

CABLE CONSTRUCTION

1. FEP Jacket (Clear)
2. Silver-Plated Copper Shield
3. Aluminum / Polyimide Shield
4. Silver-Plated Copper Flat Strip Braid
5. PTFE Dielectric
6. Silver-Plated Copper Conductor



This cable is particularly suitable for GPS, TCAS, Mode-S, MLS and SATCOM installations.

This special coaxial design incorporates a multi-layered shielding technique that combines conventional shields with an inner shield woven of flat strips of silver plated copper. This “unitized” shield reduces attenuation at frequencies over 1 GHz when compared to round wire braids in standard coaxial cables.

Additionally, the cable VSWR is lower because the braids can be applied more uniformly. The attenuation and VSWR variation due to aging and flexure is substantially less.

It is Skydrol resistant, RoHS compliant and meets the FAA flammability requirements of FAR Part 23 and 25, Appendix F; complies with MIL-C-17 as applicable.

PHYSICAL DATA

• Conductor	12 AWG Stranded SPC
• Operating Temperature	-55 to +200°C
• Outer Diameter: in (mm)	0.31 (7.87)
• Minimum Bend Radius: in (mm)	1.55 (39.37)
• Weight: lbs/100 ft (kg/100 m)	8.3 (12.4)

ELECTRICAL DATA

• Impedance: ohms	50
• Capacitance: pF/ft (m)	24.0 (78.7)
• Velocity of Propagation: %	84.5
• Time Delay: ns/ft (m)	1.21 (3.97)
• RF Shielding Effectiveness: dB/min	-90
• DC Resistance: ohms/1000 ft (m)	1.6 (5.3)
• Attenuation: Nom / Max	dB/100 ft (dB/100 m)
• @400 MHz	3.2 / 3.5 (10.5 / 11.5)
• @1.0 GHz	5.1 / 5.6 (16.7 / 18.4)
• @1.6 GHz	6.5 / 7.2 (21.3 / 23.6)
• @5.0 GHz	12.0 / 13.2 (39.4 / 43.3)
• K Values (nom loss):	K1 = 0.155, K2 = 0.000199
• Formula for Attenuation:	$(K1 * \sqrt{F(MHz)}) + (K2 * F(MHz))$

All values nominal unless otherwise noted



PIC P/N **CONNECTOR TYPE**

ARINC

190619	404 Size 1
190601	600 Size 1
190602	600 Modified Size 1

M39012

PIC P/N	CONNECTOR TYPE	PIC P/N	CONNECTOR TYPE
190612	BNC Straight Plug	190614	SMA Straight Plug
190613	BNC 90° Plug	190615	SMA 90° Plug
190627	BNC Inline Jack	190625	SMA Inline Jack
190606	C Straight Plug	190608	TNC Straight Plug
190607	C 90° Plug	190609	TNC 90° Plug
190604	HN Straight Plug	190631	TNC 75° Plug
190605	HN 90° Plug	190623	TNC Inline Jack
190610	N Straight Plug	190621	TNC Bulkhead Jack
190611	N 90° Plug		
190624	N Inline Jack		
190622	N Bulkhead Jack		



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