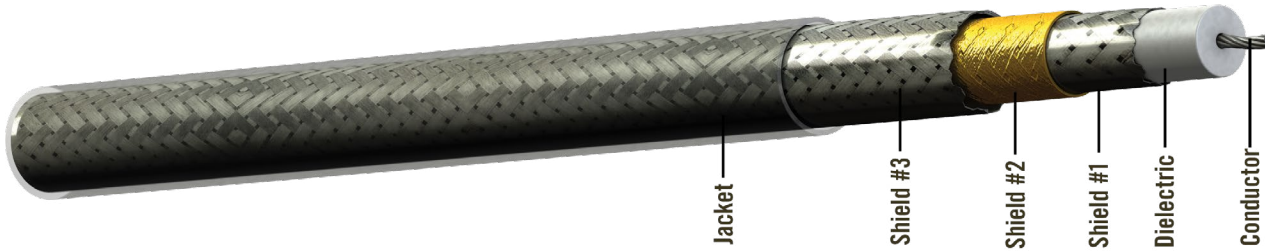


S55122



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

S55122 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 S55122 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.

PHYSICAL DATA

Conductor:	12 AWG Stranded SPC
Temperature Range:	-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)

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

ELECTRICAL DATA

Impedance:	50 ohms
Capacitance: pF/ft (m)	24.0 (78.7)
Velocity of Propagation:	84.5%
Time Delay: ns/ft (m)	1.21 (3.97)
Shielding Effectiveness: dB/min	-90
DC Resistance: ohms/1000 ft (m)	1.62 (5.3)

ATTENUATION DATA

Frequency	Nom / Max dB/100 ft	Nom / Max (dB/100 m)
@0.4 GHz	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)

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

K Values (nom loss):
 K1 = 0.155 K2 = 0.000199

All values nominal, unless otherwise noted

S55122 50 OHM COAXIAL CABLE

CONTACTS/CONNECTORS FOR S55122

ARINC CONTACTS

PART #	CONTACT TYPE
190619	404 Size 1 Socket
190601	600 Size 1 Socket
190602	600 Modified Size 1 Socket

M39012 CONNECTORS

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