

V76261



V76261 75 OHM COAX CABLE

CABLE CONSTRUCTION

- Conductor:** Silver-Plated Copper
- Dielectric:** FEP
- Shield #1:** Aluminum/Polyimide Composite
- Shield #2:** Tin-Plated Copper Braid
- Jacket:** Extruded ETFE, White (Laser Markable)

The V76261 75 Ohm coaxial cable is substantially stronger (more than twice the tensile strength), has better attenuation characteristics, and has superior shielding effectiveness compared to M17/94-RG179 cables. The V76261 construction includes a stranded silver-plated copper center conductor nearly 60% larger than in RG179 — yet the overall diameter of the cable increases by only 23%. To maintain correct impedance in its small diameter, a foamed fluoropolymer dielectric surrounds the center conductor. The cable is double-shielded with a braid of tin-plated copper and an aluminized 100%-coverage wrapper. This combination yields better than -90 dB shielding effectiveness.

PHYSICAL DATA

- Conductor:** 26 AWG Stranded SPC
- Temperature Range:** -55 to +150°C
- Outer Diameter:** in (mm) 0.122 (3.1)
- Minimum Bend Radius:** in (mm) 0.6 (15.24)
- Weight:** lbs/100 ft (kg/100 m) 1.1 (1.6)

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

RECOMMENDED MAX TRANSMISSION LENGTHS

- SMPTE 259M (SD-SDI Component):** f (m) 468 (143)
- SMPTE 259M (SD-SDI Widescreen):** f (m) 405 (123)

(Max length based on 30 dB max. Contact system OEM to verify max loss allowed)

ELECTRICAL DATA

- Impedance:** 75 ohms
- Capacitance:** pF/ft (m) 16 (52.5)
- Velocity of Propagation:** 80%
- Time Delay:** ns/ft (m) 1.27 (4.17)
- Shielding Effectiveness:** dB min -90
- DC Resistance:** ohms/1000 ft (m) 34.5 (113.2)

ATTENUATION DATA

Frequency	Nom / Max dB/100 ft	Nom / Max (dB/100 m)
@ 0.135 GHz	5.8/6.4	(19.0/21.0)
@ 0.180 GHz	6.7/7.4	(22.0/24.3)
@ 0.270 GHz	8.3/9.2	(27.2/29.9)
@ 0.360 GHz	9.7/10.6	(31.8/34.8)

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

K Values (nom loss):
 K1 = 0.487 K2 = 0.0012

All values nominal, unless otherwise noted

CONTACTS/CONNECTORS FOR V76261

ARINC CONTACTS

PART #	CONTACT TYPE
190703	Size 5 Socket
190733	Size 5 Socket
190729	Size 8 Socket
190732	Size 8 Socket
190730	Size 16 Socket
110237	Mil-C-81659 Size 9 Socket

M39012 CONNECTORS

PART #	CONNECTOR TYPE
190712	BNC Straight Plug
110717	HD-BNC Straight Plug
111163	HD-BNC 90° Plug
110249	BNC 90° Plug
190745	BNC Mini Straight Plug
111069	BNC Mini 90° Plug
190727	BNC Inline Jack
190728	BNC Bulkhead Jack
110783	HD Straight Bulkhead Jack
110677	F Straight Plug
110218	RCA Straight Plug
190736	SMB Socket
110285	SMC Female Plug
190768	SMC 90° Female Plug
110863	SMZ Straight Female Plug
110865	SMZ 90° Female Plug
190714	SMA Straight Plug
190708	TNC Straight Plug
190721	TNC Bulkhead Jack
190752	MCX 90° Plug

M39029 FOR MIL-C-38999 CONTACTS

PART #	CONTACT TYPE
190738	Size 8 Pin
190738-01	Size 8 Pin 50 ohm w/seal
190740	Size 8 Pin
190740-01	Size 8 Pin (w/ Environmental Seal)
190766	Size 12 Pin
190735	Size 16 Pin
190739	Size 8 Socket
190739-01	Size 8 Socket (w/ Environmental Seal)
190741	Size 8 Socket
190741-01	Size 8 Socket (w/ Environmental Seal)
190767	Size 12 Socket
190734	Size 16 Socket

DIN CONNECTOR

PART #	CONNECTOR TYPE
110842	1.0/2.3 DIN Plug

D-SUB CONTACTS

PART #	CONTACT TYPE
110235	Size 8 Pin
190763	Size 8 Pin
110236	Size 8 Socket
190764	Size 8 Socket