



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

General Specifications

Flexibility	Standard
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	Ring Corrugated Copper Tube
Jacket	Black PE
Diameter of Inner Conductor	4.80 mm
Diameter of Dielectric	12.20 mm
Diameter of Outer Conductor	13.80 mm
Diameter of Jacket	15.90 mm

Electrical Specifications

Impedance	50 ohms ± 1 ohm
Maximum Available Frequency	8.8 GHz
Cut-off Frequency	10.0 GHz
Velocity Ratio	88%
Peak Power	40 kW
Insulation Resistance	3000 M Ω -km
DC Breakdown Voltage	4000 V
Nominal Capacitance	76 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	0.15	0.05	40.00
1	0.21	0.06	35.83
1.5	0.26	0.08	29.26
2	0.30	0.09	25.39
10	0.67	0.20	11.32
20	0.95	0.29	7.93
30	1.16	0.35	6.46
50	1.51	0.46	4.98
88	2.01	0.61	3.73
100	2.15	0.66	3.49
108	2.24	0.68	3.36
150	2.61	0.80	2.75
174	2.86	0.87	2.62
200	3.08	0.94	2.44
300	3.79	1.16	1.97
400	4.42	1.35	1.70
450	4.68	1.43	1.53
500	4.97	1.51	1.51
512	5.03	1.53	1.49
600	5.48	1.67	1.37
700	5.95	1.81	1.26
800	6.40	1.95	1.17
824	6.50	1.98	1.15
900	6.82	2.08	1.05
960	7.05	2.15	1.04
1000	7.21	2.20	1.02
1250	8.15	2.48	0.92
1500	9.00	2.74	0.83
1700	9.64	2.94	0.78
1800	10.10	3.08	0.72
2000	10.70	3.26	0.67
2100	10.99	3.35	0.65
2200	11.09	3.38	0.62
2400	11.73	3.58	0.61
3000	13.22	4.03	0.56
4000	15.64	4.77	0.48
6000	19.90	6.07	0.38
8000	23.56	7.18	0.32

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)	≥80 mm
Bending Radius (Repeated)	≥125 mm
Number of Bending (Typical)	≤15
Tensile Strength	1150N

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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