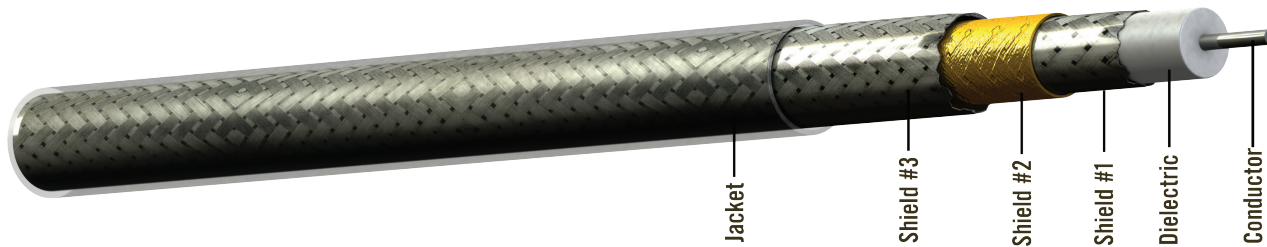


S67163



CABLE CONSTRUCTION

Conductor: Silver-Plated Copper

Dielectric: PTFE

Shield #1: Silver-Plated Copper Flat Strip Braid

Shield #2: Aluminum/Polyimide Foil

Shield #3: Silver-Plated Copper Braid

Jacket: Extruded FEP, Clear

S67163 is a 50 Ohm coaxial cable and the industry's workhorse, with decades of proven performance in the aerospace and defense markets. The construction of the S67163 features a multi-layered shielding that combines conventional shields with an inner braid woven of flat strip of silver plated copper which reduces attenuation at frequencies over 1GHz when compared to round wire braids in standard coaxial cable. The cable VSWR is lower because the braids can be applied more uniformly, providing more uniform coverage and reducing attenuation due to aging and flexure. When compared to Mil-Spec coax cable, the S67163 cable is approximately half the weight when compared to RG393 and less than one third the weight of RG214 coax cable.

PHYSICAL DATA

Conductor: 15 AWG Solid SPC
Temperature Range: -55 to +200°C
Outer Diameter: in (mm) 0.225 (5.72)
Minimum Bend Radius: in (mm) 1.2 (30.48)
Weight: lbs/100 ft (kg/100 m) 5.4 (8.0)

ELECTRICAL DATA

Impedance: 50 ohms
Capacitance: pF/ft (m) 25 (82)
Velocity of Propagation: 80%
Time Delay: ns/ft (m) 1.27 (4.17)
Shielding Effectiveness: dB/min -90
DC Resistance: ohms/1000 ft (m) 3.25 (10.7)

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	4.4/4.8	(14.4/15.7)
@1.0 GHz	7.0/7.7	(23.0/25.3)
@1.6 GHz	8.9/9.8	(29.2/32.2)
@5.0 GHz	16.1/17.7	(52.8/58.1)

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

K Values (nom loss):
 K1 = 0.215 K2 = 0.0001785

All values nominal, unless otherwise noted

S67163 50 OHM COAXIAL CABLE

CONTACTS/CONNECTORS FOR S67163

ARINC CONTACTS

PART #	CONTACT TYPE
190519	404 Size 1 Socket
190501	600 Size 1 Socket
190502	600 Modified Size 1 Socket
190503	404/600 Size 5 Socket
190529	Size 8 Socket

M39012 CONNECTORS

PART #	CONNECTOR TYPE
190512	BNC Straight Plug
190513	BNC 90° Plug
190506	C Straight Plug
190507	C 90° Plug
190504	HN Straight Plug
190505	HN 90° Plug
190510	N Straight Plug
190511	N 90° Plug
190524	N Inline Jack
190522	N Bulkhead Jack
110580	QMA Straight Plug
110581	QMA 90° Plug
190514	SMA Straight Plug
190515	SMA 90° Plug
111082	SMA Bulkhead Jack
190508	TNC Straight Plug
190509	TNC 90° Plug
190531	TNC 75° Plug
190523	TNC Inline Jack
190521	TNC Bulkhead Jack