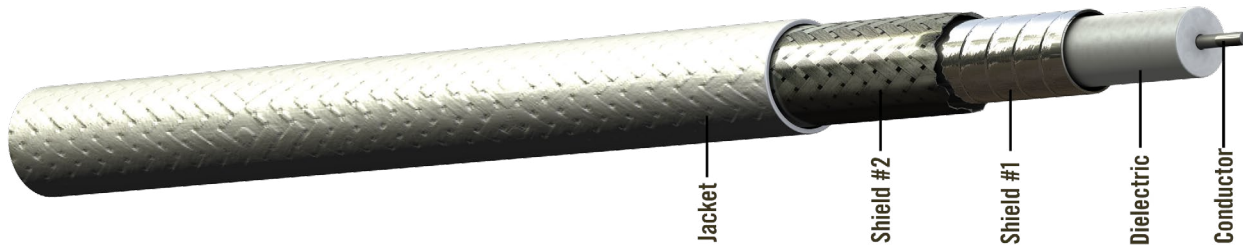


UH44193



CABLE CONSTRUCTION

Conductor: Silver-Plated Copper-Clad Steel

Dielectric: PTFE

Shield #1: Silver-Plated Copper Flat Spiral Wrap

Shield #2: Silver-Plated Copper-Clad Aluminum Braid

Jacket: Extruded ETFE, White (Laser Markable)

UH44193 is an UltraLite 50 Ohm premium coaxial cable for proven performance in the aerospace and defense markets. The UH44193 cable is constructed with low loss and ultra-lightweight materials to provide an extremely lightweight and low loss coaxial cable. With a silver-plated copper clad aluminum (SPCCA) braided shield and a flat spiral wrapped shield, The UH44193 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. Due to its construction, the UH44193 is more than 30% lighter than cables of similar size and 56% lighter & significantly lower loss than RG400/142.

PHYSICAL DATA

Conductor:	19 AWG Solid SPCCS
Temperature Range:	-65 to +150°C
Outer Diameter: in (mm)	0.155 (3.94)
Minimum Bend Radius: in (mm)	0.8 (20.32)
Weight: lbs/100 ft (kg/100 m)	1.9 (2.8)

ENVIRONMENTAL DATA

Skydrol Resistant:	SAE AS4373E, Method 601
RoHS Compliant:	RoHS Directive 2002/95/EC
Flame / Smoke Requirements:	FAR Part 25.869 (a) App. F, Part 1, (a)(3)
Berry Specialty Metals Compliance:	DFARS 252.225-7014, Alt 1

ELECTRICAL DATA

Impedance:	50 ohms
Capacitance: pF/ft (m)	27 (88.6)
Velocity of Propagation:	77%
Time Delay: ns/ft (m)	1.32 (4.33)
Shielding Effectiveness: dB/min	-110
DC Resistance: ohms/1000 ft (m)	19.1 (62.7)

ATTENUATION DATA

Frequency	Nom / Max dB/100 ft	Nom / Max (dB/100 m)
@0.4 GHz	6.5/7.3	(21.3/24.0)
@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)

Formula for Attenuation:
 $(K1 \times \sqrt{F(\text{MHz})}) + (K2 \times F(\text{MHz}))$

K Values (nom loss):
 K1 = 0.318 K2 = 0.000342

All values nominal, unless otherwise noted

UH44193
ULTRALITE COAXIAL CABLE

CONTACTS/CONNECTORS FOR UH44193

ARINC CONTACTS

PART #	CONTACT TYPE
150101	600 Size 5 1 Socket
150102	600 Modified Size 1 Socket
150103	600 Size 5 Socket
150129	Size 8 Socket

D-SUB CONTACTS

PART #	CONTACT TYPE
150163	Size 8 Pin
150164	Size 8 Socket

M39029 FOR MIL-C-38999 CONTACTS

PART #	CONTACT TYPE
150138	Size 8 Pin
150139	Size 8 Socket

SPECIAL PURPOSE

PART #	CONTACT TYPE
150120	Rockwell ProLine Avionics Coaxial Socket

M39012 CONNECTORS

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