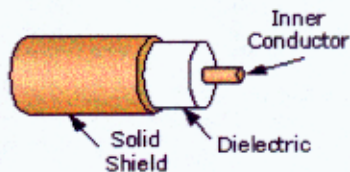


Most often used braided flexible (shown at left) and solid tube semi-rigid (shown at right) types are listed here.



Click [here](#) for popular coax cable properties.

$$\text{Capacitance (C)} = \frac{7.36 * \epsilon}{\log\left(\frac{D}{d}\right)} \frac{\text{pf}}{\text{ft}}$$

$$\text{Inductance (L)} = 0.140 * \log\left(\frac{D}{d}\right) \frac{\mu\text{H}}{\text{ft}}$$

$$\text{Impedance (Z}_0) = \sqrt{\frac{L}{C}} = \frac{138}{\sqrt{\epsilon}} * \log\left(\frac{D}{d}\right) \Omega$$

$$\text{Velocity} = \frac{100}{\sqrt{\epsilon}} \%c \text{ (speed of light in vacuum)}$$

$$\text{Time Delay} = 1.016 * \sqrt{\epsilon} \frac{\text{ns}}{\text{ft}}$$

$$\text{Cutoff Frequency} = \frac{7.50}{\sqrt{\epsilon} * (D + d)} \text{ GHz}$$

$$\text{Reflection Coefficient } \Gamma = \frac{Z_r - Z_0}{Z_r + Z_0} = \frac{\text{VSWR} - 1}{\text{VSWR} + 1}$$

$$\text{VSWR} = \frac{1 + \Gamma}{1 - \Gamma}$$

$$\text{Peak Voltage} = \frac{1150 * S * d * \log\left(\frac{D}{d}\right)}{K} \text{ Volts}$$

d = outside diameter of inner conductor in inches

D = inside diameter of outer conductor in inches

S = maximum voltage gradient of cable insulation in volts/mil

where

? = dielectric constant

K = safety factor

f = frequency in MHz