CABLE CONSTRUCTION

1. Fluoropolymer Jacket (Blue)
2. Silver-Plated Copper Braided Shield
3. Silver-Plated Copper Spiral Shield
4. PTFE Dielectric
5. Silver-Plated Copper Clad Steel Conductor

This cable is a flexible equivalent of RG405 semi-rigid coax. It employs dual shielding, the inner spiral shield providing a close-conforming shield similar to that of a semi-rigid tubing.

Compared to RG405, S40501 has comparable attenuation figures and a considerably higher temperature rating. Impedance is precisely controlled for low VSWR’s.

A fluoropolymer jacket insulates and protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

It is Skydrol resistant, RoHS compliant and meets the FAA flammability requirements of FAR Part 23 and 25, Appendix F; complies with MIL-C-17 as applicable.

PHYSICAL DATA

- Conductor: 24 AWG Solid SPCCS
- Operating Temperature: -55° to +200°C
- Outer Diameter: in (mm) 0.10 (2.54)
- Minimum Bend Radius: in (mm) 0.63 (16.00)
- Weight: lbs/100 ft (kg/100 m) 1.4 (2.1)

ELECTRICAL DATA

- Impedance: ohms 50
- Capacitance: pF/ft (m) 29.4 (96.5)
- Velocity of Propagation: % 70.0
- Time Delay: ns/ft (m) 1.45 (4.76)
- RF Shielding Effectiveness: dB/min -110
- DC Resistance: ohms/1000 ft (m) 24.2 (79.4)
- Attenuation: Nom / Max dB/100 ft (dB/100 m)
  - @400 MHz 12.1 / 13.3 (39.7 / 43.6)
  - @1.0 GHz 19.4 / 21.4 (63.6 / 70.2)
  - @1.6 GHz 24.8 / 27.4 (81.4 / 89.9)
  - @5.0 GHz 45.7 / 50.3 (149.9 / 165.0)

- K Values (nom loss): K1 = 0.589, K2 = 0.00081
- Formula for Attenuation: \( K1 \cdot \sqrt{F(MHz)} + (K2 \cdot F(MHz)) \)

All values nominal unless otherwise noted