

## 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.

**PIC**  **RF MATES® ULTRALITE**



## 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:	$(K1 * \sqrt{F(GHz)}) + (K2 * F(GHz))$	

*All values nominal unless otherwise noted*

**PIC P/N**                      **CONNECTOR TYPE**

**ARINC**

<b>150401</b>	<b>600 Size 1</b>
<b>150402</b>	<b>600 Modified Size 1</b>

**M39012**

<b>PIC P/N</b>	<b>CONNECTOR TYPE</b>	<b>PIC P/N</b>	<b>CONNECTOR TYPE</b>
<b>150412</b>	<b>BNC Straight Plug</b>	<b>150414</b>	<b>SMA Straight Plug</b>
<b>150413</b>	<b>BNC 90° Plug</b>	<b>150415</b>	<b>SMA 90° Plug</b>
<b>150406</b>	<b>C Straight Plug</b>	<b>150408</b>	<b>TNC Straight Plug</b>
<b>150407</b>	<b>C 90° Plug</b>	<b>150409</b>	<b>TNC 90° Plug</b>
<b>150410</b>	<b>N Straight Plug</b>	<b>150409-L</b>	<b>TNC 90° Plug (Long)</b>
<b>150411</b>	<b>N 90° Plug</b>	<b>150421</b>	<b>TNC Bulkhead Jack</b>
<b>150422</b>	<b>N Bulkhead Jack</b>		

*Die Sets Available On Loan Or For Purchase From PIC  
Refer To Connector Drawing For Tooling  
**Call PIC For Availability***