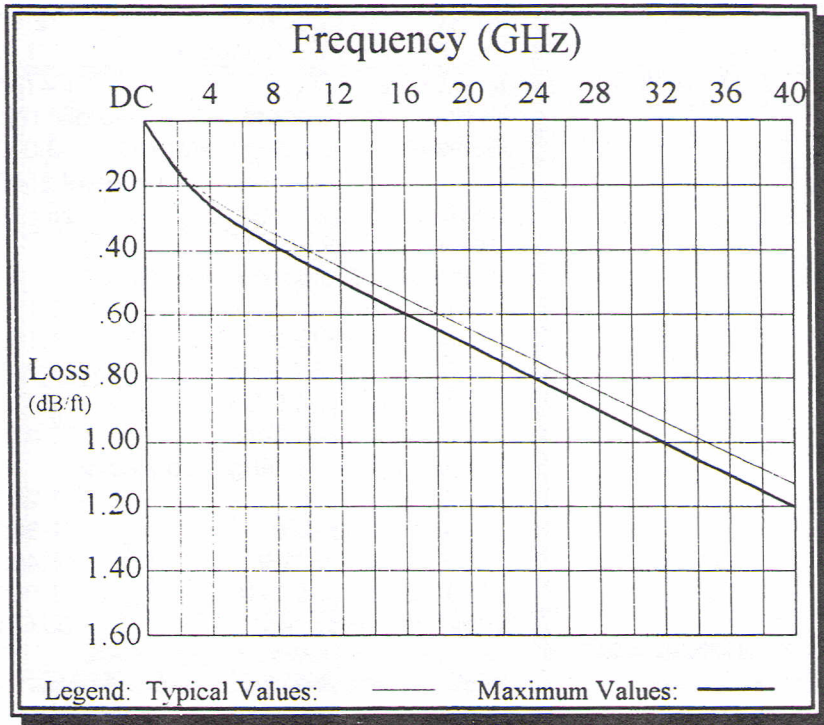




FC182 Flexible Coaxial Cable 40 GHz Cable

Frequency vs. Attenuation



Electrical Characteristics:

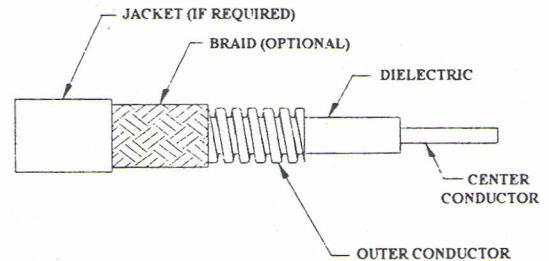
Nominal Impedance: 50Ω
 Velocity of Propagation: 69%
 Effective Dielectric Constant: 2.10
 Time Delay: 1.47 ns/ft
 Shielding Effectiveness: -90 dBc min.
 Dielectric Withstanding Voltage: 5.0 KV
 (@ 60 Hz, Sea Level/25°C)
 Nominal Capacitance: 29 pF/ft

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
 18 GHz - < 26.5 GHz 1.35:1
 26.5 GHz - 40 GHz 1.40:1

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
 18 GHz - 26.5 GHz 1.50:1

Maximum Frequency: 50 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)	Precision Connector Loss (dB)	Non Precision Connector Loss (dB)
0.5	0.08	0.07	0.02	0.03
1.0	0.12	0.11	0.02	0.03
2.0	0.18	0.17	0.03	0.05
4.0	0.26	0.24	0.04	0.06
6.0	0.34	0.32	0.06	0.09
8.0	0.40	0.38	0.07	0.11
10.0	0.46	0.44	0.08	0.12
12.0	0.51	0.48	0.08	0.12
14.0	0.56	0.53	0.09	0.14
16.0	0.60	0.57	0.10	0.15
18.0	0.65	0.62	0.11	0.17
20.0	0.70	0.66	0.12	0.19
22.0	0.75	0.71	0.13	0.23
24.0	0.80	0.76	0.14	0.26
26.0	0.83	0.78	0.15	0.30
28.0	0.90	0.85	0.16	
30.0	0.95	0.90	0.16	
32.0	1.00	0.95	0.17	
34.0	1.06	1.00	0.18	
36.0	1.10	1.04	0.19	
38.0	1.15	1.10	0.20	
40.0	1.20	1.14	0.20	



Physical Characteristics:

Center Conductor: Solid SPC per ASTM-B298
 Dielectric: PTFE per L-P-403
 Outer Conductor: Strip wound oxygen free copper
 Minimum Internal Bend Radius: 0.5 inches
 Operating Temperature: -60°C to +175°C
 Weight per Foot (unjacketed): 0.035 lbs
 Connector Interface: Per MIL-C-39012

Optional Jacketing and Braid:

Polyolefin per MIL-I-23053/5: 0.250" max. O.D.
 Neoprene per MIL-I-23053/1: 0.285" max. O.D.
 FEP per MIL-I-23053/11: 0.240" max. O.D.
 Braid: Bronze per UNS C22000, 0.250" max. O.D.
 Others available, please consult factory.