1/2" Corrugated Feeder Coax Cable

Cross Section

1: Inner Conductor
2: Insulation
3: Outer conductor
4: Jacket

Attenuation and Average Power

Frequency MHz	Attenuation dB/100 m	Power rating kW
10	0.665	12
100	2.15	3.7
200	3.08	2.6
400	4.43	1.8
450	4.72	1.7
800	6.43	1.2
900	6.85	1.2
1000	7.26	1.1
1400	8.74	0.9
1800	10	0.78
2000	10.7	0.74
2400	11.8	0.66
3000	13.4	0.58
Maximum attenuation value shall be 105% of the nominal attenuation value		

CONSTRUCTION

Inner conductor	Copper-clad aluminium	wire Ø 4.8 mm (0.19 in)
Dielectric	Cellular polyethylene	Ø 12.1 mm (0.48 in)
Outer conductor	Corrugated copper tube	Ø 13.9 mm (0.55 in)
Jacket	Polyethylene	Ø 16.0 mm (0.63 in)
Marking	RFC-12-50, manufacture week, year and ft marker	

MECHANICAL CHARACTERISTICS

Weight	0.23 kg/m	(0.15 lb/ft)
Maximum pulling force	2550 N	(562 lb)
Minimum bending radius		
• Single bending	70 mm	(2.8 in)
• Repeated bending	120 mm	(4.7 in)
Operating temperature range	-55...+80°C	(-67...+176°F)
Crush resistance	2.0 kg/mm	(110 lb/in)
Bending moment	3.8 Nm	(2.8 lb-ft)
Recommended clamp spacing	1.0 m	(3.3 ft)

ELECTRICAL CHARACTERISTICS at +20°C (+ 68°F

Characteristic impedance	50 ± 1 Ω
Velocity factor	0.88
Capacitance	76 pF/m 23pF/ft)
Maximum frequency	9800 MHz
Peak RF voltage rating	1.80 kV
Peak power rating	31.8 kW

DC-resistance

• Inner conductor	1.44 Ω/km	(0.44 Ω /1000ft)
• Outer conductor	2.24 Ω/km	(0.68 Ω /1000ft)

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