



Flexible Coaxial Cable
50 Ω - PTFE - Single Shielding

RG-316/U



Meets all MIL-C-17 Requirements

Material And Diameter

Connector parts	Material	Diameter
Inner Conductor	Steel, Copper + Silver plated (Stranded)	7/0.175 mm
Dielectric	PTFE (Polytetrafluoroethylene)	1.53 $\pm$ 0.05 mm
Outer Shield	Copper, Silver plated	1.95 $\pm$ 0.05 mm
Jacket	FEP (Fluorinated ethylene propylene)	2.50 $\pm$ 0.05 mm

Electrical Data

Impedance	50 $\Omega \pm 2$
Frequency	DC to 6 GHz
Capacitance	106 pF/m
Velocity of signal propagation	70 %
Signal delay	4.7 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M Ω /m
Screening effectiveness	≥ 38 dB (up to 1 GHz)
Operating voltage	≤ 2.0 kVrms (@ sea level)

Mechanical Data

Weight	17 g/m
Min. bending radius	15 mm (Static)

Environmental Data

Temperature range	-65°C to +150°C
RoHS (2011/65/EU)	compliant

Typical Attenuation

Frequency (GHz)	Typical Attenuation (dB/m) @ 25°C sea level	Typical Attenuation (dB/ft) @ 25°C sea level	Max. CW power (Watt) @ 40°C sea level
0.1	0.29	0.09	420
0.4	0.58	0.18	210
0.9	0.88	0.27	140
1	0.93	0.28	135
1.8	1.27	0.39	100
2.4	1.46	0.45	78
3	1.65	0.50	72
5	2.14	0.65	61
6	2.34	0.71	52