

RG 316 Coaxial Cable

RG 316 coaxial cable can be used in direct burial, radio frequency and telecommunications applications. It is often used for the transmission of radio frequency signals and can also be used in wireless communication, broadcast and military equipment. Another use for RG 316 coax is in high frequency interconnections between PCB and telecommunications equipment. It is a good choice for applications like these that require good performance and stability in high temperature environments and superior phase stability, or for applications in demanding environments or with minimal installation space. RG 316 is a high performance coaxial cable that is in accordance with MIL-DTL-17 specifications and has a corresponding part number, M17/113-RG316.

RG 316 Coaxial Cable Construction

Inner Cond:	Silver Covered Copper Clad Steel
Dielectric:	Extruded Solid Polytetrafluoroethylene (PTFE)
Outer Cond:	Silver Covered Copper
Jacket:	Fluorinated Ethylene Copper (FEP) Type IX per MIL-C-17

RG 316 Coaxial Cable Additional Specifications

Weight:	12.2 lb/ft
Operating Temperature:	-55°C to 200°C

RG 316 Coaxial Cable Electrical Specifications

Capacitance:	29.4 pF/ft
Impedance:	50 +/- 2 ohms
Maximum Operating Voltage:	1200 Volts
Velocity of Propagation:	69.5%

RG 223 Loss Attenuation Specifications and Power Handling by Frequency

Frequency (MHz)	Attenuation (db/100ft)	Power (watts)
10	2.5	1869
30	4.3	1072
50	5.6	827
100	8	580
400	16	282
1000	26	173
1500	32	138
2000	38	118
2500	42	104
3000	47	93
k1	0.787	-
k2	0.00120	-

The RG316 loss chart gives common frequency and loss characteristics. RG316 attenuation is lower than other options in this category due to the large size of its conductor.

RG316, like RG393 and many other Mil Spec coaxial cables, has excellent power handling capabilities due to the high thermal conductivity.

The information contained in this document is accurate to the best of our knowledge and representative of the part described here. Unless otherwise state, all specifications are nominal.

RG 316 Coaxial Cable Mechanical Specifications

Inner Conductor:

Material:	Silver Covered Copper Clad Steel
Strand Count:	7
Strand Size:	0.0067
Diameter, in:	0.0201

Dielectric:

Material:	Solid PTFE
Diameter, in:	0.060

Outer Conductor:

Material:	Silver Plated Copper Braid
Diameter, in:	0.078

Jacket:

Material:	Fluorinated Ethylene Copper Type IX per MIL-C-17
Diameter, in:	0.098

RG 316 Coaxial Cable CAD Drawing

