

Technical Data Sheet

Flexible Coaxial Cable 50 Ω - PTFE - Double Shielding

RG-316-d



Material And Diameter

Connector parts	Material	Diameter
Inner Conductor	Steel, Copper + Silver plated (Stranded)	7/0.175 mm
Dielectric	PTFE (Polytetrafluoroethylene)	1.53 mm
First Outer Shield	Copper, Silver plated	1.95 mm
Second Outer Shield	Copper, Silver plated	2.4 mm
Jacket	FEP (Fluorinated ethylene propylene)	2.9 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 $\geq 1 \times 10^8 M\Omega/m$ Insulation resistance Screening effectiveness \geq 80 dB (up to 6 GHz) Operating voltage ≤ 2.0 kVrms (@ sea level)

Mechanical Data

Weight 25 g/m Min. bending radius 18.2 mm (Static)

Environmental Data

Temperature range -65 °C to +165 °C Installation temperature -20 °C to +60 °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	0.09	210
0.9	0.88	0.15	140
1	0.93	0.29	135
1.8	1.27	0.41	100
2.4	1.46	0.70	78
3	1.65	0.77	72
5	2.14	0.65	61
6	2.34	0.71	52

Additional Information

MIL reference MIL-C-17/172

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