PIC S65161-A

VERY LIGHT WEIGHT LOW LOSS 50 OHM COAXIAL CABLE

CABLE CONSTRUCTION

1. ETFE Jacket (White) Laser Markable
2. Round Silver Plated Copper
3. Silver-Plated Copper Spiral Shield
4. PTFE Dielectric
5. Stranded Silver-Plated Copper

This is a flexible, unusually lightweight cable with electrical characteristics comparable to RG393, yet weighs less than 25%. It is half the diameter (and thus far more flexible), laser-markable, easier to terminate, and easily assembled in the field.

S65161-A is 100% shielded construction, incorporating both silver-plated copper spiral (inner) and braided (outer) shields. The inner spiral shield conforms to the low-loss expanded PTFE dielectric for superior uniformity and stability of all operating parameters, initially and over time.

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: 16 AWG Stranded SPC
- Operating Temperature: -65° to +200°C
- Outer Diameter: in (mm) 0.20 (4.95)
- Minimum Bend Radius: in (mm) 1.00 (25.40)
- Weight: lbs/100 ft (kg/100 m) 3.5 (5.2)

ELECTRICAL DATA

- Impedance: ohms 50
- Capacitance: pF/ft (m) 26.0 (85.3)
- Velocity of Propagation: % 83.0
- Time Delay: ns/ft (m) 1.23 (4.04)
- RF Shielding Effectiveness: dB/min -110
- DC Resistance: ohms/1000 ft (m) 3.9 (12.8)
- Attenuation: Nom / Max dB/100 ft (dB/100 m)
  - @400 MHz 5.1 / 5.6 (16.7 / 18.4)
  - @1.0 GHz 8.2 / 9.1 (26.9 / 29.9)
  - @1.6 GHz 10.5 / 11.6 (34.4 / 38.1)
  - @5.0 GHz 19.2 / 21.1 (63.0 / 69.2)
- K Values (max loss): K1 = 8.72, K2 = 0.33
- Formula for Attenuation: \( K1 \times F(\text{GHz}) + K2 \times F(\text{GHz}) \)

All values nominal unless otherwise noted
## PIC S65161-A Connectors

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<th>PIC P/N</th>
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<td>SMA Straight Plug</td>
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<td>600 Size 1</td>
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<td>SMA 90° Plug</td>
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<td>600 Modified Size 1</td>
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<td>404/600 Size 5</td>
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Die Sets Available On Loan Or For Purchase From PIC
Refer To Connector Drawing For Tooling

Call PIC For Availability

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