

CABLE CONSTRUCTION

1. SPCCS 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) braided shield. Our next generation of light weight cable is more than 30% lighter than cables of similar size and 56% lighter & significantly lower loss than RG400/142. It is laser-markable, easy to terminate, and easily assembled in the field.

UH44193 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.

PIC  **RF MATES® ULTRALITE**



PHYSICAL DATA

• Conductor	19 AWG Solid SPCCS
• Operating Temperature	-65° to +150°C
• Maximum Temperature	-65° to +200°C
• Outer Diameter: in (mm)	0.152 (3.86)
• Minimum Bend Radius: in (mm)	0.80 (20.32)
• Weight: lbs/100 ft (kg/100 m)	1.9 (2.9)

ELECTRICAL DATA

• Impedance: ohms	50
• Capacitance: pF/ft (m)	25.0 (82.1)
• Velocity of Propagation: %	81
• Time Delay: ns/ft (m)	1.25 (4.10)
• RF Shielding Effectiveness: dB/min	-110
• DC Resistance: ohms/1000 ft (m)	19.1 (62.7)
• Attenuation: Nom / Max	dB/100 ft (dB/100 m)
• @400 MHz	6.5 / 7.3 (21.3 / 23.9)
• @1.0 GHz	10.4 / 11.6 (34.1 / 38.1)
• @1.6 GHz	13.3 / 14.8 (43.6 / 48.6)
• @5.0 GHz	24.3 / 27.0 (79.7 / 88.6)
• K Values (nom loss):	K1 = 10.07, K2 = 0.342
• Formula for Attenuation:	$(K1 * \sqrt{F(GHz)}) + (K2 * F(GHz))$

All values nominal unless otherwise noted

PIC P/N **CONNECTOR TYPE**

ARINC

150101	600 Size 1
150102	600 Modified Size 1
150103	600 Size 5
150129	Size 8 Socket

D-SUB

150163	Size 8 Pin
150164	Size 8 Socket

M39029 for MIL-C-38999 Connector

150138	Size 8 Pin
150139	Size 8 Socket

Special Purpose

150120	Avionics Coaxial Socket
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M39012

PIC P/N	CONNECTOR TYPE	PIC P/N	CONNECTOR TYPE
150112	BNC Straight Plug	150110	N Straight Plug
150113	BNC 90° Plug	150111	N 90° Plug
150113-L	BNC 90° Plug (Long)	150122	N Bulkhead Jack
150128	BNC Bulkhead Jack	150114	SMA Straight Plug
150106	C Straight Plug	150115	SMA 90° Plug
150107	C 90° Plug	150108	TNC Straight Plug
		150109	TNC 90° Plug
		150121	TNC Bulkhead Jack

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