PIC Wire & Cable is a division of The Angelus Corporation, a leading provider of aerospace and defense industry solutions.

ISO 9001 • AS9100 • FAA PMA Certified

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phone 1.262.246.0500  toll free 1.800.742.3191

PIC UH22089
ULTRALITE 50 OHM COAXIAL CABLE

CABLE CONSTRUCTION

1. SPCCA Center Conductor
2. PTFE Dielectric
3. SPC Spiral Shield
4. SPCCA Braided Shield
5. ETFE Jacket (White) Laser Markable

This ultra lightweight and flexible cable has a silver-plated copper clad aluminum (SPCCA) center conductor and braided shield. Our next generation of light weight cable is more than 30% lighter than cables of similar size and 60% lighter than S22089. It is laser-markable, easy to terminate, and easily assembled in the field.

UH22089 is 100% shielded construction, incorporating a flat spiral wrapped shield which achieves -110 dB shielding effectiveness, same as a solid copper tube. The inner spiral shield conforms to the low-loss 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 14 CFR Part 25.869 (a)(4) Amdt 25-113 Appendix F Part 1 (a)(3); complies with MIL-C-17 as applicable.

PHYSICAL DATA

• Conductor: 10 AWG Solid SPCCA
• Operating Temperature: -65° to +150°C
• Maximum Temperature: -65° to +200°C
• Outer Diameter: in (mm) 0.345 (8.76)
• Minimum Bend Radius: in (mm) 1.70 (43.18)
• Weight: lbs/100 ft (kg/100 m) 7.2 (10.7)

ELECTRICAL DATA

• Impedance: ohms 50
• Capacitance: pF/ft (m) 24.0 (78.7)
• Velocity of Propagation: % 83
• Time Delay: ns/ft (m) 1.22 (4.00)
• RF Shielding Effectiveness: dB/min -110
• DC Resistance: ohms/1000 ft (m) 2.00 (6.56)
• Attenuation: Nom / Max dB/100 ft (dB/100 m)
  - @400 MHz 2.2 / 2.4 (7.2 / 7.9)
  - @1.0 GHz 3.5 / 3.9 (11.5 / 12.8)
  - @1.6 GHz 4.4 / 4.9 (14.4 / 16.1)
  - @5.0 GHz 8.1 / 9.0 (26.6 / 29.5)
• K Values (nom loss): K1 = 3.31, K2 = 0.135
• Formula for Attenuation: \((K1 \times \sqrt{F(\text{GHz})}) + (K2 \times F(\text{GHz}))\)

All values nominal unless otherwise noted
### ARINC

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### M39012

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