

1/2" Super Flexible Helical Corrugated Coax Cable

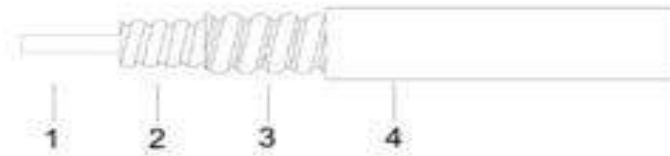
HRCAY(Z)-50-9(1/2" S)

► Overview

50 ohm RF cable with foam degree of about 80% of the ultra-high foam polyethylene, low attenuation, the temperature coefficient is small, the temperature changes have a good stability. It is mainly used as a low loss, low VSWR signal transmission line in wireless base stations such as mobile communication, antenna feeder, microwave transmission, broadcasting communication and other systems base stations, and the connection between receiver and antenna or other high frequency fields.



► Construction



Item	Material	Diameter (mm)
1.Inner conductor	Copper Clad Aluminum	3.55±0.02
2.Dielectric	Physical Foam Polyethylene	8.89±0.02
3.Outer conductor	Helical Copper Tube	12.19±0.02
4.Jacket	Black PE	13.46±0.2

► Electrical Characteristics

1.Capacitance (pF/m)	80
2.Impedance (Ω)	50
3.Velocity (%)	83
4.Peak Power Rating (kW)	19.0
5.RF Peak Voltage (kV)	1.13
6.Insulation Resistance (MΩ.km)	>5000
7.Cut-off Frequency (GHz)	12.5
8.Insulation Voltage (kVrms)	2.5
9.Jacket Spark (kVrms)	5.00
10.Sheilding Effectiveness (dB)	>120

► **Mechanical and Environmental Characteristics**

Min. Single Bending Radius (mm)	50
Min. Repeated Bending Radius (mm)	125
No. of Bends	15
Mobile Apply (mm)	350
Bending Moment (N.m)	5.0
Tensile Strength (kg)	110
Storage Temp (°C)	-55 to +85
Installation Temp (°C)	-40 to +60
Operating Temp (°C)	-55 to +85
VSWR≤(Return loss≥dB)	
0.005-3GHz	1.15 (23)
0.8-1.0GHz	1.10 (26)
1.7-2.0GHz	1.10 (26)
2.0-2.4GHz	1.10 (26)

► **Attenuation (VSWR1.0, cable temp. 20°C) & Average Power (VSWR 1.0, ambient temp. 40°C)**

Frequency (MHz)	Attenuation (dB/100m)	Average Power (kW)
100	3.22	3.03
200	4.65	2.11
450	7.2	1.37
800	9.86	1
900	10.56	0.94
1000	11.15	0.88
1500	13.8	0.7
1800	15.55	0.63
2000	16.4	0.59
2200	17.35	0.56
2400	18.1	0.53
2500	18.5	0.52
3000	20.9	0.48
4000	3.22	3.03
5000	4.65	2.11