



CASTHERMCOAX™

Style RG178 U

-55°C to +200°C, 50 Ohms



Construction

Type: coaxial cable

Core: Silver Plated Copper Coated Steel (SPCCS)

Dielectric: PTFE

Shielding: silver-plated copper braid

Sheath: FEP

Production

Standard: nominal diameter 1.83 mm

Options: Please consult us for any special requirements

Application

Aerospace and Defense: radio frequency communications, data transmission, wireless communication in extreme conditions

General characteristics

Operating environment: protection from electromagnetic interference

Chemical behavior: excellent resistance to chemical environments

Humidity: excellent resistance to humidity

Thermal characteristics

Operating temperature: -55°C to +200 °C

Electrical characteristics

Operating Voltage: 750V

Impedance: 50 Ohms

Approvals – Standards

Aeronautic and defense: MIL-DTL-17

Conductor structure			Conductor Diameter		Dielectric Diameter		Outer Shield Diameter		Final O.D.	
# Strands	Diam. Of Strands (mm)		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
	(in)	(mm)								
7	0.004	0.1	0.012	0.3	0.034	0.86	0.051	1.3	0.072	1.83

DATA TRANSMISSION CHARACTERISTICS	
Impedance	50Ω
Capacitance max	96.45 pF / m
Use frequency max	3 GHz
Velocity of propagation	69.5%
Operating voltage	750V

SIGNAL ATTENUATION		
Frequency (MHz)	Nominal attenuation	
	(dB / 100 m)	(dB / 100 ft)
100	45.3	13.8
400	91.2	27.8
1000	145.7	44.4
3000	257.2	78.4



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