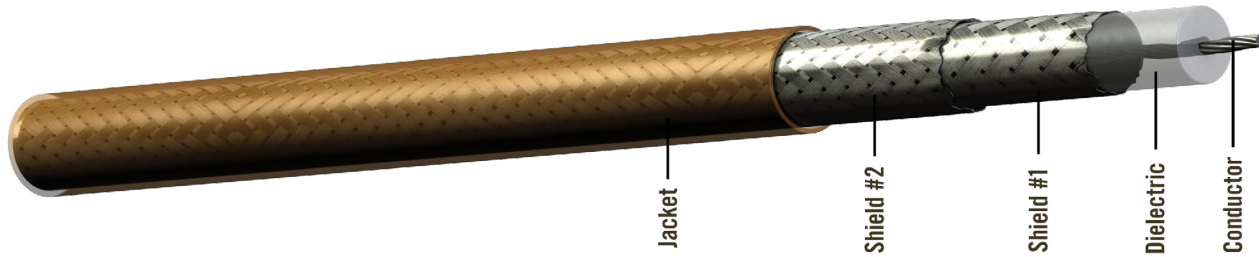


S46191



CABLE CONSTRUCTION

Conductor: Tin-Plated Copper
Dielectric: Fluoropolymer
Shield #1: Aluminum Braid

Shield #2: Tin-Plated Copper Braid
Jacket: Extruded FEP, Brown Tint, Translucent

S46191 is a 50 Ohm coaxial cable and the industry's workhorse, with decades of proven performance in the aerospace and defense markets. S46191 is dimensionally equivalent to M17/128-RG400, but will provide at least 40% weight savings over RG400 and save approximately 8 dB per 100 feet at 1.0 GHz compared to the standard RG400 coax cable.

PHYSICAL DATA

Conductor: 20 AWG Stranded TPC
Temperature Range: -55 to +150°C
Outer Diameter: in (mm) 0.195 (4.95)
Minimum Bend Radius: in (mm) 1 (25.4)
Weight: lbs/100 ft (kg/100 m) 2.68 (4.0)

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) 28.4 (93.2)
Velocity of Propagation: 70%
Time Delay: ns/ft (m) 1.45 (4.76)
Shielding Effectiveness: dB/min -75
DC Resistance: ohms/1000 ft (m) 9.5 (31.2)

ATTENUATION DATA

Frequency	Nom / Max dB/100 ft	Nom / Max (dB/100 m)
@0.4 GHz	12.8/14.0	(42.0/45.9)
@1.0 GHz	22.3/24.6	(73.2/80.7)
@1.6 GHz	30.2/33.3	(99.1/109.3)
@5.0 GHz	66.3/72.9	(217.5/239.2)

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

K Values (nom loss):
 K1 = 0.52 K2 = 0.0059

All values nominal, unless otherwise noted

S46191 50 OHM COAXIAL CABLE

CONTACTS/CONNECTORS FOR S46191

ARINC CONTACTS

PART #	CONTACT TYPE
190119	404 Size 1 Socket
190101	600 Size 1 Socket
190102	600 Modified Size 1 Socket
110123	404/600 Size 5 Socket

M39012 CONNECTORS

PART #	CONNECTOR TYPE
190112	BNC Straight Plug
190113	BNC 90° Plug
190127	BNC Inline Jack
111202	BNC Bulkhead Jack
190106	C Straight Plug
190107	C 90° Plug
190104	HN Straight Plug
190105	HN 90° Plug
190110	N Straight Plug
190111	N 90° Plug
110087	N Bulkhead Jack
110576	QMA Straight Plug
110577	QMA 90° Plug
110198	SMA Straight Plug
110207	SMA 90° Plug
190108	TNC Straight Plug
190109	TNC 90° Plug
190131	TNC 75° Plug
190123	TNC Inline Jack
190121	TNC Bulkhead Jack