



Super-flexible coaxial feeder cable, helical corrugated copper for outer conductor and copper-clad aluminum wire for inner conductor, 1/2 in, black PE jacket

General Specifications

Flexibility	Super-flexible
Jacket Color	Black
Performance Note	Attenuation guaranteed within the tolerance $\pm 10\%$
Structure Note	Dimension guaranteed within the tolerance $\pm 5\%$
Nominal Size	1/2 in

Material Specifications

Inner Conductor	Copper-Clad Aluminum Wire
Dielectric	Physical Foam Polyethylene
Outer Conductor	Helical Corrugated Copper Tube
Jacket	Black PE
Diameter of Inner Conductor	3.60 mm
Diameter of Dielectric	9.10 mm
Diameter of Outer Conductor	12.00 mm
Diameter of Jacket	13.55 mm

Electrical Specifications

Impedance	50 ohms ± 1 ohm
Maximum Available Frequency	10.2 GHz
Cut-off Frequency	13 GHz
Velocity Ratio	81%
Peak Power	16 kW
Insulation Resistance	5000 M Ω -km
DC Breakdown Voltage	2500 V
Nominal Capacitance	83 pF/m
Nominal Inductance	0.19 μ H/m

Attenuations

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.23	0.07	15.6
1	0.32	0.10	15.6
1.5	0.40	0.12	15.6
2	0.46	0.14	15.6
10	1.03	0.31	10.1
20	1.48	0.45	7.07
30	1.81	0.55	5.75
50	2.36	0.72	4.42
88	3.16	0.96	3.30
100	3.38	1.03	3.08
108	3.51	1.07	2.96
150	4.17	1.27	2.49
174	4.51	1.37	2.30
200	4.86	1.48	2.14
300	6.03	1.84	1.72
400	7.05	2.15	1.48
450	7.48	2.28	1.38
500	7.96	2.43	1.31
512	8.07	2.46	1.29
600	8.80	2.68	1.18
700	9.58	2.92	1.09
800	10.30	3.14	1.01
824	10.50	3.20	0.99
900	11.09	3.38	0.91
960	11.49	3.50	0.90
1000	11.68	3.56	0.88
1250	13.27	4.04	0.78
1500	14.75	4.50	0.70
1700	15.84	4.83	0.65
1800	16.44	5.01	0.63
2000	17.43	5.31	0.59
2100	17.92	5.46	0.58
2200	18.42	5.61	0.56
2400	18.71	5.70	0.55
3000	22.28	6.79	0.42
4000	26.44	8.06	0.39
6000	34.06	10.38	0.30
8000	40.99	12.49	0.25

Return Loss / VSWR

Frequency Band	VSWR	Return Loss (dB)	Tolerance
0.8-1.0GHz	1.15	23.1	5%
1.7-2.2GHz	1.15	23.1	5%
2.2-2.7GHz	1.15	23.1	5%
3.3-3.8GHz	1.22	20.1	5%
4.8-5.0GHz	1.22	20.1	5%

Mechanical Specifications

Bending Radius (Single)	≥17 mm
Bending Radius (Repeated)	≥35 mm
Number of Bending (Typical)	≤20
Tensile Strength	1050 N

Environmental Specifications

Installation Temperature	-20 °C to +55 °C
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +85 °C

Regulatory Compliances

ISO 9001:2015	Compliant
ROHS	Compliant
China RoHS	Compliant
UK RoHS	Compliant
REACH	Compliant
EU/CE	Compliant

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