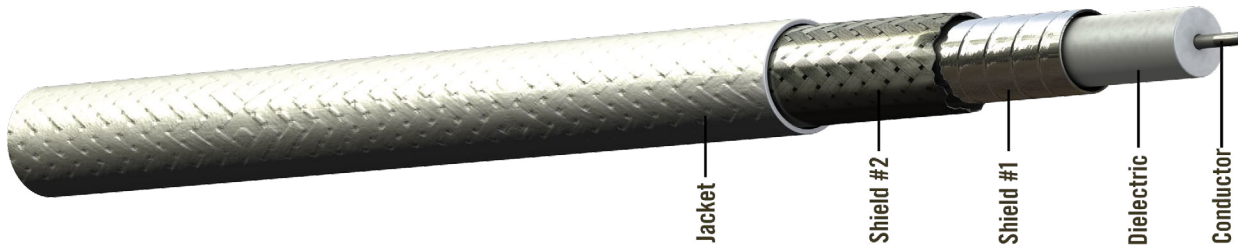


UH25107



CABLE CONSTRUCTION

Conductor: Silver-Plated Copper-Clad Aluminum
Dielectric: PTFE
Shield #1: Silver-Plated Copper Flat Spiral Wrap

Shield #2: Silver-Plated Copper-Clad Aluminum Braid
Jacket: Extruded ETFE, White (Laser Markable)

UH25107 is an UltraLite 50 Ohm premium coaxial cable for proven performance in the aerospace and defense markets. The UH25107 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 UH25107 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 UH25107 cable can save 60% or more in cable weight compared to traditional RG cable.

PHYSICAL DATA

Conductor: 8 AWG Solid SPCCA
Temperature Range: -65 to +150°C
Outer Diameter: in (mm) 0.445 (11.3)
Minimum Bend Radius: in (mm) 2.5 (63.5)
Weight: lbs/100 ft (kg/100 m) 12 (17.9)

ELECTRICAL DATA

Impedance: 50 ohms
Capacitance: pF/ft (m) 25 (82)
Velocity of Propagation: 82%
Time Delay: ns/ft (m) 1.22 (4)
Shielding Effectiveness: dB/min -110
DC Resistance: ohms/1000 ft (m) 1.1 (3.6)

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

ATTENUATION DATA

Frequency	Nom / Max dB/100 ft	Nom / Max (dB/100 m)
@0.4 GHz	1.7/1.9	(5.6/6.2)
@1.0 GHz	2.8/3.1	(9.2/10.2)
@1.6 GHz	3.6/4.0	(11.8/13.1)
@5.0 GHz	7.0/7.8	(23.0/25.6)

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

K Values (nom loss):
 K1 = 0.079 K2 = 0.00029

All values nominal, unless otherwise noted

UH25107
ULTRALITE COAXIAL CABLE

CONTACTS/CONNECTORS FOR UH25107

ARINC CONTACTS

PART #	CONTACT TYPE
190401	600 Size 5 1 Socket
190402	600 Modified Size 1 Socket

M39012 CONNECTORS

PART #	CONNECTOR TYPE
190412	BNC Straight Plug
190413	BNC 90° Plug
190406	C Straight Plug
190407	C 90° Plug
190410	N Straight Plug
190411	N 90° Plug
190422	N Bulkhead Jack
190424	N Inline Jack
190408	TNC Straight Plug
190409	TNC 90° Plug
190421	TNC Bulkhead Jack
190423	TNC Inline Jack