-0361HN	MMCX Right-Angle Plug, RG-178	Low Permeability	RG178	KTH-2008	0.128
513-060-0049J	SMB Right-Angle Jack, PCB Mount	Std. Non-Magnetic	N/A		
513-060-0040J	SMB Right-Angle Jack, PCB Mount, Low Profile	Std. Non-Magnetic	N/A		
511-060-0040J	SMB Straight Jack, PCB Mount	Std. Non-Magnetic	N/A		
511-060-0046J	SMB Straight Jack, PCB Mount	Std. Non-Magnetic	N/A		
512-060-0040J	SMB Right-Angle Plug, PCB Mount	Std. Non-Magnetic	N/A		
512-060-0043HN	SMB Right-Angle Plug, PCB Mount	Low Permeability	N/A		
510-060-0040J	SMB Straight Plug, PCB Mount	Std. Non-Magnetic	N/A		
512-900-0630J	SMB Right-Angle Plug, RG-316	Std. Non-Magnetic	RG316	KTH-2011	0.128



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