

## 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 80% lighter & lower loss than RG393. It is laser-markable, easy to terminate, and easily assembled in the field.

UH67163 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**<sup>®</sup> ULTRALITE



## PHYSICAL DATA

- Conductor 14 AWG Solid SPCCA
- Operating Temperature -65° to +150°C
- Maximum Temperature -65° to +200°C
- Outer Diameter: in (mm) 0.227 (5.77)
- Minimum Bend Radius: in (mm) 1.20 (30.48)
- Weight: lbs/100 ft (kg/100 m) 3.4 (5.1)

## ELECTRICAL DATA

- Impedance: ohms 50
- Capacitance: pF/ft (m) 24.0 (78.7)
- Velocity of Propagation: % 84
- Time Delay: ns/ft (m) 1.21 (3.97)
- RF Shielding Effectiveness: dB/min -110
- DC Resistance: ohms/1000 ft (m) 4.10 (13.46)
- Attenuation: Nom / Max dB/100 ft (dB/100 m)
  - @400 MHz 3.9 / 4.3 (12.8 / 14.1)
  - @1.0 GHz 6.2 / 6.8 (20.3 / 22.3)
  - @1.6 GHz 7.9 / 8.7 (25.9 / 28.5)
  - @5.0 GHz 14.3 / 15.9 (46.9 / 52.2)
- K Values (nom loss): K1 = 5.90, K2 = 0.216
- Formula for Attenuation:  $(K1 * \sqrt{F(GHz)}) + (K2 * F(GHz))$

*All values nominal unless otherwise noted*

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

**ARINC**

<b>150501</b>	<b>600 Size 1</b>
<b>150502</b>	<b>600 Modified Size 1</b>
<b>150503</b>	<b>600 Size 5</b>

**M39029 for MIL-C-38999 Connector**

<b>150538</b>	<b>Size 8 Pin</b>
<b>150539</b>	<b>Size 8 Socket</b>

**M39012**

<b>PIC P/N</b>	<b>CONNECTOR TYPE</b>	<b>PIC P/N</b>	<b>CONNECTOR TYPE</b>
<b>150512</b>	<b>BNC Straight Plug</b>	<b>150549</b>	<b>QMA Straight Plug</b>
<b>150513</b>	<b>BNC 90° Plug</b>	<b>150550</b>	<b>QMA 90° Plug</b>
<b>150504</b>	<b>HN Straight Plug</b>	<b>150514</b>	<b>SMA Straight Plug</b>
<b>150505</b>	<b>HN 90° Plug</b>	<b>150515</b>	<b>SMA 90° Plug</b>
<b>150510</b>	<b>N Straight Plug</b>	<b>150525</b>	<b>SMA Inline Jack</b>
<b>150511</b>	<b>N 90° Plug</b>	<b>150508</b>	<b>TNC Straight Plug</b>
<b>150522</b>	<b>N Bulkhead Jack</b>	<b>150509</b>	<b>TNC 90° Plug</b>
<b>150569</b>	<b>SC Straight Plug</b>	<b>150509-L</b>	<b>TNC 90° Plug (Long)</b>
		<b>150521</b>	<b>TNC Bulkhead Jack</b>
		<b>150523</b>	<b>TNC Inline Jack</b>

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