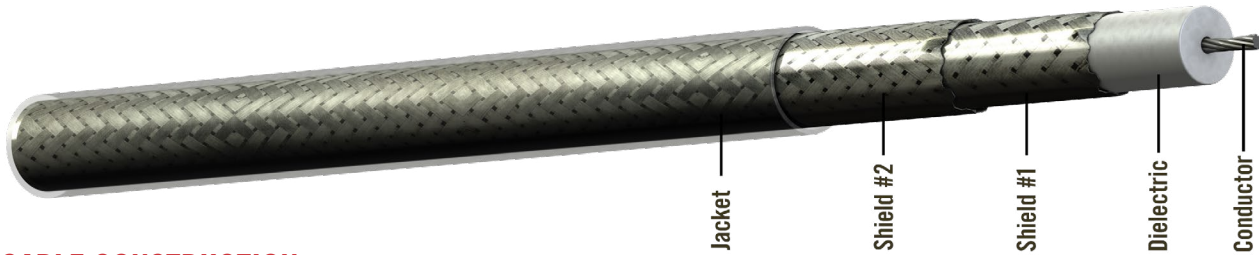


S86208



CABLE CONSTRUCTION

Conductor: Silver-Plated Copper

Dielectric: PTFE

Shield #1: Silver-Plated Copper Flat Strip Braid

Shield #2: Silver-Plated Copper Braid

Jacket: Extruded FEP, Clear

S86208 is a 50 Ohm coaxial cable and the industry's workhorse, with decades of proven performance in the aerospace and defense markets. The S86208 features a low-loss PTFE expanded tape dielectric between the center conductor and shield, which improves shielding and strength compared to conventional wire braids. S86208 is a lightweight and more compact replacement for standard M17/128-RG400 coax cable. When compared to RG400, the S86208 coax cable is two-thirds the diameter and less than half the weight — 20 lbs vs 43 lbs per 1,000 ft.

PHYSICAL DATA

Conductor:	21 AWG Stranded SPC
Temperature Range:	-55 to +200°C
Outer Diameter: in (mm)	0.13 (3.3)
Minimum Bend Radius: in (mm)	0.65 (16.51)
Weight: lbs/100 ft (kg/100 m)	1.95 (2.9)

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)	25 (82)
Velocity of Propagation:	80%
Time Delay: ns/ft (m)	1.27 (4.17)
Shielding Effectiveness: dB/min	-80
DC Resistance: ohms/1000 ft (m)	11.6 (38.1)

ATTENUATION DATA

Frequency	Nom / Max dB/100 ft	Nom / Max dB/100 m
@0.4 GHz	8.9/9.8	(29.2/32.2)
@1.0 GHz	14.1/15.5	(46.3/50.9)
@1.6 GHz	17.9/19.7	(58.7/64.6)
@5.0 GHz	32.0/35.2	(105.0/115.5)

Formula for Attenuation:

$$(K1 \times \sqrt{F(\text{MHz})}) + (K2 \times F(\text{MHz}))$$

K Values (nom loss):

$$K1 = 0.44 \quad K2 = 0.0001785$$

All values nominal, unless otherwise noted

S86208 50 OHM COAXIAL CABLE

CONTACTS/CONNECTORS FOR S86208

ARINC CONTACTS

PART #	CONTACT TYPE
190819	404 Size 1 Socket
190801	600 Size 1 Socket
190802	600 Modified Size 1 Socket
190803	404/600 Size 5 Socket
190837	Size 8 Pin
190829	Size 8 Socket

D-SUB CONTACTS

PART #	CONTACT TYPE
110286	Size 8 Pin
111113	Precision 50 ohm Size 8 Pin
110212	Size 8 Socket
110260	Precision 50 ohm Size 8 Socket

M39029 FOR MIL-C-38999 CONTACTS

PART #	CONTACT TYPE
190838	Size 8 Pin
190838-01	Size 8 Pin (w/ Environmental Seal)
190839	Size 8 Socket
190839-01	Size 8 Socket (w/ Environmental Seal)
190866	Size 12 Pin
190867	Size 12 Socket

M39012 CONNECTORS

PART #	CONNECTOR TYPE
190812	BNC Straight Plug
190813	BNC 90° Plug
190806	C Straight Plug
190807	C 90° Plug
190805	HN 90° Plug
190810	N Straight Plug
190811	N 90° Plug
190822	N Bulkhead Jack
110566	QMA Straight Plug
110567	QMA 90° Plug
190814	SMA Straight Plug
190815	SMA 90° Plug
190825	SMA Inline Jack
190808	TNC Straight Plug
190809	TNC 90° Plug
190809-L	TNC 90° Plug (Long)
190821	TNC Bulkhead Jack