



**Cable Construction**

- A. Center Conductor: 0.037 +/- .001" Solid Silver Plated Copper Clad Steel
- B. Dielectric: 0.117 +/- .003" Natural PTFE
- C. First Shield: 0.128 nominal Silver Plated Copper Strip (93% coverage)
- D. Interlayer: 0.133 nominal Metallized Composite Polyimide Tape
- E. Second Shield: 0.161 max 36 Ga Silver Plated Copper (89% coverage)
- F. Jacket: 0.195 +/- .005" Fluorinated Ethylene Propylene

**Mechanical Characteristics**

- Diameter 0.200" max
- Minimum Bend Radius (Static) 1.0" inches
- Operating Temperature -55 to +200 degrees C
- Weight 44.0 Lbs/1000 Ft

**Electrical Characteristics**

- Maximum Frequency 34.0 GHz
- Characteristic Impedance 50 Ohms +/-2
- Velocity of Propagation 69.4% nominal
- Capacitance 29.4 pf/ft nominal
- Delay 1.45 nsec/ft nominal
- Shielding -90 dB minimum
- Insertion Loss See Chart

$K1 = 0.348 \times \text{Sqrt Frequency (MHz)}$   
 $K2 = 0.00120 \times \text{Frequency (MHz)}$

dB/Ft	Frequency
0.036	100 MHz
0.074	400 MHz
0.122	1.0 GHz
0.470	10.0 GHz
0.630	16.0 GHz
0.760	21.0 GHz

Marking: Cable is identified with a polyimide tape under jacket  
 "68999 TIMES MICROWAVE SYSTEMS"  
 All tests are performed in accordance with Mil-C-17 (latest revision)  
 unless otherwise specified.

Drawn By: E. Pallanti Date: April 23, 2004 Revision: E Unless specified all dimensions are in inches.	<b>TIMES MICROWAVE SYSTEMS</b> Wallingford, CT. 06492-5039 CAGE 68999
	<b>SF-142B</b>
	Drawing Number <b>AA 2423</b>
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