

50 ohm Corrugated Copper-tube Outer Conductor Coaxial Cables for Wireless Communication



1/2" Superflexible Coaxial Cable

Standard Jacket: HRCAY-50-9 (1/2" Superflexible)

Fire retardant Jacket: HRCAYZ-50-9(1/2" Superflexible)

Characteristics

- Low Attenuation, low VSWR
- High expansion, high power rating
- Excellent environmental performance
- Mechanical Performance.

Application

Widely used in Wireless Communication base system

Construction

Inner conductor

Copper Clad Aluminum

Diameter (mm) 3.55±0.10

Insulation

3 layers of Insulation

Diameter(mm) 9.0±0.2

Outer conductor

Corrugated Copper-tube

Diameter over copper outer conductor (mm) 12.00 ±0.25

Diameter over trough (mm) 8.90±0.25

Pitch (mm) 3.00±0.20

Jacket

Thickness (mm) 0.9±0.1

Diameter (mm) 13.9±0.2

Electrical Performance

Impedance (Ω)	50 ± 2	
Capacitance (pF/m)	83 ± 2	
Velocity (%)	81	
Dc Resistance (20° C, Ω /km)		
Inner Conductor	2.97	
Outer Conductor	3.54	
Dc Breakdown, volts (V)	5000	
Peak power rating (kW)	15.2	
Maximum Frequency (GHz)	10.4	
Attenuation (dB/100m) and average power (kW)		
Frequency	Attenuation	Average Power
150MHz	4.35	2.51
280MHz	6.06	1.86
450MHz	7.83	1.41
800MHz	10.74	1.00
900MHz	11.47	0.96
1500 MHz	15.32	0.71
1800 MHz	17.02	0.62
2000 MHz	18.10	0.60
2400 MHz	20.15	0.52
3000 MHz	23.01	0.45
VSWR	max	
824MHz~960MHz	1.20	
1700MHz~1900MHz	1.20	

Engineering Data

Weight (kg/km)	210
Minimum Bending Radius (mm)	
Single Bending	17
Multiple Bending	35
Temperature range (° C)	
Standard jacket	-40~+70
Fire Retardant Jacket	-25~+70

Standard: YD/T 1092-2004