

Reference Data and Application Notes

Useful Design Equations, Materials Properties, Abbreviation Key and Critical Characteristics to Consider when Selecting or Designing Coaxial Cables

α = Attenuation in dB/100 feet
 ϵ = Dielectric constant
 Γ = Reflection coefficient
 ϕ = Electrical length
 C = capacitance
 L = Inductance
 Z_0 = Impedance
 V_p = Velocity of propagation
 df = Dissipation factor
 T_d = Time delay
 F = Frequency
 PTC = Phase temperature coefficient
 ΔT = Change in temperature (t2 to t1)
 LTH = Length
 $\Delta\phi$ = Change in electrical length (t1 to t2)
 D = dielectric diameter
 ds = Braid wire size
 F_{bc} = Braid factor
 N = Braid carrier
 t = Braid wire thickness
 w = Flat strip width
 SRL = Return loss
 $VSWR$ = Voltage standing wave ratio

degrees
pF/foot
uH/foot
ohms
%
nS/foot
MHz
ppm/C
C
feet
degrees
inches
inches
inches
dB
dB