



MCX and Reverse Polarity MCX Specifications

Materials

Connector part	Material	Finish
Bodies	Brass	Nickel or Gold
Center Contact	Male: Brass	Gold
	Female: Beryllium copper	
Insulator	Teflon	N/A
Crimp ferrule	Annealed Copper	Nickel or Gold

Electrical

Electrical Data	Detail		
Impedance	50 ohm		
Frequency range	0~6GHz		
Working voltage	RG178, 196/U → 250 volts rms max.		
	RG316/U, semi-rigid → 335 volts rms max.		
Insulation resistance	1,000 megaohms min.		
Dielectric withstanding voltage	RG178/U → 750 volts rms max.		
	RG316/U, semi-rigid → 1,000 volts rms max.		
Contact resistance	Center contact: 5.0 milliohms max.		
	Outer contact: 1.0 milliohms max.		
VSWR: f (GHz)		Straight	Right angle
	RG178/U	1.17+0.04f	1.07+0.06f
	RG316/U, semi-rigid	1.13+0.04f	1.07+0.04f
Insertion loss	0.1dB max. (straight)		
	0.2dB max. (right angle)		

Mechanical

Mechanical Data	Detail
Engagement force	5.6lbs max.
Disengagement force	3lbs
Connector durability	500 matings
Cable retention force	RG178/U → 10lbs min.
	RG316/U → 20lbs min.
	semi-rigid → 30lbs min.

Environmental

Environmental Data	Detail
Corrosion (Salt spray)	MIL-STD-202 METHOD 101 TEST CONDITION B
Thermal shock	MIL-STD-202 METHOD 107 TEST CONDITION F
Vibration	MIL-STD-202 METHOD 204 TEST CONDITION B
Mechanical shock	MIL-STD-202 METHOD 213 TEST CONDITION B
Temperature range	-65°C to 165°C