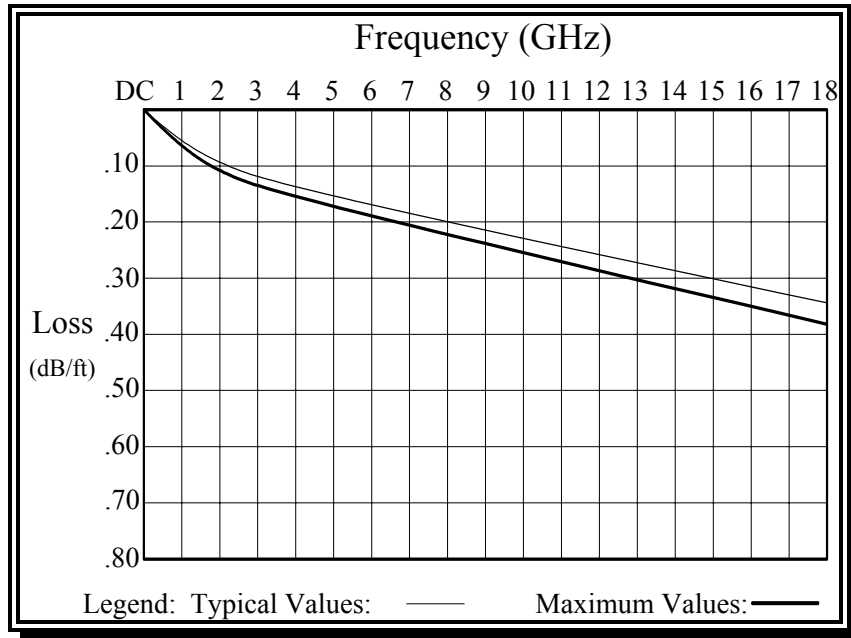


## FC242 Flexible Coaxial Cable 18 GHz Cable

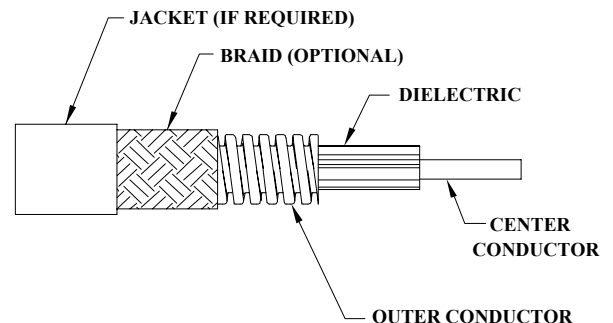
### Frequency vs. Attenuation



**Electrical Characteristics:**

- Nominal Impedance: 50Ω
  - Velocity of Propagation: 80%
  - Effective Dielectric Constant: 1.56
  - Time Delay: 1.27 ns/ft
  - Shielding Effectiveness: -90 dBc min.
  - Dielectric Withstanding Voltage: 5.0 KV  
(@ 60 Hz, Sea Level/25°C)
  - Nominal Capacitance: 28 pF/ft
  - Maximum VSWR:
    - Precision Straight connectors:
      - DC - <4 GHz 1.10:1
      - 4 GHz - <8 GHz 1.15:1
      - 8 GHz - 18 GHz 1.25:1
    - Non-Precision or Angle connectors:
      - DC - <4 GHz 1.20:1
      - 4 GHz - <8 GHz 1.30:1
      - 8 GHz - 18 GHz 1.40:1
  - Maximum Frequency: 18 GHz
- For phase and other electrical characteristics, please consult the appropriate section of catalog.

Frequency (GHz)	Maximum Insertion Loss (dB/ft)	Typical Insertion Loss (dB/ft)	Loss per precision connector (dB)	Loss per non precision or angle connect. (dB)
0.5	0.05	0.04	0.02	0.03
1.0	0.07	0.06	0.02	0.03
2.0	0.11	0.10	0.03	0.05
3.0	0.12	0.11	0.04	0.06
4.0	0.16	0.15	0.04	0.06
5.0	0.18	0.17	0.05	0.08
6.0	0.20	0.19	0.06	0.09
7.0	0.21	0.20	0.06	0.09
8.0	0.23	0.22	0.07	0.11
9.0	0.25	0.24	0.07	0.11
10.0	0.27	0.26	0.08	0.12
11.0	0.28	0.27	0.08	0.12
12.0	0.30	0.29	0.08	0.12
13.0	0.32	0.30	0.09	0.14
14.0	0.33	0.31	0.09	0.14
15.0	0.34	0.32	0.10	0.15
16.0	0.35	0.34	0.10	0.15
17.0	0.37	0.35	0.11	0.17
18.0	0.38	0.36	0.11	0.17



**Physical Characteristics:**

- Center Conductor: Solid SPC per ASTM-B298
- Dielectric: PTFE per ASTM D4895
- Outer Conductor: Strip wound oxygen free Copper per UNS C10200, 0.335" max. O.D.
- Minimum Internal Bend Radius: 1.0 inches
- Operating Temperature: -60°C to +175°C
- Weight per Foot (unjacketed): 0.088 lbs

**Optional Jacketing and Braid:**

- Polyolefin per AMS-DTL-23053/5: 0.375" max. O.D.
  - Neoprene per AMS-DTL-23053/1: 0.410" max. O.D.
  - FEP per AMS-DTL-23053/11: 0.360" max. O.D.
  - Braid: Bronze per UNS C22000, 0.375" max. O.D.
- Others available, please consult factory.