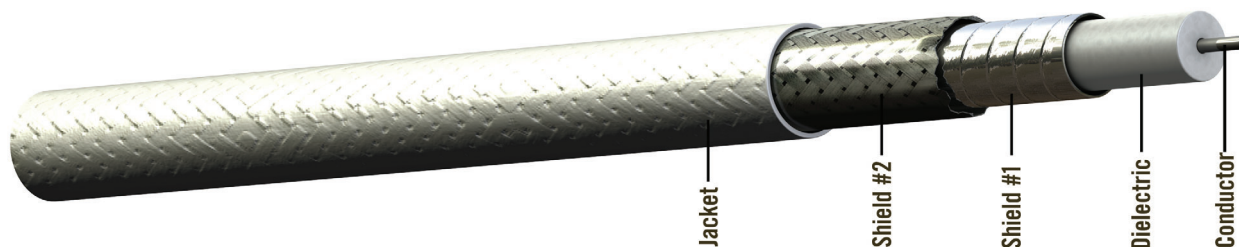


# UH22089



## 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)

UH22089 is an UltraLite 50 Ohm premium coaxial cable for proven performance in the aerospace and defense markets. The UH22089 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 UH22089 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.

## PHYSICAL DATA

<b>Conductor:</b>	10 AWG Solid SPCCA
<b>Operating Temperature:</b>	-65 to +150°C
<b>Outer Diameter:</b> in (mm)	0.345 (8.76)
<b>Minimum Bend Radius:</b> in (mm)	1.7 (43.18)
<b>Weight:</b> lbs/100 ft (kg/100 m)	7.2 (10.7)

## ELECTRICAL DATA

<b>Impedance:</b>	50 ohms
<b>Capacitance:</b> pF/ft (m)	24 (78.7)
<b>Velocity of Propagation:</b>	83%
<b>Time Delay:</b> ns/ft (m)	1.22 (4)
<b>Shielding Effectiveness:</b> dB/min	-110
<b>DC Resistance:</b> ohms/1000 ft (m)	2 (6.6)

## ENVIRONMENTAL DATA

**Skydrol Resistant:** YES, SAE AS4373E, Method 601  
**RoHS Compliant:** YES, 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	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)

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

**K Values (nom loss):**  
 K1 = 0.105    K2 = 0.000135

*All values nominal, unless otherwise noted*

UH22089  
ULTRALITE COAXIAL CABLE

# CONTACTS/CONNECTORS FOR UH22089

## ARINC CONTACTS

PART #	CONTACT TYPE
150401	600 Size 1 Socket
150402	600 Modified Size 1 Socket

## M39012 CONNECTORS

PART #	CONNECTOR TYPE
150412	BNC Straight Plug
150413	BNC 90° Plug
150406	C Straight Plug
150407	C 90° Plug
150410	N Straight Plug
150411	N 90° Plug
150422	N Bulkhead Jack
150414	SMA Straight Plug
150415	SMA 90° Plug
150408	TNC Straight Plug
150409	TNC 90° Plug
150409-L	TNC 90° Plug (long)
150421	TNC Bulkhead Jack